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SIGNALLING LEGITIMACY FOR SMALL- AND MEDIUM-SIZE ENTERPRISES (SMES) IN TRANSITION ENVIRONMENTS: THE CASE OF THE BULGARIAN IT SECTOR

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LIST OF ABBREVIATIONS

BAIT – Bulgarian Association of Information Technologies

BASSCOM – Bulgarian Association of Software Companies

BIBA – Bulgarian International Business Association

BINA – Bulgarian Internet Association

BPO – Business Process Outsourcing

CEE – Central and Eastern Europe

CIO – Chief Information Officer

CIS – Commonwealth of Independent States

CMMI – Capability Maturity Model Integration

COMECON – Council for Mutual Economic Assistance

CRM – Customer Relationship Management

EDESA – Electronic Document and Electronic Signature Act

ERP – Enterprise Resource Planning

ESI – European Software Institute

EU – European Union

FL – Functional Legitimacy

ICT – Information and Communication Technology

ICTDA – Information and Communications Technology Development Agency

IS – Information System

ISO – International Organization for Standardization

IT – Information Technology

KIS – Knowledge-Intensive Services

LV – Leva (the national currency in Bulgaria)

M&A – Mergers and Acquisitions

MLE – Maximum Likelihood Estimation

MNE – Multinational Enterprise

NGO – Non-Government Organizations

NSN – National State Network

OL – Organizational Legitimacy

OLS – Ordinary Least Squares

PDPA – Personal Data Protection Act

PLS – Partial Least Squares

RL – Relational Legitimacy

SCM – Supply Chain Management

SEM – Structural Equation Modeling

SMEs – Small- and Medium-Size Enterprises

SOEs – State-Owned Enterprises

TCE – Transaction-Cost Economics

ULS – Unweighted Least Squares

VIF – Variance Inflation Factor

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GENERAL INTRODUCTION

The process of institutional transition from one coordination mechanism to another one is an important period in the evolution of any society. Transitions are associated with fundamental political, legal, economic and social changes (Danis *et al.* 2010) affecting all aspects of life (Peng 2003). The transition from planned to open-market economy that has taken place in Central and Eastern Europe (CEE), East Asia, and the newly independent states of the former Soviet Union represents an institutional transition.

An environment that goes through transition is characterized by high level of vulnerability and uncertainty which impacts all actors evolving in it, including the organizations (Peng 2003). The dynamic relationship environment-organization is reflected in the concept of legitimacy. Legitimacy is a pertinent concept to study the transition stage since it exists on the borderline between the organization and its environment.

In transition environments, the processes of deinstitutionalization of the old structures and the reinstitutionalization of the new ones coexist. This leads to a lack of institutional framework to guide behavior of actors or a situation called institutional vacuum. Since institutions regulate economic exchanges (North 1990), the lack of them leads to elevated costs for all actors due to the proliferation of opportunistic behavior (Meyer 2001). In such environments, demonstrating legitimacy becomes crucial for the survival of structures and actors. Legitimation is sought by new elites (Raychev and Stoichev 2008), the government (Peng 2000a), the new laws, decrees and regulations (Stark 1992), and the private organizations (Peng 2000a).

The success of the transition directly depends on the strategies of organizations evolving in such environments (Peng 2000). Small and medium-size enterprises (SMEs)[1] play an important role as catalysts of the process of change (McIntyre 2003: 1) since they are expected to spur economic growth and employment (Peng 2000a),

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[1] The terms small- and medium-size enterprises (SMEs) and small organizations/firms are used interchangeably in this research.

and maintain social peace (McIntyre 2003: 1). Despite their central role in transition environments, little is known about the challenges SMEs face and the actions that can be undertaken in order to overcome them (Danis, Chaburu and Lyles 2010).

One of the main challenges of SMEs in transition environments is to demonstrate that they are legitimate players implying that they comply with the expectations of relevant stakeholders' groups. The main objective of this study is to shed some light on how SMEs in transition environments gain organizational legitimacy necessary for obtaining stakeholders' support. The interest of the study lies in the fact that if organizational legitimacy is problematic for all organizations due to changing norms, beliefs, and stakeholders' expectations over time (Ashforth and Gibbs 1990), it is even more problematic for small organizations in transition environments since the norms, beliefs and expectations are not clearly defined.

In order to address the legitimacy needs of small organizations[2] in transition environments, I propose a *signaling theory of legitimacy*, which postulates that the legitimacy-claiming entities can rely on valid signals in order to demonstrate (communicate) their adherence to the requirements of the evaluating audiences. In general, the signaling theory of legitimacy should hold for any organization facing a liability - the discount the evaluating audiences place on it in comparison to its potential competitors. Organizations in transition environments face *liability of origin* (Bartlett and Ghoshal 2000) – a discount that the evaluating audiences (both domestic and foreign) may place on them based on their context of origin. For small organizations[3], the challenges resulting from liability of origin are even bigger because of their size, they are more prone to import instability from the environment. The higher level of vulnerability of small firms encourages them to engage in opportunistic behavior. Hence, demonstrating their legitimacy is a key issue for SMEs operating in transition environments.

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[2] All economic actors experience the elevated level of uncertainty and vulnerability inherent to the transition environment. Small organizations are more prone to import instability from the environment due to their liability of smallness and lack of slack which can absorb part of the instability.

[3] By small organizations I mean small- and medium-size enterprises (SMEs). The two terms are used interchangeably in the text.

Organizational legitimacy becomes especially important when organizations engage in long-term arrangements since this requires an assessment of the organization not only in terms of its products/services but also in terms of its ongoing access to resources and capabilities as well as its reliability as a partner. In order to address the legitimacy needs of small firms evolving in transition environments and trying to obtain long-term partnerships, a new legitimacy typology is proposed. It is comprised of two types – functional and relational legitimacy. *Functional legitimacy* represents the adherence to the evaluating audiences' requirements regarding relevant resources and capabilities. *Relational legitimacy* is the conformity with the evaluating audiences' expectations regarding the reliability of an organization as a partner.

Hence, this study addresses two research questions:

1. What are the dimensions (and valid signals) of functional and relational legitimacy (for small organizations in transition environment)?
2. Does using signals of specific types of legitimacy (depending on the liability faced) enhance organizational legitimacy?

This doctoral research examines the legitimacy challenges of SMEs in transition environments trying to obtain long-term arrangements. In the first part of the study, the two types of legitimacy - functional and relational legitimacy - are constructed. Similar to organizational legitimacy (Deephouse and Carter 2005), functional and relational legitimacy are also multidimensional constructs comprised of different facets.

In the second part, I examine whether the signals of functional and relational legitimacy help SMEs in transition environment gain organizational legitimacy. The research model is tested on data collected from the information technology (IT) sector in Bulgaria.

Based on the data analysis and results, this research has several theoretical and methodological contributions. The results also have practical implications for the managers of small organizations in transition environments as well as the public policy agents.

The **theoretical contributions** are associated mainly with the signaling theory of legitimacy. It looks at how organizations can overcome certain liabilities by communicating their adherence to the expectations of relevant stakeholders' groups. Organizations can demonstrate their conformity to the evaluating audiences' requirements by using valid signals – organizational characteristics that can be observed, are costly to imitate and are based on shared meaning between the sending and the receiving party.

In addition, the study contributes to the literature on transition environments by looking at the particular case of SMEs and their attempt to demonstrate that they are legitimate players when trying to engage in long-term arrangements.

The **methodological contribution** lies in the way the two types of legitimacy (functional and relational) are measured via formative measurement constructs (Diamantopoulos and Winklhofer 2001; Jarvis *et al.* 2003) under the partial least squares (PLS) technique. Formative constructs are associated with causality that goes from the manifest (directly observable) variable to the latent construct or in other words, the manifest variables cause/build the latent construct (Diamantopoulos 1999). This made possible to match the legitimacy claims of organizations from once side based on the functional and relational signals and the legitimacy granted by relevant stakeholders' groups, on the other side. In addition, the research contributes to the growing number of studies in strategic management that use PLS as a structural equation modeling technique (Birkinshaw *et al.* 1995; Cool *et al.* 1989; Fornell *et al.* 1990; Johansson and Yip 1994; Tsang 2002).

The **practical implications** of this research shed some light on which signals (organizational characteristics) are important for managers of small organizations in transition environments. Signals are costly and since all organizations (and especially small firms) have limited resources, managers have to know which signals to invest in. It is important to note that many managers disregard the relational aspect of their legitimacy claims which (based on the results of the study) are more important in the communication process between the legitimacy-claiming and legitimacy-granting entities.

Overall, this study represents a fertile area for future research. Researchers can test the signaling theory of legitimacy in other contexts – i.e., other transition environments (Eastern Europe vs. China), as well as compare the signals used by organizations in transition environments and developed economies. Researchers can also test the signaling theory of legitimacy on organizations facing different liabilities (i.e. liability of market newness) and try to extend the existing legitimacy typologies. In addition, future studies can focus on issues of meaning construction (based on signals) in the communication process between organizations.

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CHAPTER 1: ORGANIZATIONAL LEGITIMACY

Organizational legitimacy is a concept, which exists on the borderline between the organization and its environment (Baum and Rowey 2003: 6). It reflects the conformity of an organization to broadly accepted norms, values, standards (Scott 2003). The question that arises is: when those norms, values, standards are not clearly defined (as in transition environments due to the existing institutional vacuum), what can organizations do in order to be granted legitimacy? Herein, I adopt the view that even in transition environments where the standards based on which legitimacy-granting entities evaluate organizations have not been established yet, the latter can still demonstrate their legitimacy by employing valid signals (organizational characteristics).

Small organizations in transition environments looking for long-term contracts can use signals of two types of legitimacy – functional and relational legitimacy. Functional legitimacy is related to demonstrating that the organization has the necessary resources and capabilities. Relational legitimacy is associated with demonstrating that the organization is a reliable partner. As a result, signaling functional and relational legitimacy can help small organizations in transition environments gain the active support of stakeholder groups.

The chapter is organized as follows. Firstly, I look at the different theoretical approaches to organizational legitimacy in management science, followed by description of organizational environment in terms of its elements and dimensions with a special focus on the transition environments. In section 2, I discuss legitimacy typology and introduce the types of legitimacy relevant to the current research. In section 3, I make the distinction between the determinants and the antecedents (sources) of legitimacy. Lastly (in section 4), I examine the consequences of legitimacy and emphasize its impact on organizational performance.

1. The Concept of Legitimacy in Management Science

In management science, there are two main approaches towards organizational legitimacy - evaluative and cognitive. The two of them are based on the Open System Perspective.

1. 1. Organizations as Open Systems

Organizations are collective actors (Scott 2003: 7) oriented towards the attainment of certain goals (Parsons 1960: 17), functioning as repositories of resources (Hannan and Freeman 1984) and infused with value (Selznick 1957). As social systems, organizations are different from the environment (Luhmann [1984] 1995: 17). But in order to accomplish their objectives, organizations need to develop relationships with the environment since they procure resources (inputs), have a set of mechanisms to process them, and last but not least, realize their output back in the environment (Parsons 1960: 17). In addition, any organization needs to import meaning from the environment (Scott 2001), in order to be understood. For all these reasons, organizations depend on the environment and their actions and structure reflect this dependence (Luhmann [1984] 1995: 183; Katz and Khan 1978: 3). Thus, organizations develop dynamic, complex and vital relationships with the natural and socio-cultural environment, in which they exist (Katz and Khan 1978: 63; Scott 2003: 24).

This view on organizations is reflected in the Open System perspective,[4] which perceives organizations as "activities involving coalitions of participants with varying interests embedded in wider material-resource and institutional environments" (Scott 2003: 29-30). In comparison to the other approaches adopted by organizational theorists over the years (such as the Rational and Natural Systems Perspectives), the Open System approach emphasizes the adaptive nature of organizations and views them as organisms intertwined with the environment (Baum and Rowey 2003: 6).

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[4] The idea of open systems is based on the work of the biologist Ludwig von Bertalanffy (1956), who contributed to the creation of the general system theory (GST). GST is applied not only to natural systems but also to social systems (Katz and Khan 1978: 22). Furthermore, it was extended to organizations. The latter are perceived to be a special type of open systems (Katz and Khan 1978: 68).

Indeed, Scott (2003) presents a combination of different perspectives on organizations and introduces the concept of "open-natural system models[5]" (Scott 2003: 115). This concept emphasizes the importance of the environment on the structure, behavior and survival of organizations and at the same time questions the rationality of organizations as economic actors (Scott 2003: 115). Since organizational environments are important for understanding organizational structures and actions, one must examine the context in which this behavior takes place (Pfeffer and Salancik [1978] 2003: 1). In the section below, the elements and the dimensions of the organizational environment are examined.

1.2. The Environment

The elements (i.e. clients, suppliers, norms, values) are situated on different layers of the environment and are different from the environmental dimensions (Tung 1979). First, I look at the elements and layers of the environment, and then I discuss the environmental dimensions or characteristics.

1.2.1. Layers of the Environment

Organizations are different from the environment (Luhmann [1984] 1995: 17), which is always more complex (Luhmann [1984] 1995: 182). The environment of organizations consists of the totality of physical and social factors taken into consideration in the process of decision-making (Duncan 1972: 314). The environment of an organization is *internal* (comprised of all relevant physical and social factors inside the organizational boundaries, such as organizational objectives and goals, products and services) and *external* (comprised of all relevant physical and social factors outside the organizational boundaries) (Duncan 1972; Tung 1979). The focus in the current study is on the external environment of the organization, which can be further regarded as *macro*, *aggregated* and *task* (Osborn and Hunt 1974), or in the resource dependence tradition - as *broader*, *enacted* and *interactive* environment (Pfeffer and Salancik 2003 [1978]: 63).

The *macro (broader) environment* of an organization is the general institutional context of a specific geographic area and it consists of those factors (educational,

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[5] According to Scott (2003), organizational ecology, resource dependence and institutional theory belong to the "open-natural system models."

legal-political, and socio-cultural) that have important influence on organizations (Osborn and Hunt 1974: 231). The *aggregated (enacted) environment* consists of non-organizational collections, such as associations, interest groups and other constituencies that impact organizational behavior (Osborn and Hunt 1974). It imposes the norms and values on the focal organization (Pfeffer and Salancik 2003 [1978]: 63). It is important to note that the macro and the aggregated environment represent the larger and more general framework which constrains organizational behavior (Pfeffer and Salancik 2003 [1978]: 63). The boundaries of those layers of the environment can be the nation-state, the region (or the state) or a certain geographic area in which the organization evolves (Osborn and Hunt 1974).

The *task (interactive) environment* of an organization is part of the larger framework (macro and aggregated) and is comprised of entities with which the focal system interacts (through input-output transactions) in order to survive and grow (Osborn and Hunt 1974: 232; Pfeffer and Salancik 2003 [1978]: 63). The elements of the task environment are regarded as other organizations (Osborn and Hunt 1974), such as the customers (both distributors and final users), suppliers (of material, labor, equipment, capital, and work space), and competitors (for both markets and resources) (Dill 1958).[6]

The environment impacts organizational behavior (Dill 1958) through exerting selective pressure (Terrebarry 1968). Thus, organizations are contingent on the environment in which they evolve (Luhmann [1984] 1995). According to some researchers (Luhmann [1984] 1995: 184), organizational contingency on the environment can be presented in two different ways depending on the way the environment is viewed: (1) if the environment is perceived as a resource, then the organization experience contingency as dependency (resource dependence perspective) (Yuchtman and Seashore 1967), and (2) if the environment is perceived as information, then the organization experiences contingency as uncertainty (institutional theory) (Dill 1958; Duncan 1972). Luhmann [1984] 1995: 184) stated that "these two ways to view the organizational contingency on the environment are

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[6] Dill (1958) considered the regulatory bodies (government agencies, unions, interfirm associations) as being part of the task environment of an organization. Herein, I follow Osborn and Hunt (1974) who considered these entities as being part of the aggregated environment.

not mutually exclusive because information can also be treated as a resource and because problems of information can arise in relation to resources, but the system's internal forms of managing contingency diverge, depending on which way is chosen."

As it was mentioned earlier, the elements that compose the environment (clients, suppliers, and competitors) are not the same as the environmental dimensions or characteristics (Tung 1979). Many researchers tried to identify relevant environmental dimensions (Duncan 1972; Terrebarry 1968; Thompson 1967; Tung 1972). Below, the characteristics of the environment relevant to the current study are presented.

1.2.2. Dimensions (Characteristics) of Organizational Environment

The organizations under scrutiny evolve in transition environments characterized by high level of complexity, instability and non-routiness due to the process of institutional change. Therefore, I regard the following dimensions of organizational environment – (1) complexity; (2) change rate, and (3) routiness (versus non-routiness) of problem/opportunity states.

A) Complexity

Environmental complexity refers to the number and heterogeneity of the factors that a focal organization has to take into account when making decisions (Emery and Trist 1965, Dess and Beard 1984; Duncan 1972; Terreberry 1968; Thompson 1967). As the number and diversity of environmental components increases, organizations experience difficulties to understand the relationships between them (Tung 1979). Hence, the level of environmental uncertainty increases (Dess and Beard 1984).

B) Change Rate

The change rate of an environment refers to the "frequency and magnitude of turbulence that prevails among environmental factors and components" (Tung 1979: 675). In addition, the change pattern can be predictable (stable) and/or not predictable (unstable) (Dess and Beard 1984; Jurkovich 1974; Tung 1979). When the relevant environmental components experience constant change and the pattern of change is hard to predict, the organizations find it difficult to keep up (Tung 1979). This situation increases the level of environmental uncertainty (Thompson 1967; Duncan

1972; Tung 1979). Furthermore, the change rate has the single greatest effect on the variation in the environmental uncertainty (Duncan 1972; Tung 1979).

C) Routiness of Problem/Opportunity State

The routiness of problem/opportunity states refers to the variability and analyzability of the stimuli confronting the organization (Duncan 1972; Jurkovich 1974; Tung 1979). Variability is related to the number of stimuli and the analyzability – to whether existing solutions can be applied to new stimuli. It is said that when the variability is high and the stimuli are not easily analyzable, the level of uncertainty is higher (Tung 1979).

The current research focuses on organizational environments in transition. They are extremely complex, experiencing high level of change and nonroutiness of problem/opportunity states. The level of uncertainty for such environments is extremely elevated. Thus, predictability of the future state of things becomes very difficult (Terreberry 1968). Organizations evolving in such environments "live on the brink of chaos" (Jurkovich 1974: 389). "Situations change rapidly and unpredictably. No matter how exhaustive and reliable information is, it tends to increase the potential for conflict" (Jurkovich 1974: 390). The process of transition and the transition environments are examined in detail in Chapter 2.

In any environment, organizations can function on different layers. For many small organizations, the enacted environment is geographically confined.

1.2.3. Local, National, and International/Global Layer of the Environment

As Gillespie and Perry (1975: 29) suggest, the organizational environment must be further segmented in order to facilitate analysis and theory building "in a manner which maximizes the variation between content areas and minimizes the variation within content areas." Following the neo-institutionalists, the environment can be regarded as local, national, and international/global assuming that small organizations decide *a priori* which layer is the most appropriate to import meaning from (Scott 2001).

Local enacted environment is when the relevant constituencies (i.e. clients, competitors) are located on a local level – a city and/or a particular region. National environment is when the company addresses audiences located within the boundaries of the nation-state.

International/global enacted environment is when the relevant constituencies are located outside of the national borders of the focal organizations. In this research, the organizations functioning on this layer do not physically cross the national borders but address external or outside the national borders audiences through partnership arrangements.

Herein, I do not distinguish between the evaluating audiences on the different environmental layers (local, national, international/global) because all actors evolving in the transition environment as well as the international organizations that have originated in more stable environments but are looking for partners in the transition environment experience elevated transaction costs (Meyer 2001).

So far, I presented the organizational environment, its elements and its dimensions/characteristics. In order to better understand the organization-environment relationship, in the next section I look at the concept of organizational legitimacy existing on the borderline between the two.

1.3. Theoretical Approaches to Organizational Legitimacy

In the field of organizational studies, there are two main theoretical approaches regarding organizational legitimacy (Suchman 1995): *evaluative* (also sometimes called *strategic*) adopted by most strategists (Parsons 1960; Thompson [1967] 2003), including population ecologists (Delacroix and Swaminathan 1991; Hannan and Freeman 1977, 1984) and resource dependence theorists (Ashforth and Gibbs 1990; Dowling and Pfeffer 1975; Pfeffer and Salancik [1978] 2003; Zimmerman and Zeitz 2002), and *cognitive* (or sometimes called *institutional*) adopted by neo-institutionalists (DiMaggio and Powell 1983, 1991; Meyer and Rowan 1977; Meyer and Scott 1983; Scott 1991, 2001, 2003; Zucker 1977).

The difference in the way the two schools interpret organizational legitimacy comes from the different way they view the organization, the environment and their relationship (Kraatz and Zajac 1997). The strategists adopted a technical perspective that regards organizations as rational actors functioning in a complex environment (Thompson 1967) "within which a product or a service is exchanged in a market such that organizations are rewarded for effective and efficient control of the work process" (Scott and Meyer 1983: 140). Hence, they emphasize the exchange interdependencies (Meyer and Rowan 1977) in place between the organization and its task environment (Thompson [1967] 2003).

On another side, based on the sociological tradition, new institutionalists regard the organization as being confined by its environment (Tolbert and Zucker 1983) since it is a reflection of the prevailing societal myths (in the form of institutionalized practices and procedures) rather than actors involved in exchanges with their environment (Meyer and Rowan 1977). The organizational environments are perceived as comprised of "cultural elements, that is taken-for-granted beliefs and widely promulgated rules that serve as templates for organizing" (DiMaggio and Powell 1991: 27-28). Thus, neo-institutionalists emphasize the institutional rather than the technical aspect of the organizational environment (Meyer and Rowan 1977). In general, institutional environments have a broader definition – it is the meaning system in which an organization resides (Palmer and Biggart 2005) and it includes norms, standards, and expectations held by relevant constituencies (Kraatz and Zajac 1996).

In addition, in terms of the way the two approaches regard the relationship "organization-environment," the technical environments exercise control on the organizational output while the institutional environments reward organizations for establishing correct structures and processes by conferring them with legitimacy (Scott 1991: 167).

The concept of legitimacy is developed on the borderline between the organization and the environment in which it exists (Baum and Rowley 2005: 6) (see Fig. 1). "Legitimacy provides the linkage between organizational and societal level of analysis" (Dowling and Pfeffer 1975: 131) and helps researchers understand the

relationship "organization-environment" by providing some insights on organizational viability and survival (Scott 2001: 158).
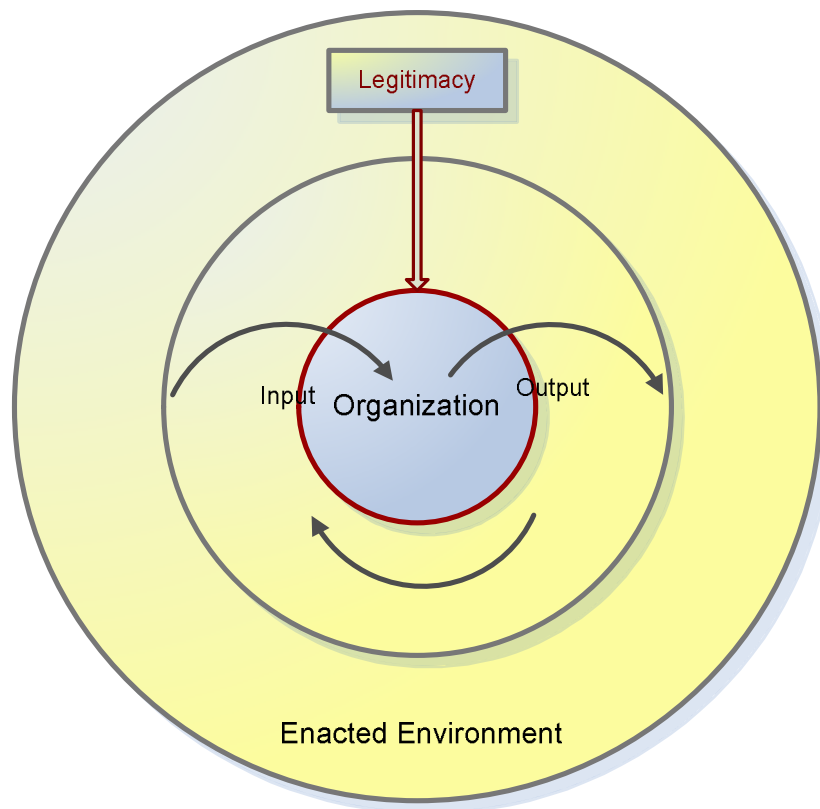
Fig. 1: Interdependence between the Organization and the Environment

There are two main approaches to organizational legitimacy - evaluative and cognitive – discussed in the next section.

1.3.1. Evaluative Approach to Organizational Legitimacy

Since organizations are collective actors claiming to accomplish some specific set of ends, they need public support (Hannan and Freeman 1984). Legitimacy is perceived as an appraisal of organizational actions by the outer societal systems based on the congruence between organizational actions and the value system of the larger super-ordinate system (Parsons 1960: 175). Even though Parsons (1960: 176) states that the process of legitimation does not legitimate the value system of an organization but its

actions, the latter[7] themselves reveal the value system of an organization (Dowling and Pfeffer 1975).

Within the evaluative approach towards organizational legitimacy, I examine the population ecology and resource dependence view on the concept.

A) Population Ecology

According to population ecologists, legitimacy is associated with public approval and it is directly linked to organizational survival (Hannan and Freeman 1984). Legitimacy is regarded as a valuable asset, which can increase the life chances of an organization (Hannan and Freeman 1984).

Indeed, population ecologists associate organizational legitimacy with two organizational characteristics – reliability and accountability (Hannan and Freeman 1984). *Reliability* is defined as the ability to "produce collective products of a given quality repeatedly" (Hannan and Freeman 1984: 153). *Accountability* is related to the ability of organizations to "account rationally for their actions" (Hannan and Freeman 1984: 153). In terms of accountability, organizations are not obliged to have certain processes and procedures in place; they just have to make internally consistent arguments that those exist to ensure the repeated rational allocation of resources (Hannan and Freeman 1984). As a result, the external approval favors inertial organizational structures that can demonstrate reliability and accountability based on reproduction of processes and routines within the organization (Hannan and Freeman 1984).

At the same time, population ecologists perceive legitimacy as a constraint on organizational behavior in more general terms, and on organizational change and adaptation, in particular (Hannan and Freeman 1977). Change undermines the already acquired legitimacy based on the external requirements for reliability of performance (Delacroix and Swaminathan 1991).

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[7] Organizational actions are role behavior, which is sanctioned by norms, justified in their turn by values (Katz and Kahn 1966: 68). Thus, roles, norms, and values furnish three interrelated bases for the integration of organizations (Katz and Kahn 1966: 68).

B) Resource Dependence

In the resource dependence tradition, legitimacy is viewed as a valuable resource, which organizations use in order to gain access to other resources required for their activities (Pfeffer and Salancik [1978] 2003). This way they ensure their continuous adaptation and survival (Pfeffer and Salancik [1978] 2003). In addition, some authors claim a relationship between legitimacy and organizational performance since they assume that the attracted resources are positively correlated with profitability (Mazza 1999: 42). Thus, the ultimate sign of legitimate organization is its profit making ability (Mazza 1999: 42).

Since the resource-holders are the outside constituencies of an organization, the latter are the ones that confer organizational legitimacy (Perrow 1970; Pfeffer and Salancik [1978] 2003). It is said that legitimacy lies in the eye of the beholder (Ashforth and Gibbs 1990; Zimmerman and Zeitz 2002). Indeed, "legitimation is the process whereby an organization justifies to a peer or subordinate system its right to exist, that is to continue to import, transform, and export energy, material, or information" (Maurer 1971: 361). Hence, legitimacy is always controlled by the outside of an organization (Pfeffer and Salancik [1978] 2003: 194).

It is interesting to note that legitimacy is known more often when organizational actions are perceived to be illegitimate rather than legitimate (Pfeffer and Salancik [1978] 2003: 194)[8]. This is due to the fact that when an actual or potential discrepancy exists between the organizational value system and the value system of the larger super-ordinate system, organizations are subject to sanctions (legal, economic or social sanctions) (Dowling and Pfeffer 1975). Hence, organizations take steps to guarantee that their actions are legitimate (Parsons 1960).

A very important property of organizational legitimacy is the fact that it is socially-constructed (Berger and Luckman 1967), which means that it does not lie in the organization itself. Rather, legitimacy is a condition which the organization has accomplished based on relating with the environment and accepting certain rules and

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[8] Organizational legitimacy is not identical with economic exchange as well as what is legal or illegal according to the law system within a society (Dowling and Pfeffer 1975). In addition, efficiency and performance are not sufficient to proclaim an organization as legitimate (Ashford and Gibbs 1990).

norms of the larger societal system (Pfeffer and Salancik 2003 [1978]: 194). This way the environment exercises certain external control on the organization (Pfeffer and Salancik [1978] 2003: 43).

At the same time, strategists do not agree with the passive view of accepting the environmental control *per se*. They state that organizations can actively manage environmental demands by adopting different strategies in order to alter the environment so that it fits organizational capabilities (Pfeffer and Salancik [1978] 2003: 106).

Strategists regard organizational legitimacy as being *ambiguous* (Pfeffer and Salancik [1978] 2003: 195) and *problematic* (Ahsforth and Gibbs 1990). It is ambiguous because it is not clear how large the part of the social system that supports the activities of an organization should be (Pfeffer and Salancik [1978] 2003: 194). It is also not known by which processes organizations evaluate the legitimacy of organizational actions (Pfeffer and Salancik [1978] 2003: 194). In addition, the mere standards of desirability of the external environment are varying from crystallized to ambiguous (Thompson [1967] 2003: 85).

Legitimacy is *problematic* because of contradicting requirements of different stakeholders' groups, changing norms and values, and difficulty in operationalization of social values (Ashforth and Gibbs 1990). Thus, organizational environments are considered not to be dependable based on changing requirements imposed on the organizations (Pfeffer and Salancik [1978] 2003: 2). When environments change the organizations face the dilemma whether to change with them (Pfeffer and Salancik [1978] 2003: 2). The changing environment creates hurdles for the focal organization in terms of ensuring the needed resources for organization's operations.

Furthermore, strategists view organizational legitimacy as being *retrospective* since organizations review their past actions in the context of the current social values and norms (Pfeffer and Salancik [1978] 2003: 195).

Organizational institutionalists offer a complementing view on organizational legitimacy, which is called cognitive approach to organizational legitimacy.

1.3.2. Cognitive Approach to Organizational Legitimacy

In order to understand the way the institutionalists view legitimacy, it is important to look at the way they regard institutions. The latter are the building blocks of social life. Institutions are comprised of three elements – regulative, normative and cultural-cognitive – that "together with associated activities and resources, provide stability and meaning to social life" (Scott 2001: 48). In general, institutions are resistant to change (Giddens 1984: 24). They also tend to be reproduced and transmitted across generations through certain "carriers" – symbols, relational systems, routines and artifacts (Scott 2001: 48). Furthermore, institutions operate on multiple levels – from the world system to the interpersonal relationships (Scott 2001: 48).

The importance of institutions for understanding the concept of legitimacy lies in the fact that they control and limit social action (Scott 2001: 50). Scott (2001: 50) states that institutions provide the guidelines for social behavior as well as the restrictions by "defining legal, moral and cultural boundaries setting off legitimate from illegitimate activities" (Scott 2001: 50).

Scott (2001: 50) stated that institutions are both a property and a process. They are property at any given time because they represent the state of the social order (Scott 2001: 50). At the same time, the process of institutionalization (and deinstitutionalization) is the process when the institutions are formed (Scott 2001: 50). Legitimacy can also be both perceived as a property and a process – the process of legitimation.

New institutionalists view legitimacy emerging from the organizational compliance to the expectations of the external socio-cultural environment (Meyer and Rowan 1977; DiMaggio and Powell 1983). Even though the institutionalists emphasize the cultural-cognitive or taken-for-granted aspects of legitimacy (rather than normative and regulative), the elements based on which an organization is proclaimed as legitimate or illegitimate are again externally assessed (Meyer and Rowan 1977). The cultural-cognitive meaning is more likely to be imported from the environment (Scott 1991: 170) since culture is viewed as a "tool kit" from which organizations choose their ends (or purposes) and the strategies to accomplish them (Swidler 1986). This way, organizational actions are understood in the larger socio-cultural environment

(Dobbin 2004; Zucker 1977). Hence, Meyer and Scott (1983) and Scott (1991: 170) defined legitimacy as "the degree of cultural support for an organization – the extent to which the array of established cultural accounts provides explanation for its existence."

For the neo-institutional researchers, organizations are driven to adopt practices and procedures defined by prevailing concepts of rationalization, called "myths[9]" (Meyer and Rowan 1977) or "cultural understandings" (Zucker 1977). They may not have anything to do with organizational efficiency or rationality (DiMaggio and Powell 1983) but they tend to persist as part of the objective reality (Zucker 1977) because they are considered "proper, adequate, rational, and necessary" by external constituents (Meyer and Rowan 1977). This is why organizations must integrate them (in the form of structural elements) in order to gain legitimacy and increase their survival chances (Meyer and Rowan 1977). Thus, neo-institutionalists envision a relationship between legitimacy and stability since organizations that do not adopt legitimate elements are more vulnerable to claims that they are "negligent, irrational, or unnecessary" (Meyer and Scott 1977).

It is important to note that for neo-institutionalists, the process of legitimation is the same as the process of institutionalization (Meyer and Rowan 1977; Suchman 1995) since the organizational actions are perceived to be legitimate only when they reflect the highly institutionalized and thus taken-for-granted elements of the societal environment (Meyer and Rowan 1977; DiMaggio and Powell 1991). In fact, institutionalization is perceived as both a process and a property (Zucker 1977). It is the process of transmission of the socially-defined reality among actors (Zucker 1977), which corresponds to the process of legitimation. At the same time, at any point of the process, "the meaning of an act can be defined as more or less a taken-for-granted part of the social reality" (Zucker 1977: 728), which corresponds to the legitimacy property of an organization.

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[9] For the purpose of the study, I utilize the term "myths."

1.3.3. Evaluative vs. Cognitive Approach to Organizational Legitimacy

The basic difference between the two approaches lies in the fact that while the strategists adopt a managerial perspective and view organizations as being able to use actions (Ashforth and Gibbs 1990) in order to get (or maintain and repair) societal support, the institutionalists regard the cultural pressures that sector-wide structuration dynamics generate on organizational actions (Suchman 1995). In other words, strategists view organizations as actively managing their legitimacy by deciding on which strategies to adopt in order to satisfy the sometimes conflicting demands of various stakeholder groups. And the institutionalists regard the manager's decisions being constructed by the same belief systems that determine audiences' reactions. Hence, the latter adopt a more passive view on organizations as merely accepting the norms and expectations imposed by the outer super-ordinate system, which makes organizations in fact choose from a pre-defined set of alternatives.

This is directly related to how the two groups view the process of legitimation. For the strategists, the process of legitimation is when the organizations act in order to increase their perceived legitimacy (Dowling and Pfeffer 1975: 122). For the institutionalists, the process of legitimation and the process of institutionalization (the collective structuration of fields) are the same (Suchman 1995).

The evaluative approach views legitimacy as a resource that an organization can manage (Zimmerman and Zeitz 2002). The institutionalists, on the other side, do not view legitimacy as a commodity that can be exchanged but as "a condition reflecting perceived consonance with relevant rules and laws, normative support or alignment with cultural-cognitive frameworks" (Scott 2001: 59). In addition, legitimacy cannot be perceived as an input to the production process like the rest of the resources an organization utilizes in its activities (Scott 2001: 59). It has a rather symbolic value, which has to be displayed or signaled to the interested constituencies (Scott 2001: 59).

1.3.4. An Integrative Approach to Organizational Legitimacy

Even if the above-mentioned differences between the evaluative and cognitive approach to organizational legitimacy do persist, the line between them is not a clear-cut since a rapprochement is observed between institutional theory on one side and population ecology and resource dependency on the other side (DiMaggio and Powell

1991: 32). A very good example is the shift in studies reflecting the institutional tradition – while the early works viewed the environment as imposing structures on individual organizations, the latter ones emphasize differences among organizations in the way they respond to the institutional pressures (Scott 2001: 151). Indeed, all the theories regarding legitimacy are converging on the ideas that "organizations actively participate in the social construction of the environment" but their ability to exercise strategic choice is constrained by the socio-cultural environment, in which they exist (Lawrence 1999: 161).

In accordance to the converging theoretical approaches, Suchman (1995) adopted an integrative approach to organizational legitimacy, integrating both the evaluative and cognitive dimensions of legitimacy. He also explicitly acknowledged the role of the different social constituencies in the legitimation dynamics by stating that "legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within socially constructed system of norms, values, beliefs, and definitions" (Suchman 1995: 574).

Even though there is a trend towards bridging the gap between the evaluative and the cognitive approach, for the purpose of this study, I adopt a strategic approach to organizational legitimacy. There are several reasons for this. The organizations under scrutiny evolve in transition environments characterized by institutional vacuum and the lack of institutional framework that can guide organizational behavior. Hence, the norms and values that an organization has to adhere to in order to be granted legitimacy have not been completely established yet. In some industries, norms and values may get imported from more stable environments or organizations may turn to the taken-for-granted signals existing on a cognitive level. In these environments, it is the managers to decide which characteristics to acquire or use in order to communicate in a meaningful way their conformity to the evaluating audiences' expectations.

Therefore, for the purpose of this study, organizational legitimacy is defined as *a perception that an organization adheres to the evaluating audiences' requirements and expectations. It is achieved based on the use of valid signals of legitimacy.*

As it was mentioned earlier, legitimacy is a complex and multidimensional concept existing on the borderline between the organization and its environment (Baum and Rowley 2005: 6). To reflect the multi-faceted character of legitimacy, different typologies have been developed. The next section examines the existing typologies of legitimacy.

2. Types of Legitimacy

In the management literature, several legitimacy typologies exist depending on the context examined and the particular research problem addressed (Dacin, Oliver and Roy 2007; Higgins and Gulati 2006; Scott 2001; Suchman 1995, among others). In fact, institutions as sources of legitimacy determine the types of legitimacy conferred. As mentioned earlier, institutions are "composed of cultural-cognitive, normative, and regulative elements that together with associated activities and resources, provide stability and meaning to social life" (Scott 2001: 48). Thus, Scott (2001: 61) based on the three pillars of institutions, proposed three main types of legitimacy: *regulatory*[10], *normative* and *cognitive*[11], which became the commonly-accepted legitimacy typology. Later, Zimmerman and Zeitz (2002) added a forth type – *legitimacy coming from the industry*.

2.1. Commonly-Accepted Legitimacy Typology

2.1.1. Regulatory Legitimacy

Max Weber ([1964] 1997) was one of the first sociologists to focus on the importance of legitimacy for the organization (Ruef and Scott 1998). When he regarded social action, Weber ([1964] 1997: 124) stated that it may be oriented according to some "legitimate order." This system of order is perceived by actors as "determined maxims or rules" (Weber [1964] 1997: 127). Not behaving according to the order leads to

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[10] In his seminal work, Suchman (1995) discussed three main types of legitimacy: pragmatic, moral and cognitive. Among these three types, only pragmatic legitimacy does not correspond to the widely-accepted typology presented by Scott (1995). According to Suchman (1995), pragmatic legitimacy is granted by the most immediate constituencies of the organization or its task environment. In comparison to pragmatic legitimacy, regulatory legitimacy has a different meaning and it is perceived as being more relevant for the purpose of this study.

[11] Zimmerman and Zeitz (2002) call the regulative legitimacy – sociopolitical regulatory legitimacy, the normative legitimacy – sociopolitical normative legitimacy and the cognitive legitimacy – cognitive legitimacy.

disadvantageous consequences (in the form of reaction of disapproval) and will not fit actor's perception of duty (Weber [1964] 1997: 124).

Regulative legitimacy is conformity to regulatory standards, rules and laws (Scott 2003: 136; Zimmerman and Zeitz 2002). In general, regulatory bodies (governments, trade associations, professional organizations) set "explicit regulative processes" (Scott 1995: 35), which include rules, monitoring and sanctions in case of non conformity (Scott 1995: 35). The mechanisms through which the regulative processes function (or the sources of regulative legitimacy) can be informal (i.e. shaming and shunning activities) or highly formalized and assigned to specialized actors (Scott 2001: 52). Examples of the latter are government bodies, such as state agencies (Baum and Oliver 1991; Ruef and Scott 1998) on different levels – local, regional, national, international.

Previous studies (Delmar and Shane 2004) show that regulatory legitimacy is the first type that organizations try to acquire in order to gain legitimacy. Scott (2001) sees the legitimacy as continuum and regulatory legitimacy being at the beginning of it.

2.1.2. Normative Legitimacy[12]

Weber ([1964] 1997) had distinguished between regulatory and normative legitimacy emphasizing the binding character of the two. Normative legitimacy though is associated with rules, which are not enforced by a specialized agency and have a voluntary character. Normative legitimacy is derived from the congruence between organizational goals and the broadly-accepted values and norms (Parsons 1960; Scott 2003: 136). Scott (2001: 54-55) defines *values* as "conceptions of the desirable" associated with "standards to each existing structures or behaviors can be compared with." *Norms* contain the notions of "how things should be done" (Scott 2001: 54-55). Moreover, the normative component places emphasis on "normative rules that introduce a prescriptive, evaluative, and obligatory dimension into social life" (Scott 1995: 37). In other words, organizational actions are evaluated whether they are "the

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[12] Suchman (1995) calls this type of legitimacy 'moral." He states that the term "normative" refers to all cultural regulatory processes, not just those involving a conscious assessment of right and wrong while the term moral legitimacy avoids the ambiguity. The author has also distinguishes between different types of moral legitimacy, which will not be regarded in this study.

right thing to do" (Suchman 1995: 579). It is important to note though that organizations have to apply not only generalized societal norms but also a variety of standards that have originated in different professional fields (Ruef and Scott 1998; DiMaggio and Powell 1983). Often, a source of normative legitimacy are the public opinion (expert and non-expert) (Deephouse and Carter 2005), and professional associations (Ruef and Scott 1998).

2.1.3. Cultural-Cognitive Legitimacy[13]

Cultural-cognitive legitimacy is based on the cultural-cognitive pillar (or elements) of institutions (Scott 2001: 57). Cultural-cognitive elements are "the rules that specify what types of actors are allowed to exist, what structural features they exhibit, what procedures they can follow, and what meanings are associated with these actions" (Ruef and Scott 1998: 879). In general, they are deeply embedded in the socio-cultural environment and provide frameworks on which normative and regulative systems are constructed (Ruef and Scott 1998). In other words, cultural-cognitive legitimacy determines the rules of the game and thus constructs the social reality of actors (Zimmerman and Zeitz 2002). If an actor gains cultural-cognitive legitimacy, it is accepted as "necessary or inevitable" (Suchman 1995). In this sense, the sources for cultural-cognitive legitimacy are the widely-held cultural beliefs and taken-for-granted assumptions or practices (Scott 2001; Zimmerman and Zeitz 2002; Westphal, Gulati and Shortell 1997).

According to Suchman (1995), the cultural-cognitive legitimacy is "the most subtle and the most powerful" as well as the most difficult to obtain and manipulate. If "things being otherwise" is unthinkable, changes become very difficult or even impossible (Suchman 1995).

Even though theoretically one can establish a difference between the normative and cultural-cognitive legitimacy, in practice, very often it is difficult to distinguish between them (Zimmerman and Zeitz 2002).

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[13] Cultural-cognitive legitimacy is emphasized by neo-institutionalists, such as Meyer and Rowan (1977), DiMaggio and Powell (1983), Zucker (1977), etc.

Industry legitimacy is conformity to practices derived from the industry (Zimmerman and Zeitz 2002). In most of the cases, an overlap exists between the broader societal and the industry dimensions of legitimacy. However, legitimacy derived from the industry is theoretically justified when different sources of legitimacy are in conflict when assessing the congruence of an organization with its environment. For example, for organizations evolving in global industries, there might be a misalignment between local standards and standards set on a global level. Furthermore, industries vary on their legitimacy level – for example, a new industry provides its member companies with little legitimacy due to lack of history, no established standards, and novel practices (Zimmerman and Zeitz 2002).

The regulative (rules), normative (norms) and cultural-cognitive (beliefs) elements are the building blocks of institutions (Scott 2001: 49). In fact, for Scott (2001) the three systems are related and they move from the regulative through the normative to the cultural-cognitive or they represent a continuum moving from the conscious to the unconscious, from the legally enforced to the taken-for-granted.

Besides the commonly-accepted typology of organizational legitimacy, below, I present some additional typologies discussed in the extant literature.

2.1.5. Other Typologies

A) Legitimacy of Upper Echelon

Higgins and Gulati (2006) examined the context of young IPOs and the signaling value of their upper echelon (comprised of board members and top managers). The main premise of the article is that the composition of a young IPO's top management team signals legitimacy that in turn can impact the way investors evaluate the firm (Higgins and Gulati 2006). In this context, they developed the following typology of legitimacy: *resource*, *role* and *endorsement legitimacy* (Higgins and Gulati 2006). In general terms, *resource legitimacy* is a dimension of legitimacy that is associated with access to resources that can improve the firm's technology, competitive stance and/or marketing capabilities (Higgins and Gulati 2006). *Role legitimacy* is related to the ability of the top managers to effectively fulfill certain key leadership positions

(Higgins and Gulati 2006). And, the third type - *endorsement legitimacy* - is associated with its ability to attract key endorsers from the investment community (Higgins and Gulati 2006).

B) Legitimacy of Strategic Alliances

By applying institutional approach to strategic alliances, Dacin, Oliver and Roy (2007) distinguished among five types of legitimacy: *market*, *relational*, *social*, *investment*, and *alliance legitimacy*. *Relational legitimacy*[14] is associated with the perceived worthiness of an organization as an attractive alliance partner (Dacin, Oliver and Roy 2007). In general, organizations are capable of communicating their worthiness as a partner to external parties via signals (Spence 1974).

The typology developed by Dacin, Oliver and Roy (2007) comes close to the typology utilized in this research. In comparison, while Dacin, Oliver and Roy (2007) deal with strategic alliances, I regard strategic outsourcing partnerships from the point of view of the outsourcing service supplier. These outsourcee organizations evolve in transition environments characterized by high level of environmental uncertainty. Hence, they experience liability of origin and as a result, they are even more prone to signal their adherence with the requirements of the stakeholders.

Since legitimacy is a very complex construct, I distinguish between two types in order to better capture the aspects that need to be communicated to the external audiences by the outsourcee organizations. The two legitimacy types were derived based on the main risks identified by Quélin and Duhamel (2003: 656) faced by the outsourcer when choosing an outsourcee: (1) risk linked to the services provider's deficient capabilities, and (2) risk of dependence on the service provider. Indeed, *functional legitimacy* is comprised of all these elements, which help an organization to meet the outsourcer's concerns regarding deficient capabilities. And *relational legitimacy* is comprised of dimensions that address the second risk – the risk of dependence on the service provider.

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[14] The concept of 'relational legitimacy' is closely related to another concept - 'relational quality.' The later was introduced by Arino, de la Torre and Ring (2001: 111) and it means "the extent to which the partners feel comfortable and are willing to rely on trust in dealing with one another." In fact, I consider relational qualiy as being part of relational legitimacy.

In the next section, I present the two types of legitimacy - functional and relational – and their respective elements.

2.2. Functional and Relational Legitimacy

Organizational legitimacy is a complex multidimensional construct (Deephouse and Carter 2005). The functional and relational aspects of legitimacy are also multidimensional constructs, each of them being comprised of several dimensions regarded in the section below.

2.2.1. Functional Legitimacy – Elements

Functional legitimacy signals the worthiness of a partner based on its access and/or control of important and valuable resources and capabilities. Organizational resources are firm-specific assets that are difficult to imitate by other organizations (Teece, Pisano and Shuen 1997). Organizational capabilities are the activities and processes through which an organization exploits and combines its resources in order to achieve the desired ends (Amit and Schoemaker 1993).

2.2.2. Relational Legitimacy – Elements

Relational legitimacy is associated with the perceived worthiness of an organization as an attractive partner (Dacin, Oliver and Roy 2007). Herein, I regard one particular aspect of relational legitimacy (according to Dacin *et al.* 2007 definition) – whether an organization is reliable as a partner (i.e. whether it can comply with the specifications of a contract). Relational legitimacy includes valid signals of the worthiness of a partner based on communicating two sets of elements: *partnership-related* (trustworthiness and reliability) and *organization-specific* (accountability, stability and visibility).

The elements of functional and relational legitimacy cannot be directly experienced by the exchange party unless the latter enters into a partnership with the organization under scrutiny. Thus, the organization can utilize other observable organizational characteristics to imply the access to relevant resources and capabilities as well as its worthiness as a partner.

I consider functional and relational legitimacy being independent from one another. This means that organizational resources and capabilities are independent from the perception of firm's reliability as a partner. A firm may possess the relevant resources and capabilities but this does not imply that it will fulfill the requirements of a contract in a proper way. At the same time, a company may be a reliable partner but it may not have the needed resources and competencies to accomplish the project.

Thus far, I defined and discussed the functional and relational types of organizational legitimacy. Now, it is important to make the distinction between the dimensions of functional and relational legitimacy and their sources. In the next section, I define what it is understood under "source" of organizational legitimacy by distinguishing it from legitimacy determinants.

3. Determinants and Antecedents (Sources) of Organizational Legitimacy

The determinants and the antecedents of organizational legitimacy are not the same. *Determinants* of organizational legitimacy are those environmental conditions that trigger the process of legitimation. The *antecedents* of organizational legitimacy are the characteristics of the organization that precede the legitimacy as a condition[15] which can be achieved at one particular point in time. Another way of calling the antecedents is sources of organizational legitimacy and this is the term adopted for the purpose of this study.

Both the process and the condition have a dynamic aspect to them. I look at those two aspects of organizational legitimacy in depth in order to better understand what leads to organizational legitimacy.

3.1. Determinants of Organizational Legitimacy

The process of legitimation implies that "organizations act to increase their perceived legitimacy" (Dowling and Pfeffer 1975: 122).

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[15] Herein, instead of the term "property" (Dowling and Pfeffer 1975) regarding legitimacy as a characteristic of the organization, I use the term "condition" as it implies certain dynamism associated with the state of being legitimate.

Since any process has its determinants, Dowling and Pfeffer (1975) have identified what determines the process of legitimation or the process of synchronization between organizational structures and actions on one side and the rules, norms and beliefs of the broader societal environment on the other side. Those determinants create discomfort in the organization and this way they exercise pressure on it to change according to the rules adopted on a higher societal level. In fact, an organization has to experience misfit with the environment in order to undertake the process of legitimation.

According to Dowling and Pfeffer (1975), the *determinants of organizational legitimation* include: changing societal norms and values (institutional change), competitive dynamics between the focal organization and other actors functioning in the same field (selection pressures), organization's methods of operation and organization's output (input-output mechanism and its fit with the organizational environment). Below, the above-mentioned determinants of organizational legitimacy are examined.

3.1.1. Institutional Change

Institutions change over time, which implies that societal rules, norms and beliefs based on institutions go through a process of transformation as well. This creates sources of pressure on organizations and ultimately motivates them to change (Dowling and Pfeffer 1975).

From a theoretical perspective, the sources that can trigger the process of institutional change can be exogenous and endogenous to the organizational field. According to Leblebici *et al.* (1991), "exogenous elements can penetrate the institutionalized context and produce change in organizational practices." In example, change of political regime, economic and social processes (Galvin 2002). The source of change can also be endogenous to the organizational field, such as the emergence and decline of powerful actors or activities (Galvin 2002). Moreover, the change processes can be both incremental and discontinuous (Scott 2001: 48), which can create either temporary or sudden discomfort for the organizations. I look at institutional change again in Chapter 2 when the legitimacy challenges of organizations evolving in transition environments are addressed.

3.1.2. Selection Pressures

The competitive dynamics in a population of organizations can also create pressures on organizations to adopt a form that has been proven to be successful and thus has been widely-accepted by other organizations. This process is known as isomorphism based on competitive pressures (which are different from institutional isomorphism). Thus, intensive competition creates discomfort by elevating the level of uncertainty regarding the survival chances. In this case, organizations will adopt a form, which has been proven to work. This creates certain inertial pressures on organizations within a population, which later may be detrimental when another change process starts evolving (Pfeffer and Salancik [1978] 2003).

3.1.3. The Input-Output Process

The resource dependence perspective views the organization and its environment as being interdependent (Pfeffer and Salancik [1978] 2003). Indeed, the input-output mechanism links the organization and its environment. When either the processes or products of these processes do not fit the environmental requirements, the organization will experience discomfort. According to the resource dependence view, change does not come from changing societal rules, norms and beliefs but rather it originates internally and affects the way things have been done within the organization.

As it was mentioned earlier, the determinants are different from the antecedents/sources of organizational legitimacy. In the next section, I examine the antecedents or sources of organizational legitimacy.

3.2. Sources of Organizational Legitimacy

A *source of organizational legitimacy* is an organizational characteristic based on which an organization can be evaluated by external audiences. At any particular point in time, these characteristics can be viewed as results of certain processes. The characteristics can be internal to the organization (i.e. age) or it can be granted to the organization by association with other actors in the field (i.e. a certificate by a reputable industry actor). In the latter case, the source of legitimacy lies in the relationship with the external entity, which at the same time can be an evaluating

stakeholder group. Depending on the result of the assessment process of the organizational characteristics, an organization can be granted legitimacy.

The process of external assessment is subjective - each stakeholder grants legitimacy depending on the weight of importance it gives to a certain source and the particular needs it experiences at the moment of evaluation. The latter reflects how the organization granting legitimacy fits with its own environment. These two conditions are interrelated – in example, if an organization experiences pressing needs for certain input, it may give a higher weight to the organization that can provide it and grant legitimacy in an easier manner. Since organizational legitimacy lies in the eye of the beholder (Ashforth and Gibbs 1990), the weight allocated to each characteristic is subjective as long as the evaluation process is individually accomplished by the interested stakeholder and the latter did not reply on somebody else's previously-done evaluation.

Not all organizational characteristics can be used as sources of legitimacy. Only characteristics with signaling value attached are considered sources of legitimacy. For this reason, they have to be observable, costly to imitate and share common meaning between the legitimacy-claiming and legitimacy-granting entities. Since the congruence of the rules, norms and beliefs of an organization with those of the environment has to be communicated from the sending to the receiving party and understood by the two parties the same way, the signals have to "make sense" (institutional perspective). Since legitimacy is a complex construct, each source will signal certain aspects (or dimensions) of legitimacy.

This study focuses on communicating meaning between the legitimacy-claiming and legitimacy-granting entities based on portfolio of signals. Any organization can choose among many alternatives in building its portfolio. The challenge is to pick the most appropriate signals, which implies very good knowledge on the evaluating audiences' requirements and expectations.

It is important to note that I do not look at how the receiving party interprets the signals (or performs the assessment process internally) but rather how this affects the support the focal organization receives from interested stakeholders. It is assumed that

if the receiving party interpreted the signals the same or similar way as the sending party, the focal organization will receive more support since it is more likely that the latter will be granted legitimacy, everything else being equal.

Acquiring legitimacy has certain consequences for the organization. They are examined in the section below.

4. Consequences of Organizational Legitimacy

Suchman (1995) poses the important question "legitimacy for what?" and tries to establish the difference between what is legitimacy and the consequences of legitimacy. Even though Suchman (1995) states that organizations seek legitimacy for many reasons, he distinguishes between two sets of reasons – continuity versus credibility and passive versus active support (Suchman 1995).

4.1. Being Worthy vs. Being Understood

The first set of reasons is associated with an increased "stability and comprehensibility of organizational activities" (Suchman 1995: 574). An organization may want to acquire legitimacy in order to be perceived as more worthy (Suchman 1995). For example, this may happen when the organization faces high level of environmental uncertainty or when the organization is young (liability of newness) and small (liability of smallness). As it is a valuable resource, legitimacy increases the chances that an organization will be granted other resources from interested stakeholders and thus, it influences in a positive way its survival chances. This way, organizational stability goes up. The increased stability later will act against the organization as it will be transformed into inertia. But from the moment of granting legitimacy, organizational worth increases.

Another consequence of granting legitimacy is the fact that an organization is understood by its external evaluators. The organization wants to be evaluated by the audiences not only as more worthy (for resource granting purposes) but also as "more meaningful, more predictable and more trustworthy" (Suchman 1995). This is an important condition, which ensures that an organization is comprehensible and thus there is a need of it in the larger societal framework. If the organization does not fit

the meaning framework, it will be considered as not needed and then its survival will be threatened.

4.2. Passive Support vs. Active Support

The second set of reasons why an organization seeks legitimacy is associated with whether it looks for passive or active support (Suchman 1995). These two terms "active support" versus "passive support" are associated with the level of legitimacy threshold that an organization needs to reach in order to be proclaimed as legitimate. This level depends on how involved is the audience. Thus, an organization which wants passive support has to reach a minimum threshold level of legitimacy. As Suchman (1995) puts it an organization may need just to be "left alone" by some group of stakeholders. This may be related to employing some impression management techniques by organizations, such as writing mission statements containing certain words and phrases.

An organization requires an active support from audiences that are not only passively interested in the way the organization is doing business but also actively involved in the process of elevating expectations towards the organization as well as the process of assessment. In this case, an organization will need to reach a higher threshold level of legitimacy.

As Suchman (1995) states the two sets of reasons basically show the same thing – when an organization wants a passive support, this can be associated with the condition in which the organization is merely willing to "make sense" or gain comprehensibility. And when an organization wants an active support, it wants to be perceived as being worthy and/or valuable (Suchman 1995). As an important resource, legitimacy makes organizations in general and their structures and processes in particular understood and perceived as worthy (Scott 2001). This eventually increases their life chances.

This study focuses on the attempts of small organizations evolving in transition environments to be perceived as worthy and gain the active support of the evaluating audiences. For this purpose, SMEs engage in building portfolio of signals which is used to demonstrate their adherence to the requirements and expectations of relevant

stakeholder groups. The ultimate goal is to translate the active support of various constituencies into a better profit-making ability for the focal organization.

Whether and how an organization seeks legitimacy and its effect on profit-making ability of an organization depends on the strategies employed. In the next section, I examine the strategies for gaining legitimacy. It is important to note that I do not study the process of legitimation itself but the result of it by comparing the legitimacy stocks of organizations at a particular point in time.

5. Strategies for Gaining Organizational Legitimacy

Following the strategists (Ashforth and Gibbs 1990; Oliver 1991), Suchman (1995) sees the process of legitimation imposing considerable challenges on organizations. The challenges come from conflicting audiences' requirements as well as the institutional "iron cage" (DiMaggio and Powell 1983). This means that an organization cannot take a decision, which is outside the set of possible decisions (Meyer and Rowan 1977). The process of legitimation can have three distinct forms – gaining, maintaining and repairing legitimacy (Suchman 1995). Herein, I examine only the process of building/gaining legitimacy.

Building legitimacy is typical for organizations which operate in new sectors with problematic technologies or are still poorly institutionalized (Aldrich and Fiol 1994), new entrants into old sectors (Suchman 1995) or simply when an organization is getting established (Ashforth and Gibbs 1990). Legitimacy is a valuable but at the same time a problematic resource (Ashforth and Gibbs 1990). Gaining legitimacy is a challenging endeavor for most organizations since when the latter are in situation of not having legitimacy, they normally face conditions known as liabilities – liability of newness (Stinchcombe 1965), liability of market newness (first defined by Certo 2003) including liability of foreignness (Zaheer 1995), liability of smallness (Freeman, Carroll and Hannan 1983), and liability of origin (Bartlett and Ghoshal 2000).

Dowling and Pfeffer (1975) and later Suchman (1995) identified three possible strategies that can help organizations gain legitimacy: (1) Conform to the prevailing rules, norms and cultural-cognitive beliefs; (2) Select audiences which will grant organizational legitimacy and (3) Manipulate the broadly-defined rules, norms and cultural-cognitive beliefs.

These three strategies fall into a continuum – from relatively passive conformity to relatively active manipulation (Oliver 1991; Suchman 1995). Since changing the social rules, norms and beliefs is a gradual and a difficult process, organizations will concentrate generally either on conforming to the prevailing rules, norms and beliefs or on trying to identify with legitimate actors (Ashforth and Gibbs 1990; Dowling and Pfeffer 1975). That is to say that manipulation of the environment is "less controllable, less common and consequently far less understood" in comparison to the other two strategies (Ashforth and Gibbs 1990).

Herein, the strategy "selection of environment" (Dowling and Pfeffer 1975) is considered as the first step to building a successful portfolio of valid signals. In other words, an organization has to be clear who the evaluating audiences are in order to develop its portfolio of signals as a first step in the legitimation process. After the selection is done, which is indeed an active process implying strategic rather than institutional view on organizational legitimacy, the organization can build its portfolio. For this, it has to select from a set of possible signals that can be used since the characteristics utilized by an organization as signals have to make sense to the relevant stakeholder groups.

To conclude, the current study examines the actions undertaken by SMEs evolving in transition environments in order to gain organizational legitimacy. Indeed, I do not look at the process of accumulation of organizational characteristics (signals) but rather compare the legitimacy stocks of similar organizations at one particular point in time (cross-sectional study). The perspective on organizational legitimacy adopted herein is the strategic perspective since an organization can actively decide on the sources of legitimacy it employs. According to the institutional perspective, the set of sources/signals used is always constraint by the environment in which an organization evolves. In transition environments though due to the institutional vacuum, the

commonly-accepted rules, norms and beliefs are not clearly established. Hence, it is difficult for organizations to identify a common set of sources/signals based on which they can gain the support of the evaluating audiences.

Organizations in transition environments try to gain legitimacy in order to be perceived as worthy and receive the active support of the evaluating audiences. The organizations seek their support of different stakeholder groups in terms of making and executing a decision to buy/distribute their products and/or services (clients and distributors), or work for the organization (employees).

As it was mentioned earlier, in order to gain the active support of evaluating audiences, organizations employ valid signals of legitimacy. In highly turbulent environments, it is difficult for organizations to know what the valid signals of legitimacy are since the institutions against which legitimacy is matched have not been established yet. In the next Chapter 2, I examine the legitimacy issues in transition environments characterized by high level of uncertainty and instability.

PART I: THEORY DEVELOPMENT AND POSITIONING OF THE RESEARCH

CHAPTER 1:
Organizational Legitimacy

CHAPTER 2:
Legitimacy Issues in
Transition Environments

CHAPTER 3:
Signaling Theory of
Legitimacy

PART II: THEORETICAL AND EMPIRICAL SETTING

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CHAPTER 2: LEGITIMACY ISSUES IN TRANSITION ENVIRONMENTS

Transition environments (such as transition economies) are settings that shift from one coordination mechanism to another one. They are characterized by high level of vulnerability and instability (Meyer 2001). To a certain extent, today's environment of any organization is perceived to be turbulent, that is to say it changes more rapidly than ever before (Terrebarry 1968). But herein, I particularly look at environments where "processes arise from the field itself and not merely from the interactions of component organizations" (Terrebarry 1968).

Any organization evolves in an environment with which it is inevitably intertwined. If the environment experiences turbulence and instability, this impacts the state of the organization as well. Therefore, in this study, I examine the influence of the transition environment on organizational actions. For this purpose, I employ the concept of organizational legitimacy, which exists on the borderline between the environment and the organization. More particularly, I study the legitimacy challenges of small organizations in transition environments. Small organizations are important for the success of any transition because they spur economic growth and employment (Danis *et al.* 2010).

The chapter is organized as follows. First, I examine the specificities of the transition environment. I look at the institutional transition as a stage in the process of institutional change. Second, I examine the legitimacy needs of organizations (including small firms) evolving in transition contexts. Third, I look at the transition economies as an example of the transition environments. The phases of development of the transition economies are discussed. Lastly, I examine the challenges that small organizations that originate in transition environments face when they expand internationally.

1. Transition Environments

From a general perspective, the transition represents a specific period of time characterized by a change from one identified stage to another. The concept comes close to the concept of institutional change but it is indeed an integral part of it. Below, in order to better understand the transition stage of the institutional change process, I first look at the institutions and the institutional change.

1.1. Institutions and Institutional Change

Institutions are representation of social order (Jepperson 1991). As such, they constrain and shape interactions and provide a structure to everyday life (North 1990: 3). By setting limitations, institutions facilitate and reduce the cost of the exchange interactions (North 1990: 36). Therefore, they convey stability and continuity (Scott 2001).

Even though institutions defining the institutional environment of organizations imply some level of stability and persistence, they are also subject to change (Scott 2001: 48; Dowling and Pfeffer 1975). The process of change can be both incremental and discontinuous (Scott 2001: 48) as well as caused by exogenous sources (i.e. change in political regime, economic and social processes) or endogenous sources (i.e. emergence and decline of powerful actors or activities) (Galvin 2002). Institutional change creates sources of pressure on organizations and ultimately motivates organizations themselves to change (Dacin, Goodstein and Scott 2002; Dowling and Pfeffer 1975).

In terms of their rate of change, institutions differ depending on their type - while formal rules and regulations can be changed overnight, informal institutions, by being deeply embedded in the culture of society, show greater resistance to change (North 1992: 477). In addition, enforcing formal institutions without considering informal institutions brings risk to the success of the whole process of institutional change (Ovin 2001).

More precisely, *institutional change* is the process that "witnesses the deinstitutionalization of existing forms and their replacement by new arrangements,

which, in time, undergo institutionalization" (Scott 2001). The process of institutional change is comprised of the following stages (see Fig. 2): (1) institution formation (institutionalization); (2) disappearance or fading away of institutions (deinstitutionalization), and (3) the adoption of new practices (reinstitutionalization) (Rao, Monin and Durand 2003).
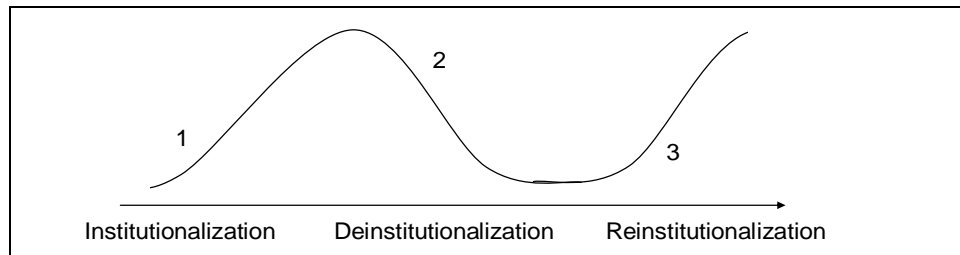
Fig. 2: The Process of Institutional Change

The first stage of the institutional change is the process of institutionalization. Selznick (1996) defined *institutionalization* as the process through which organizations adapt to environmental pressures or the process when institutions are formed (Scott 2001). Institutionalization is "the infusion with value beyond the technical requirements of the task at hand" (Selznick 1996). Besides institutionalization, the opposite process of fading away of institutions is also possible (Oliver 1992; Scott 2001).

Deinsitutionalization is the process by which "institutions weaken and disappear" (Scott 2001), "the legitimacy of an established or institutionalized practice erodes or discontinues" (Oliver 1992), even though institutionalized practices do not disappear completely (Dacin and Dacin 2008). Thus, an important question during the process of deinstitutionalization is the question "what is kept and what is left?"

Greenwood, Suddaby, and Hinings (2002) analyzed *reinstitutionalization* as the final stage of their model of institutional change. They associate reinsitutionalization with new practices being widely adopted and surviving across generations.

The processes of institutionalization, deinstitutionalization and reinstitutionalization belong to the same continuum of the process of institutional change (Rao, Monin and Durand, 2003) (see Fig. 2). In its essence, institutional transition is a process which is very similar to the process of institutional change but in fact, it is an essential part of it. It encompasses the deinstitutionalization of certain practices, rules and norms and the reinstitutionalization of the new ones. In the next section, I regard the specificities of institutional transitions.

1.2. Institutional Transitions

Institutional transitions are "fundamental and comprehensive changes introduced to the formal and informal rules of the game that affect organizations as players" (Peng 2003: 275). The transition represents the period in which former institutions fade away but still exist, and the process of new institution formation has started but has not been completed yet. Therefore, it is characterized by the co-existence of two institutional frameworks and/or the lack of any.

When the two frameworks overlap and none is valid or when there is no institutional framework to guide organizational behavior, there is a situation called *institutional vacuum*. The vacuum is characterized by a sense of chaos due to either lack of institutional framework or, on the opposite, an overlap of conflicting institutions functioning simultaneously.

Hence studying the transition concept lies in studying the interaction between the 'old' institutional framework and the 'new' one. When studying transition, several situations can arise in terms of predictability of change and conflict between the models. During the transition stage, organizations will either keep or abandon the 'old' institutions and will create/adopt the 'new' institutions (see Fig. 3).
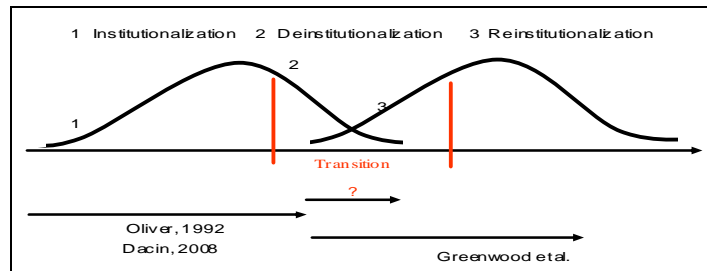
Fig. 3: Institutional Transition as a Stage in the Process of Institutional Change

Since most interactions are based on and create habitualization, typification (Berger and Luckmann 1967) and expectations (Parsons 1960) within a specific institutional context, all actors evolving in a transition environment are impacted by the chaos inherent to the transition stage. The specificities of the transition environments are regarded in the section below.

1.3. Transition Environments

In general, *transition environments* are settings which go through an institutional transition. Therefore, the institutional vacuum is inherent to all transition environments. It makes all actors within a system experience elevated transaction costs (Meyer 2001) resulting from the unclear regulatory frameworks and the abundance of opportunistic behavior exercised by many actors due to the lack of formal sanctions (Tsui-Auch and Möllering 2010), unreliable market information, and underdeveloped institutions (i.e. the court systems) (Meyer 2001). The environmental instability produces ambiguity and uncertainty in the rules of exchange among economic actors (Hitt *et al.* 2000). Economic actors that have originated in more stable environments (such as developed economies) and that are looking for partners in transition environments also experience the above-mentioned transaction costs (Meyer 2001).

Therefore, the transition environment is immensely different from that of a typical Western organization (McIntyre 2003; Peng and Heath 1996). Even though uncertainty exists in exchange processes even in market-based economies, in transition contexts, the underdeveloped market-supporting institutions for regulating economic exchanges, weak laws and poor enforcement capacity of the formal legal

institutions (Acquaah 2007) are additional sources of uncertainty which make the environment more complex and difficult to operate in.

Characterized by uncertainty (Terreberry 1968; Duncan 1972), the transition environment is *turbulent* and *dynamic* (Dess and Beard 1984; Duncan 1972). It is also *unstable* (Dess and Beard 1984). Thus, within such a context, change is difficult to predict (Lawless and Finch 1989). Additionally, a transition environment is *not "organized"* (Dess and Beard 1984), meaning that it lacks regulations and maturity (Dess and Beard 1984).

When studying transition, several situations can arise in terms of *predictability of change* and *conflict* between the co-existing institutional frameworks. If the transition is planned (Stone and Brush 1996), for example through a change in the law, then organizations can prepare and plan for the change. Furthermore, organizations are provided with a 'clear picture' of the new rules of the game. However, most of the changes are not planned. Hence, some 'old' rules of the game do not work, but the 'new' game has not been created yet. In itself, this leads to difficulties in predicting the future state of things and in adopting adequate organizational behavior. This condition is called organizational shortsightedness (myopia).

1.3.1. Organizational Shortsightedness (Myopia)

Based on the high level of the environmental uncertainty during transitions, organizations experience shortsightedness. This implies that they can hardly plan for the long-term future and their span of activities can be predicted for maximum of several months (sometimes weeks). The organizational myopia can be explained with the overall institutional upheaval (Peng and Heath 1996) and the resulting efforts to constantly adapt to the insecure environment. As a result, organizations in transition environments lose sight for the long-run merely because their survival in the short run requires their constant attention and effort exertion. Two factors lead to organizational shortsightedness in transition environments – operational embeddedness and unclear vision for the future.

A) Operational Embeddedness

As a result of the risks associated with daily operations, which in more mature and stable environments are routines, organizations become focused on ensuring the continuous process of operation. Herein, the embeddedness in day-to-day activities is called *operational embeddedness*[16] – the operational limits on long-term planning. In example, lacking of basic infrastructure (water, electricity, roads), insecurity in the banking sector, inter-firm indebtedness and other factors lead to interruptions of firms' operations on a daily basis. This embeddedness in the day-to-day activities leads to lack of sight for the future.

B) Unclear Vision for the Future

In addition, when the environment changes in a profound way, the organizations do not know what the desired future state of things is simply because they have not experienced it and have not established a benchmark for comparison. Thus, if left on their own, with no imported models of behavior (Newman 2000), they do not know which behavior is correct to reach the desired future state and what the latter is, as a matter of fact.

Organizational shortsightedness (myopia) is a result of the instability of the transition environment and it is one of the reasons an evaluating audience may place a discount on an organization which evolves in a transition environment. Other reasons (related to organizational myopia) may be unreliable performance, lack of trustworthiness, low quality of products/services offered, etc. The discount that the evaluating audiences (both domestic and foreign) can place on an organization due to its context of origin is called *liability of origin* – a term coined by Bartlett and Ghoshal (2000). Liability of origin affects all organizations evolving in transition contexts since it is based on the specificity of the environment itself. But organizational size moderates the effect of the liability of origin because the smaller the organization, the more vulnerable it is to the impact of the environment in which it evolves.

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[16] Based on Zukin and DiMaggio (1990), Uzzi (1997) regards four types of embeddedness: (1) structural – related to structure of ties among actors; (2) cognitive – refers to the mental processes that direct economic behavior of actors; (3) cultural – shared beliefs, norms and values shape economic goals; and (4) political – institutional limits on economic incentives. Herein, I use a fifth type of embeddedness – operational embeddedness (as described above).

The severity of liability of origin depends on the phase of development of the transition environment (early or late) and this issue is discussed below.

1.3.2. Phases in the Development of the Transition Environment

Based on the examination of transition economies, some authors (Peng 2003; Danis *et al.* 2010) conceptualize the transition process as being comprised of two stages – an early and a late phase. The *early stage* of the transition marks the process of deinstitutionalization of the rules, norms and values pertinent to the old institutional framework and the beginning of the new institutions creation (reinstitutionalization of the new framework). In the *late stage* of the transition process, the new rules of the game are more firmly established as the institutions mature (Danis *et al.* 2010) while the old ones slowly fade away.

In general, the liability of origin is more severe for organizations in the initial phase of the transition process since the lack of legitimacy of the new ways of organization of the economic activity is ubiquitous. In addition, the process of new institution creation has started but has not been completed yet. This creates many difficulties and costs for all economic actors. As the institutions mature, in the late phase of the transition process, the liability of origin experienced by the organizations evolving in the transition environment starts to diminish. An explanation to the diminishing liability of origin is the accumulation of legitimacy stock by organizations.

Liability of origin, like any liability, determines the need of an organization to demonstrate its legitimacy or the adherence to the requirements and expectations of evaluating audiences. Since many theories are challenged when applied to transition environments (Peng *et al.* 2008), herein, I look at organizational legitimacy and try to identify the specificities pertinent to the concept when it is applied to organizations evolving in transition contexts.

2. Legitimacy Needs of Organizations in Transition Environments

Organizational legitimacy in transition environment will exhibit certain specificities mainly due to the dynamic nature of the relationship environment-organization.

2.1. The Dynamic Nature of Organizational Legitimacy

Organizational legitimacy exists in the borderline between the organization and its environment (Baum and Rowey 2003: 6). In less vulnerable environments (such as developed economies), the relationship environment-organization is stable and it is more clear what the requirements of the legitimacy-granting entities are. Hence, in stable environments, organizational legitimacy is perceived to be dichotomous – an organization is either legitimate (that is to say it meets the requirements) or not (it deviates from them).

In vulnerable contexts (such as transition environments), the relationship between the organization and its environments, reflected in organizational legitimacy, is influenced by the instability of the environment. The change rate is elevated and the rules, norms and beliefs change even over short periods of time. In such contexts, organizational legitimacy can be regarded as a continuous variable – organizations can accumulate legitimacy stocks (characteristics) that eventually place them on a continuum from less legitimate to more legitimate. At any given point in time, organizations can be compared based on their legitimacy stock.

From signaling theory of legitimacy perspective, the process of building the legitimacy stock is difficult due to the following two reasons: **First**, the meaning of signals in transition environments is not clearly-defined or has not been established yet. In example, signals that are imported (i.e. ISO management standards) are not completely understood by the organizations that decided to adopt them as well as their evaluating audiences. It takes time for shared meaning to be developed. **Second**, in transition environments, there are many noisy signals (i.e. quality awards). This means that they are not granted on merit but based on certain corruptive practices. As a result, they do not carry the informational value they are supposed to convey. Therefore, the communication based on signals between organizations is impeded. The organizations themselves are confused in how to claim their organizational legitimacy. Often, they act upon sporadic opportunities and scarce information.

In addition, if the environment changes in a dynamic way, organizations have to adapt to these changes and also change. This dynamic relationship environment-organization is reflected in organizational legitimacy. The nature of organizational

legitimacy becomes also dynamic. Legitimacy is hard-to-establish in such environments due to the newness and instability of the regulative, normative and cognitive institutions. In general, the sources of legitimacy become either signals that are imported from more stable environments (i.e. management and process standards) and/or some taken-for-granted assumptions (i.e. organizational size and age).

Moreover, in unstable environments, by conforming to the requirements and expectations of relevant stakeholder groups, a legitimate player tries to convey the message "I am here to stay." Hence, organizational legitimacy is the antidote of organizational opportunism prevalent in transition environments. Organizations are prone to get into opportunistic actions in transition environments due to lack of formal sanctions and their shortsightedness. Building legitimacy stocks indeed demonstrates that an organization has long-term intentions to evolve in a certain sector.

By looking at organizational legitimacy as a continuous variable, one can pose the question of the appropriateness of the use of organizational reputation for the purpose of this analysis keeping in mind that reputation has been always considered a continuous variable. In the section below, I compare organizational legitimacy and reputation.

2.2. Organizational Legitimacy vs. Organizational Reputation

An *organizational reputation* is a collective representation of the company's past actions and future prospects that describe how key resource providers interpret company's initiatives and assess its ability to deliver valued outcomes (Fombrun 2001). A positive reputation is a valuable organizational asset because it can provide information to firm's stakeholders (i.e., consumers, investors, suppliers) (Fombrun 1996) and influence their expectations towards the future actions of the organization (Weigelt and Camerer 1988). Since the content of firm's reputation is information (Dollinger, Golden and Saxton 1997), it becomes especially important in incomplete information settings (Dollinger, Golden and Saxton 1997), such as transition environments.

On the contrary to the widely accepted view (Rao 1994), I consider reputation as an antecedent of organizational legitimacy. This is due to the fact that the organizations

under scrutiny are small enterprises functioning in transition environments characterized by chaos and a high level of instability (Peng 2003). Building good reputation comes before establishing legitimacy simply because the legitimacy-granting institutions have not been created yet or even if they were, they may not perform their functions as expected. An organization can have a good reputation and not be legitimate but reputation can help an organization build its legitimacy.

Herein, the organizations under scrutiny are SMEs evolving in transition environments. Based on the high level of environmental instability and vulnerability, all organizations evolving in transitional contexts experience liability of origin. The liability of origin determines the need of organization to demonstrate their legitimacy. The question then is: what are the legitimacy needs of small organizations (vs. large ones) evolving in transition environments? In the section below, I try to specify the legitimacy challenges of SMEs evolving in transitional contexts.

2.3. Legitimacy Needs of SMEs Organizations in Transition Environments

Today, small organizations are the most common type of enterprises (Soriano and Dobon 2009). Thus far, in the literature there is no commonly agreed upon definition of what constitutes an SME. Moreover, across countries different criteria (i.e. employment, sales turnover or investment) are adopted (Ayyagari, Beck and Demirguc-Kunt 2007). Even when the same criterion is used, the definition of an SME still differs from country to country (Ayyagari, Beck and Demirguc-Kunt 2007; Soriano and Dobon 2009). For the purpose of this article, I follow McIntyre (2003: 10) and adopt the standard European Union definition of SMEs: SMEs are organizations with fewer than 250 employees. This definition includes micro- (from 1 to 9 employees), small- (from 10 to 49 employees) and medium- (from 50 to 249 employees) enterprises (McIntyre 2003: 10). For the purpose of this study, the terms SME and small organizations are used interchangeably.

Herein, I focus on the legitimacy needs of SMEs evolving in transition environments. There are several reasons why legitimacy needs of small and large organizations differ. **First**, small organizations have lower visibility. **Second**, they face different institutional pressures in comparison to large organizations, most of which are privatized formerly state-owned enterprises (SOEs). And **third**, small organizations

face liability of smallness. All of the above-mentioned challenges of SMEs operating in transition environments determine the specificities of their legitimacy needs. In the section below, I regard these challenges in detail.

2.3.1. SMEs and Organizational Visibility

In general, organizational visibility is perceived to be a function of size (Boje and Whetten 1981; Brammer and Millington 2006; Goodstein 1994; Pfeffer and Salancik 1978). That is to say larger organizations have higher visibility. There are several reasons for this. Large organizations have more interpersonal (Boje and Whetten 1981) and interorganizational ties (Gulati 1999), greater number of clients (Bowen 2000), offer wider range of products and services (Boje and Whetten 1981) and are connected to more employees, investors, government agencies, etc. (Pfeffer and Salancik 1978). Visibility is important because it influences how others perceive and evaluate the organizations (Boje and Whetten 1981).

In stable environments, as organizations increase in size, they become involved in more complex and intensive ties with various stakeholder groups (Goodstein 1994). The later impose their requirements, to which large organizations have to conform in order to be granted legitimacy (Goodstein 1994; Kostova and Zaheer 1999). Indeed, larger organizations are more prone to engage in strategic actions in order to demonstrate their conformity to the requirements and needs of various stakeholder groups (Goodstein 1994).

Based on the communist legacy, large organization traditionally have been more visible and legitimate (Shinkle and Kriauciunas 2010). In transitional contexts, higher visibility directly relates to higher level of organizational legitimacy.

2.3.2. SMEs and State-Owned Enterprises (SOEs)

In many sectors, most of the large organizations are privatized formerly state-owned enterprises (or incumbents). The institutional pressures are different for new entrepreneurial firms (most of which are SMEs) and the incumbents (Peng 2003). In the early phase of the transition, the formerly state-owned enterprises can more easily extract protection and resources from the government and this way leverage their deeply embedded relationships with regulative authorities (Peng 2003). Hence, they

operate in a safety net, which minimizes the pressures coming from the transition environment.

In the late phase of the transition, (former) SOEs are pressurized to enhance their competitiveness and consequently their profitability as the government decreases its ownership (Zhu, Hitt and Tihanyi 2007). Hence, as the transition progresses, the legitimacy challenges for former SOEs increase.

In comparison, small entrepreneurial ventures are subject to different institutional pressures (Peng 2003). At the beginning of the transition process, the mere private form of economic organization has to gain legitimacy. In many former socialist countries, productive assets were owned by the government which was significantly involved in all economic activities (Shinkle and Kriauciunas 2010). Due to the lack of legitimacy, small firms face numerous barriers to growth – difficult access to financing, discriminative regulations by government based on the lack of well-established property rights, rent-seeking and corruption by government officials (Zhu, Hitt and Tihanyi 2007). Therefore, SMEs are encouraged to build relationships with the government, SOEs and business groups[17] in order to get resource allocations (Zhu, Hitt and Tihanyi 2007).

In the late phase of the transition process, small organizations engage in the process of gaining organizational legitimacy based on signaling their own resources and capabilities. Growth is encouraged by the fact that financing becomes more easily available from banks and newly-created capital markets (Zhu, Hitt and Tihanyi 2007). Organizational legitimacy based on signaling resources and capabilities becomes meaningful when certain (market-based) institutions were established - either built or imported from more stable environments. At the same time, developing relationships with government officials earns less and less legitimacy for the small firms.

2.3.3. SMEs and Liability of Smallness

Small organizations are subject to liability of smallness. In general, they have higher chances of failure (Freeman, Carroll and Hannan 1983) due to the fact that they have

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[17] Business groups are sets of firms bound together by formal and informal ties and are accustomed to taking coordinated actions (Zhu, Hitt and Tihanyi 2007).

fewer resources, less well-trained managers, and less developed relationships with creditors (Bruderl and Schussler 1990) and other external stakeholders (Singh, Tucker and House 1986). This is a condition known as 'liability of smallness[18]' (Freeman, Carroll and Hannan 1983). In transition environments, small organizations are even more vulnerable since they can more easily import instability from the environment (Smallbone *et al.* 1999) due to lack of organizational slack.

As it was mentioned earlier, firm growth is challenged in transitional contexts. Hence, an organization that was able to grow in size demonstrates that it can manage in a successful way the insufficiency of resources as well as the environmental instability. Based on the communist historical norms, large organizations are perceived as more legitimate (Shinkle and Kriauciunas 2010). Hence, in transitional contexts, size alone is a powerful signal of legitimacy.

To conclude, size is an important attribute which impacts the legitimacy needs of organizations. In general, SMEs are not scrutinized by as many stakeholders as large organizations. At the same time, it is more difficult for them to demonstrate their adherence to the expectations of relevant constituencies. Based on the signaling theory of legitimacy, organizations can demonstrate their legitimacy by using valid signals. Since valid signals are costly, small organizations are less likely to obtain them due to lack of sufficient resources. As a result, gaining organizational legitimacy is more challenging for small rather than for large organizations evolving in transition environments.

For the purpose of this study, I look at the attempts of SMEs to gain organizational legitimacy in the late phase of the transition process. Since the market-supporting institutions have matured, small organizations can use valid signals of legitimacy in order to demonstrate their adherence to the stakeholder's expectations. In most cases, the legitimacy-claiming efforts of small organizations in transition environments are related to the fact that they offer high quality products/services (Peng 2003), and in long-term arrangements that they are reliable partners.

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[18] At the same time, small organizations have certain advantages related to their size – i.e., smaller firms can often react faster to the changing market needs due to their flexible organizational structure which promotes and encourages innovation, communication, and decision making (Soriano and Dobon 2009).

Examples of settings going through the transition stage of the institutional change process (or transition environments) are the transition economies. In the section below, I examine the specificities of transition economies.

3. Transition Economies

Transition economies are the countries going through institutional transitions (Danis *et al.* 2010; Peng 2003), or institutional upheaval (Peng and Heath 1996). More particularly, the transition economies move from one primary mode of exchange (central economic planning) to another mode (market orientation underpinned by private ownership) (Hoskisson *et al.* 2000; Peng 2003). This process is associated with fundamental change of the formal and informal rules of the game (institutions) that affect all economic actors, including organizations (Danis *et al.* 2010; Peng 2003).

Historically, planned economies were characterized with strong central economic planning and bureaucratic controls on all business decisions, property rights held by the state, little need for formal laws to define the relationships between exchange parties (Hoskisson *et al*. 2000). The business planning in centrally-planned economy was focused on product supply and flow rather than product demand (Martin and Grbac 2003). Industries were monopolistic in nature and the competition for customers was eliminated (Martin and Grbac 2003).

The fall of communism in 1989 put an end to the central planning and the beginning of the process of transition to market-based economy. This process introduced a significant change in a wide array of business factors (Martin and Grbac 2003). In general, transition strategies are based on liberalization, institution building, and macroeconomic stabilization (Blejer and Skreb 2001). Even though progress had been made across the whole Central and Eastern European region, the degree of success across countries varies and has been largely determined by country-specific conditions and political configurations (Blejer and Skreb 2001; Wright *et al*. 2005).

Several structural reforms took place during the transition period, such as price and foreign trade liberalization, opening to capital markets, and freedom to enterprise (de Larosiere 2001: 477). The latter element of the structural reforms is directly related to the processes of privatization of the large state-owned enterprises (de Larosiere 2001: 478). It also implies that new enterprises are free to establish themselves but are also free to close down in case of difficulties (de Larosiere 2001: 479).

In addition, macroeconomic stabilization was on the agenda of all governments in all transition economies. Related to the implementation of tight monetary and fiscal policy, macroeconomic stabilization was the precondition for external financial assistance (Hoskisson *et al.* 2000). The process had its difficulties resulting from the rapid price and trade liberalization and led to high inflation (de Larosiere 2001: 478). Even though transition economies tried to combine and manage the structural reforms and macroeconomic stabilization, often economic and political shocks have greatly augmented the uncertainty for both domestic and foreign firms (Hoskisson *et al.* 2000).

After the first step of structural reforms and macroeconomic stabilization, the so-called "second wave" is associated with the building of a coherent legal environment and market-based institutions which have to guarantee the ongoing success of the transition process (de Larosiere 2001:477). As de Larosiere (2001: 478) mentioned "a well-functioning market economy requires the clear definition of rights and obligations" regarding property laws, corporate laws, bankruptcy laws, tax legislature, etc. Building an adequate market-based legal framework is a very gradual process based on new laws, new organizations and new behaviors of the economic actors (Kolodko 2001). The lack of them has allowed a large increase in opportunism, rent seeking, insider privileges, bribery and corruption in many transition economies (Hoskisson *et al.* 2000). This created a greater degree of uncertainty and risks for the domestic firms and foreign investors which resulted in deterring the inward foreign direct investments (Hoskisson *et al.* 2000).

Even though the formal rules can be changed overnight, the informal rules of behavior "embodied in customs, traditions, and codes of conduct are more persistent and can change only progressively" (North 1990). During the process of transition, there

might be institutional vacuum associated with the lack of framework that guides organizational behavior. In their attempt to reduce environmental uncertainty, economic actors extensively rely on personalized networks that existed during the socialist regime and continued to proliferate during the transition period (Peng and Heath 1996). To a certain extent these networks of personal relationships substitute for the lack of adequate managerial skills. The skills of managers in small organizations in transition environments are far behind the capabilities of managers in advanced economies (Kolodko 2003).

As a profound institutional change, the transition process is a lengthy one. Even though formal rules of behavior may change overnight, the informal rules embodied in customs, traditions and codes of conduct take much more time to change (North 1990: 6). Thus, some authors (Peng 2003) have distinguished between phases in the process of institutional change. In the next section, I examine the specificities of the two phases of the transition process.

4. Phases in the Development of the Transition Economies

As it was mentioned earlier, the transition environment goes through two phases of development – early and late.

4.1. Early Phase of the Transition Process

In the early phase, even if they exist, the new institutions are still not mature and not consistent with the needs of the market-driven system (Danis *et al.* 2010). The lack of institutions to guide behavior creates an immense level of uncertainty for all actors evolving in the transitional context (Peng 2003).

For firms, the greater the uncertainty in their environment, the more likely they rely on managerial networking relationships when entering into economic exchanges (Pfeffer and Salancik 1978; Peng and Heath 1996). In highly unstable environments, economic actors are more likely to mobilize their social network resources and/or personal contacts (Batjargal 2003) to facilitate business activity and achieve their organizational goals (Zhu, Hitt and Tihanyi 2007).

Moreover, in such environments, managers adopt a survival mentality (Danis *et al.* 2010). Their strategic efforts are more related to improvisation rather than to planning and implementation (Danis *et al.* 2010).

4.2. Late Phase of the Transition Process

In the late phase of the transition process, the business environment stabilizes since exchange relationships start being governed by the market-supporting institutions (Danis *et al.* 2010). As transaction costs go down, the return on intensive personal networking may diminish (North 1990; Peng 2003). As the market develops, competition among the domestic start-ups as well as with foreign entrants intensifies (Acquaah 2007). As a result, in the late stage managers may be more prone to devote their time and energy to develop market-based competitive strategies (Peng 2003).

The legitimacy needs of organizations in general, and the entrepreneurial new ventures in particular, are different during the early and late stage of the transition process. In the early stage, the small entrepreneurial ventures try to establish the legitimacy of the private form of organization of the economic activity. In many countries, private ownership was not allowed during the Communist era. Hence, the mere private form of ownership has to gain legitimacy in the early stage of transition.

During the late stage of the transition, market-supporting institutions have matured and new norms centered on market competition have emerged (Peng 2003). Even though many institutions do not fulfill their role completely, claiming and granting legitimacy on organizational level becomes possible. Moreover, organizations differ in terms of their legitimacy stock – some will be perceived more legitimate then others. Small entrepreneurial ventures can claim (and consequently be granted) organizational legitimacy mainly by demonstrating high quality of their products and services (Peng 2003).

The stage of the transition process influences the way organizations are perceived by the evaluating audiences. In the early phase, liability of origin is higher and constituencies (domestic and/or foreign) tend to question small organizations evolving in transition environments in a more severe way. The lack of legitimacy is ubiquitous.

In the late phase, as the market-based institutions mature, small firms from transition environments extract higher legitimacy from the evaluating audiences based on their legitimacy stock.

Even though acquiring organizational legitimacy is challenging, some SMEs from transition environments try to even access the international/global markets. Indeed, there is a growing interest among international business (IB) scholars regarding the competitive strategies of small firms from transition environments trying to access the international/global market scene in general (Danis *et al.* 2010), or enter the markets of the developed economies, in particular (Yamakawa *et al.* 2008). In the section below, I regard the challenges that SMEs face when they access the international/global markets.

5. The Internationalization of SMEs from Transition Environments

Firms from transition economies are accelerating their attempts to integrate the global economy (Hoskisson *et al.* 2000). Even though recent studies show that SMEs increasingly internationalize their activities in order to capture opportunities in international/global markets (Zhu, Hitt and Tihanyi 2007), there is little research done on the internationalization attempts of SMEs from transition environments (Yamakawa *et al.* 2008).

Small firms achieve foreign market presence through exporting and/or foreign direct investments (FDI) (Dimitratos *et al.* 2003). They can be also involved in international activities from alternative perspectives. In many industries, SMEs rely on technological development (i.e. the Internet, facilitated transportation) in order to internationalize their activities (Todd and Javalgi 2007). Examples include the IT and textile manufacturing in India and Eastern Europe. Therefore, small local firms might find opportunities to go global and/or deal with foreign partners without crossing their national borders.

5.1. Reasons for Internationalization of SMEs from Transition Environments

SMEs that originated in transition environments can be motivated by different reasons to enter the international/global markets. These firms are believed to go international only after a period of domestic maturation and home market saturation (Oviatt and McDougall 2005). Home-based SMEs would want to access the international markets after the local market would saturate due to intensive domestic (Yamakawa *et al.* 2008) and/or foreign competition (Todd and Javalgi 2007). This is especially the case when the domestic markets are small - i.e. most Eastern European countries - as well as when the purchasing power of the domestic consumers is low (Smallbone *et al.* 1999), and/or when there is a threat by MNEs entering their home base (Wu and Pangarkar, 2006).

In addition, internationalization of activities allows a higher return on investment for technologically-intensive industries (Yamakawa *et al.* 2008). In some sectors characterized by technological intensity (i.e. IT), internationalization is a way to spread the development costs over larger markets (Bruton and Rubanik 2002). Moreover, an SME can internationalize in order to access capabilities that are not existent or under-developed in its home-base (Yamakawa *et al.* 2008).

Moreover, the regulative environment within a country may push small organizations to internationalize, especially when the government allocates more support to the previously SOEs. SMEs may also find the institutional environment in the host country more friendly, that is to say with better protection of property and intellectual rights, better functioning capital markets, and less corruption (Yamakawa *et al.* 2008).

Another reason for the international expansion of small firms from transition environments is the quest for legitimacy. Any association with a client or an investment in a more stable environment (i.e. developed economy) enhances the organizational legitimacy of the small firm (Yamakawa *et al.* 2008). The SMEs are perceived more credible and producing/providing high quality products/services once they establish foothold in a more stable environmental context (Yamakawa *et al.* 2008). This way, small firms get additional resources in their home base by attracting governmental help, investors, consumers and other relevant stakeholders (Yamakawa *et al.* 2008).

Even if there are many motivating factors that make SMEs from transition environments internationalize, the latter face numerous challenges.

5.2. Challenges for SMEs from Transition Environments Going International

Those challenges can be explained by the numerous liabilities they experience – liability of smallness, foreignness and origin. It is interesting to study how these liabilities interact as well as the legitimacy strain they pose on small firms in transition environments.

The already-mentioned l*iability of smallness* is directly related to the lack of sufficient resources (i.e. financial, managerial, human and informational) and capabilities (Zhu, Hitt and Tihanyi 2007). While large MNEs have the necessary resources and capabilities to cope with the challenges inherent to internationalization/globalization, SMEs going global are less resource-endowed and less competitive (Zhu, Hitt and Tihanyi 2007). Limited resources may hinder the ability of small firms to identify and act upon entrepreneurial opportunities in foreign markets (Zhu, Hitt and Tihanyi 2007). In fact, the lack of efficient information and know-how related to the foreign markets is one of the most important problems SMEs face when they expand internationally (Liesch and Knight 1999).

The international business literature has long recognized that firms going global face the '*liability of foreignness*' because they are not yet familiar with the local practices specific to each and every market (Zaheer 1995). Liability of foreignness is part of the broader term "liability of market newness," which is discussed in Chapter 3.

Liability of origin (Bartlett and Ghoshal 2000) is linked to the environment in which SMEs have originated – transition environments. As it was mentioned, transitional contexts experience a lack of appropriate institutional framework to govern the behavior of economic actors. Liability of origin is experienced by organizations evolving in the domestic as well as foreign markets even though the evaluating audiences may be different. The domestic and foreign constituencies may discount organizations originating in transition environments based on different reasons – i.e.

foreign clients/partners may place a discount on a potential transition partner based on insufficient resources/capabilities while domestic ones on their trustworthiness.

Besides their disadvantages, SMEs face certain advantages when they decide to expand internationally. Small firms have less bureaucratic structures, higher flexibility in implementing new technologies or meeting changing consumers' tastes, higher level of innovativeness (Soriano and Dobon 2009).

Some research shows that small firms in transition environments can mobilize their networks of relationships (with the government and various business groups) in order to identify and act upon entrepreneurial opportunities in foreign markets (Oviatt and McDougall 1995; Zhou, Wu and Luo 2007). Despite their small size and all the disadvantages coming from originating in transition environments, many SMEs successfully identify opportunities in foreign markets and manage to achieve competitiveness at least in the short run (Smallbone *et al.* 1999; Todd and Javalgi 2007).

To conclude, transition environments are settings going through institutional transitions. The process encompasses two simultaneous processes – deinstitutionalization of the old rules, norms and beliefs and the reinstitutionalization of the new ones. The overlap of two institutional frameworks or the lack of any leads to institutional vacuum when there is no one institutional framework to guide organizational behavior. Institutional vacuum is inherent to the transition environments and leads to an elevated level of uncertainty and vulnerability. Consequently, this impacts the relationship environment-organization and it gets reflected in the concept of organizational legitimacy.

The legitimacy needs of organizations (including SMEs) evolving in the transition contexts have their specificities. Influenced by the dynamic nature of the relationship environment-organization, legitimacy (existing on the borderline between the two) is perceived to be a continuous rather than a dichotomous variable. In addition, reputation seems to be more easily established in transition settings and hence, it is one of the antecedents of organizational legitimacy.

Moreover, establishing organizational legitimacy is more difficult for small firms in comparison to large firms due to their lower visibility, less support from the government, and liability of smallness.

In order to better address the legitimacy needs of small firms in transition contexts, in the next Chapter 3, a signaling theory of legitimacy is proposed. It is based on communication via signals between the legitimacy-claiming and legitimacy-granting entities. Its theoretical foundations lie in the strategic perspective of organizational legitimacy (Ashforth and Gibbs 1990) and the signaling theory in economics (Spence 1973, 1974).

PART I: THEORY DEVELOPMENT AND POSITIONING OF THE RESEARCH

CHAPTER 1:
Organizational Legitimacy

CHAPTER 2:
Legitimacy Issues in
Transition Environments

CHAPTER 3:
Signaling Theory of
Legitimacy

PART II: THEORETICAL AND EMPIRICAL SETTING

CHAPTER 4:
Outsourcing

CHAPTER 5:
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PART III: RESEARCH METHOD AND RESULTS

CHAPTER 6:
Research Method

CHAPTER 7:
Data Collection, Data
Analysis and Results

PART IV: DISCUSSION AND CONTRIBUTIONS

CHAPTER 8:
Discussion, Contributions,
Limitations and Avenues for
Future Research

CHAPTER 3: SIGNALING THEORY OF LEGITIMACY

The signaling theory of legitimacy is an extension of the understanding of the concept of organizational legitimacy. It is based on the signaling theory in economics (Spence 1973; 1974) and the strategic perspective on organizational legitimacy (Ashforth and Gibbs 1990; Dowling and Pfeffer 1975; Oliver 1991). The basic premises of the signaling theory of legitimacy state that when the evaluating audiences discount a particular organization based on certain characteristics (which can be internal and/or external), the latter can use valid signals of legitimacy in order to communicate its adherence to the requirements of the relevant stakeholders' groups.

Valid signals of legitimacy have to be observable, costly to imitate (Spence 1974) and carry the same (or similar) meaning between the sending (legitimacy-claiming) and the receiving (legitimacy-granting) party. Usually contexts characterized by high level of information asymmetry between the exchange parties and the resulting adverse selection and moral hazard are the settings in which the use of signals is very important.

Transition environments (discussed in Chapter 2) are an example of settings where organizations (especially SMEs) are prone to use signals in order to communicate their conformity to the evaluating audiences' expectations. In order to better address the legitimacy needs of SMEs evolving in transition environments and trying to obtain long-term arrangements, two new types of legitimacy (comprised of functional and relational legitimacy) are examined. Indeed, signals of functional and relational legitimacy are used by small firms to demonstrate their adherence to the requirements of relevant stakeholders' groups.

The chapter is organized as follows. First, I look at the signaling theory in economics, types of signals and the context when signaling certain organizational characteristics is crucial. Second, based on the signaling theory in economics and the strategic perspective of legitimacy, I present the theoretical basis of the signaling theory of legitimacy. And finally, I present the new legitimacy typology comprised of

functional and relational legitimacy – in order to address the needs of small organizations in transition environments.

1. Signaling Theory in Economics

The signaling theory of legitimacy extends the strategic perspective on organizational legitimacy (Ashforth and Gibbs 1990; Dowling and Pfeffer 1975; Oliver 1991) proposing that when an organization faces any type of liability (newness, smallness, market newness and/or origin), it can build (and communicate to its evaluating audiences) a portfolio of legitimacy signals. Any liability threatens the survival of the organization. Hence, by employing valid signals of legitimacy, an organization can increase its survival chances.

In order to develop a signaling theory of legitimacy, I first look at the postulates of the signaling theory, which was initially developed in economics and applied to labor markets (Spence 1973).

1.1. Signaling Theory – Basic Assumptions

In economics, signaling theory relates quality and uncertainty when economic actors with different grades of quality exist at the market (Akerlof 1970; Spence 1973, 1974).[19] In general, the sellers possess more knowledge about the quality of what (s)he offers than the buyers - a situation known as *information asymmetry* (Akerlof 1970). In environments, characterized with information asymmetries between the exchange parties, one party can use available signals to reduce the uncertainty about (in more general terms) a course of action (Spence 1973, 1974).

The signals are observable characteristics, actions and/or activities that are costly and difficult to imitate as well as subject to manipulation by the sending party (Spence 1973, 1974). Signaling creates a win-win situation. It benefits the high-quality actor who sends the signals (Lee 2001) as well as the receiving party since it facilitates decision-making. By examining the insurance market, Rothschild and Stiglitz (1976)

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[19] Akerlof (1970) studied the market for cars in the United States. He distinguished between two grades in quality – good and bad cars. The latter arecalled 'lemons.'

noted "if individuals were willing or able to reveal their information, everybody [at the market] can be made better off." On the contrary, the absence of signals causes market inefficiency (Eliasberg and Robertson 1988).

Organizations use valid signals in order to communicate certain characteristics or qualities to the evaluating audiences. Below, I look at the definition of 'valid signals' in the economics literature. Afterwards, I examine the types of signals and the contexts when using signals is very important.

1.2. Valid Signals

1.2.1. Definition

A *valid signal* is a signal that reduces the level of uncertainty between the economic actors (Pollock and Gulati 2007). In order to serve as uncertainty-reducing signals, the latter should fulfill three important criteria – they have to be:

- *Observable* – a signal can effectively distinguish one economic actor from another one only if the respective party can view the characteristic and/or the activity possessed by the other party in the exchange process. For example, in the labor market context, an employer can verify the educational degree of the potential employees based on his/her diploma (Spence 1973).

- *Costly*[20] (implying difficult) to imitate (Spence 1973; Milgrom and Roberts 1986) – a signal will effectively distinguish one economic actor from another one only when the signaling costs are positively correlated with actor's productive capability (Spence 1973). If this assumption does not hold, everyone will invest in the signal. If the signal becomes ubiquitous, the actors will not be distinguishable based on it (Spence 1973). For example, in the labor market context, candidates of inferior quality do not possess the skills or abilities needed to earn certain educational degree. Signaling costs can include not only financial outlays but also psychic and other costs (i.e. time) (Spence 1973).

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[20] Some researchers state that this is not a necessary requirement for a valid signal (Bhattacharya and Ditmar 2001).

- ***Shared meaning*** – this is a condition added to the two above-mentioned characteristics of valid signals in economics. A valid signal has to carry the same (or similar) meaning for the sending (legitimacy-claiming) and the receiving (legitimacy-granting) party. If this condition does not hold, the informational value of the signal is very little, if any.

Besides the labor markets where it originated, signaling theory is applied to many other contexts. Moreover, different attributes are examined as valid signals carrying important informational content which decreases the information asymmetry between the exchange parties. Based on the evaluative criteria used, signals can be two types: (1) based on whether they can be controlled or not by the focal organization (fully-controlled and partially-controlled), and (2) based on their informational content (signals of product/service quality and signals of firm's quality).

1.2.2. Typology of Signals

A) Fully-Controlled and Partially-Controlled Signals
The *fully-controlled signals* (also called *indices*) are organizational characteristics which are in the direct control of organizations (Spence 1973; Downes and Heinkel 1982). In the management literature, some examples of fully-controlled signals include *board structures* (Certo 2003) and *managerial background* (D'Aveni 1989, 1990; Higgins and Gulati 2003, 2006). The *partially-controlled signals* (also called *signals*) are observable organizational characteristics that are largely outside the control of the focal company (Spence 1973; Downes and Heinkel 1982).

Even though the partially-controlled signals may result from actions initiated by the focal actor, these signals are provided by third parties who make their own decisions (Pollock and Gulati 2007). Partially-controlled signals are as frequently used as the fully-controlled signals (Pollock and Gulati 2007). Some examples of partially-controlled signals include: *third-party endorsements* (Carter and Manaster 1990; Gulati and Higgins 2003; Higgins and Gulati 2003, 2006; Stuart *et al.* (1999); and *certification contests* (Rao 1994; Rindova *et al.* 2005; Wade *et al.* 2006).

B) Signals of Product/Services Quality and Signals of Firm's Quality

Based on their informational content, signals can be divided into two main groups: (1) signals of product/service quality, and (2) signals of firm's quality and future prospects. I look at these two categories below. There are several institutions that function as valid signals of product quality – *product guarantee/warranty* (Grossman 1981), *brand name*, *licensing practices* indicating levels of proficiency (i.e. licensing of doctors, lawyers, and barbers) (Akerlof 1970: 499-500) and *minimum quality standards* (Leland 1979), *seller liability* (Heinkel 1981), etc. Signals are not only confined to (output) product quality issues (Lee 2001). They can also communicate the firm's quality and future prospects. In example, *firm's reputation* is used as a signal that provides information about the working conditions in the organization (Turban and Cable 2003).

The table below presents signals identified by different researchers:

FIELD	AUTHORS	VALID SIGNALS
Corporate Governance	Westphal and Zajac (1994, 1998)	Long-term incentives plans
	Zajac and Westphal (2001, 2004)	Stock repurchase plans
	Wade et al. (2006)	Certification contest
Corporate Identity	Lee (2001)	Corporate name change
Corporate Reputation	Rindova *et al.* (2005)	Media ranking
Entrepreneurship	Nelson (2003)	Founder-led companies
	Hsu and Ziedonis (2007)	Owning a patent
Finance	Ross (1977)	Debt
	Bhattacharrya (1979)	Dividends
	Leland and Pyle (1977)	Entrepreneurial willingness to invest in his/her own project
	Hughes (1986)	Direct statement about the firm value
IPO Literature	Certo (2003)	CEO stock options
	Titman and Trueman (1986); Carter and Manaster (1990); Michaely and Shaw (1994); Carter, Dark and Singh (1998); Stuart, Hoang and Hybels (1999); Gulati and Higgins (2003[21], 2006), Pollock, Porac and Wade (2004)	Reputation of investment banker (or underwriter)
	Titman and Trueman (1986), Balvers, McDonald and Miller (1988)	Reputation of an auditor company
	Gulati and Higgins (2003), Megginson and Weiss (1990), Lerner	Reputation of venture capitalists

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[21] Higgins and Gulati (2003) recognized the role of prestigious underwriters on the IPO valuation and examined the antecedents of having a prestigious underwriter. They discovered that past prominent employment affiliation of the top management team is linked to the underwriter prestige.

	(1994), Brav and Gompers (1997)	
	Gulati and Higgins (2003), Stuart, Hoang and Hybels (1999)	Strategic alliance partners
	Stuart, Hoang and Hybels (1999)	Reputation of organizations with ownership stake
	Certo (2003)	Board prestige
	Gulati and Higgins (2006), Higgins and Gulati (2003), Lester *et al.* (2006)	TMT background
	Downes and Heinkel (1982), Ritter (1984), Hughes (1986)	Proportion of equity ownership of original shareholder
Labor Market Literature	Turban and Cable (2003)	Firm's reputation
Marketing	Nelson (1974), Milgrom and Roberts (1986)	Price
	Nelson (1974), Milgrom and Roberts (1986)	Advertising volume
	Dean and Biswas (2001)	Third-party endorsement
	Eliashberg and Robertson (1988)	Pre-announcing behavior
Strategic Management	Rao (1994)	Placement in certification contests
	Baum and Oliver (1991)	Certification from credential agencies
	Baum and Oliver (1991), Haunschild (1994)	Relationship with high-status actors
Upper Echelon Literature	D'Aveni (1989, 1990[22])	Managerial prestige

Table 1: Valid Signals in Different Organizational Contexts

After I looked at the various types of signals studied in different fields, I specifically regard the contexts when signaling is important.

1.3. Contexts when Signals are Crucial

The informational difference between buyers and sellers exist in many markets (Leland and Pyle 1977). Such markets, for example, are the financial markets between the borrower and the lender, between the IPO and the potential investors, between the entrepreneur and the business angels and/or venture capitalists providing financing (Leland and Pyle 1977). The intermediate markets for outsourcing services characterized by information asymmetry between the counterparts in the exchange process are also an example of markets where signals are important. Economists have discovered that the competition on the markets with imperfect information (or

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[22] D'Aveni (1990) operationalized the multidimensional construct 'prestige' by measuring: membership in the political elite, membership in the military elite, membership in elite educational circles, membership in webs of board directorates, and previous acceptance into the ranks of high ranking corporate officers.

asymmetrical information) between the exchanged actors is very complex (Rothschild and Stiglitz 1976). As a result, many institutions arise in order to decrease the difficulty related to the existing information asymmetry (Rothschild and Stiglitz 1976).

In mature and stable sectors, there is data (collected over many years) on organizations and their actions. In such sectors, when faced with uncertainty, market players can base their decisions on past experience and on potential partner's status and/or reputation (Podolny 1994).

Additionally, professional education and training of institutional investors (i.e. mutual and pension fund managers) and investment bankers serve to diffuse knowledge and skills in standard valuation practices (DiMaggio and Powell 1983). Markets typically rely on this *codified knowledge* and detailed analysis of financial, economic, and market data to reduce information asymmetry regarding inherent quality and to value firms because such information reduces uncertainty (Alchian and Woodward 1988).

However, during the emergence of new industries, investors and analysts lack a codified body of knowledge and industry-specific experience. In these contexts, firms often operate with new and unproven business models and compete against many rival start-ups, all jockeying for early market dominance. Information asymmetry is particularly problematic in new economic sectors because managers have great discretion over scarce financial capital and investors are inexperienced in these domains (Alchian and Woodward 1988).

The situation of information asymmetry means that one party in the economic transaction has superior information than the other party (Akerlof 1970; Rothschild and Stiglitz 1976). There are two forms of opportunistic behavior that can arise from information asymmetry – adverse selection and moral hazard.

A) Adverse Selection
Adverse selection is a type of opportunistic behavior based on hidden and/or erroneous information that benefits the seller (Durand and Vargas 2003). The basis for the adverse selection is the qualitative difference in the initial conditions (Sanders and

Boivie 2004). The basic idea of the adverse selection principle (or also called "lemon principle") is that the 'bad' products are more likely to be selected than the 'good' products (Akerlof 1970). This leads to pushing the good product sellers out of the market. As a result, if there is no mechanism or institution, which can overcome the information asymmetry (Hughes 1985) the market will fail (Akerlof 1970). In this case, sellers of high-quality products have incentives to develop mechanisms and/or use institutions that will help them sell their products or services at an appropriate price (Hughes 1986). Some suggested solutions are *licensing* (Leland 1979), *imperfect quality testing* (Heinkel 1981), *product warranties* (Grossman 1981) among others.

B) Moral Hazard

Moral hazard is a risk of non-compliance of an action by an economic actor or an agent (in agent-principal relationship) (Durand and Vargas 2003). Moral hazard is related to the unobserved or hidden actions that can be undertaken by the economic actors driven by their utility (or profit) maximization (Arrow 1963; Sanders and Boivie 2004). In addition, moral hazard hampers the direct information transfer between economic actors (Leland and Pyle 1977).

Adverse selection and moral hazard are compounded by the uncertainty of new economic sectors. Consequently, when valuing new firms in emerging industries, interested audiences are likely to use secondary sources of information to help identify qualitative differences across firms and their future prospects (Pollock and Gulati 2007; Sanders and Boivie 2004).

Besides new economic sectors in established economies, the problems of adverse selection and moral hazard are typical for markets characterized with greater quality variation (Akerlof 1970). According to Akerlof (1970), these are the markets in underdeveloped countries, including transition economies. These environments are characterized by more dishonesty (Akerlof 1970) due to the overall chaos or lack of institutional framework to guide organizational behavior. When goods are sold in dishonest way on the market, the sellers misrepresent their quality. Thus, the problem for the buyer is to be able to identify the quality (Akerlof 1970). The cost of dishonesty lies not only in the amount by which the purchaser is cheated but also the

cost includes the loss from driving legitimate business out of existence (Akerlof 1970).

Organizations are dependent on the various groups of stakeholders for resources (Pfeffer and Salancik [1978] 2003), which ensure their long-term survival ((Pfeffer and Salancik [1978] 2003; DiMaggio and Powell 1983). Hence, organizations are interested in using signals to decrease information asymmetry between them and their evaluating audiences. This is a way to be granted organizational legitimacy. In the section below, the basic premises of the signaling theory of legitimacy are presented.

2. Signaling Theory of Legitimacy

The signaling theory of legitimacy is based on the signaling theory in economics (Spence 1973, 1974) and the strategic perspective of organizational legitimacy (Ashforth and Gibbs 1990; Dowling and Pfeffer 1975; Oliver 1991).

The signaling theory of legitimacy states that when facing liabilities, organizations can use valid signals of legitimacy in order to demonstrate and/or communicate their conformity to evaluating audiences' expectations. Based on the evaluation of the signals, legitimacy can be granted or not, which consequently increases or decreases the survival chances of organizations, respectively (see Fig. 4).
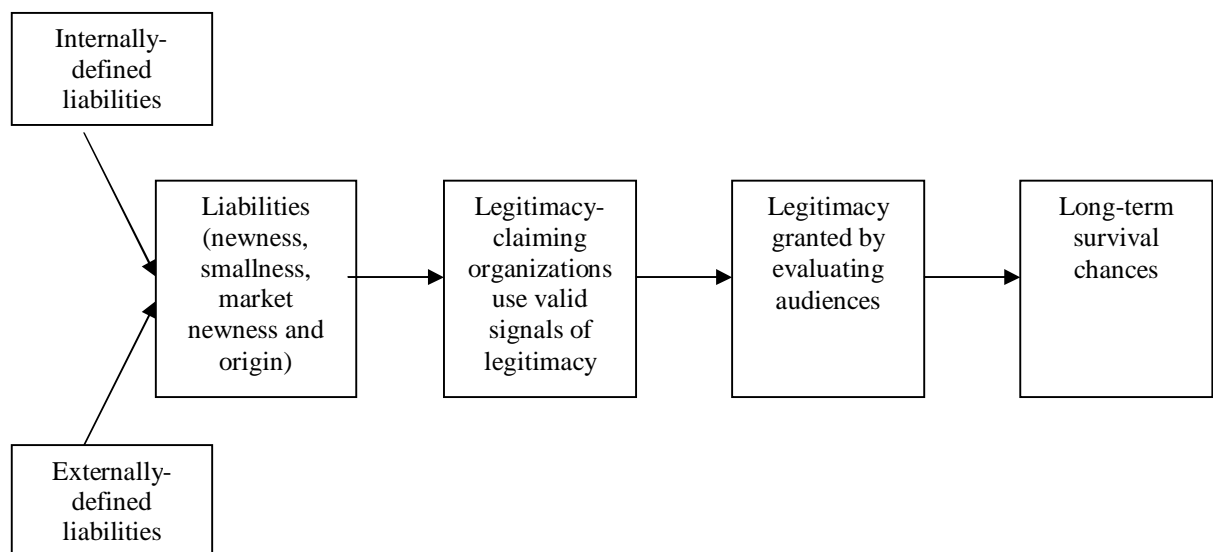
Fig. 4: Signaling Theory of Legitimacy

In developing the signaling theory of legitimacy, I first define the concept of organizational liability. Then, different types of liabilities are presented. It is followed by a discussion on a new legitimacy typology (functional and relational legitimacy) which addresses in a better way the legitimacy needs of small organizations in transition environments trying to obtain long-term contracts.

2.1. Organizational Liabilities

2.1.1. Definition of Organizational Liability

In general, a liability is the state of being liable or likely to experience something undesirable (Oxford Dictionaries Online). Arend (2004) defined strategic liability as "those resources that damage and destroy a firm's ability to generate rents." When an organization faces a liability, it experiences a certain type of disadvantage in comparison to its potential competitors. In this study, organizational liability is defined as "the discount the evaluating audiences place on a particular organization in comparison to potential competitors." The source of the liability can be inherent to the organization (internally-defined liabilities) or external to the organization (externally-defined liabilities).

I use *evaluating audiences* as a general term to address all groups of stakeholders that are interested in the organization under scrutiny. Depending on the concrete industry and position of the organization in the value chain, the importance of the different stakeholder groups varies.

The basic premises of the signaling theory of legitimacy are that by signaling their conformity to stakeholders' expectations, organizations can overcome the liabilities they face and increase their survival chances. The signaling theory of legitimacy contributes to the strategic perspective of organizational legitimacy since any organization (no matter the type of liability it faces) can create a portfolio of signals in order to communicate its fit with the requirements of the evaluating audiences. Organizations are not passive actors accepting their condition (i.e. new and small ventures) – they can indeed improve their fit with the stakeholders' expectations by utilizing valid signals of legitimacy.

2.1.2. Types of Liabilities

Going back to Fig. 4, organizational liabilities can be internally- and externally-defined. The *internally-defined liabilities* are based on certain characteristics inherent to the organization, such as age (liability of newness) and size (liability of smallness). The *externally-defined liabilities* are derived from the environment in which the organization evolves, such as liability of market newness based on the fact that the organization is new to the market and liability of origin based on the instability of the environment in which an organization evolves.

The *liabilities of newness* (Stinchcombe 1965), *smallness* (Freeman, Carroll and Hannan 1983) and *foreignness* (Zaheer 1995) are well-discussed in the literature. Certo (2003) added a new type of legitimacy – *liability of market newness* – which he used regarding organizations that undergo an IPO. Herein, it is suggested that *liability of foreignness* is a sub-type of the liability of market newness since it reflects only an organization that moves two specific layers of the environment – i.e. from national to international. Liability of market newness is a broader term referring to organizations that move not only from one environmental layer to another one but also the ones that enter new markets in general (i.e. due to a diversification strategy).

As it was mentioned earlier, the *liability of origin* (Bartlett and Ghoshal 2000) is related to the discount that evaluating audiences (both domestic and foreign) place on an organization due to its context of origin. Liability of origin is a complex phenomenon that is associated with the importation of instability from the environment in which an organization functions. The discount can be placed not only by organizations that have originated outside the transition environment but also by organizations that evolve in the transition environment itself. The reason for this is that all actors that interact with organizations evolving in transition environments experience elevated transaction costs (Meyer 2001).

All organizations in transition contexts are subject to liability of origin. But small firms are even more vulnerable since they do not have slack that help large structures absorb the environmental uncertainty.

The type of organizational liability and the type of evaluating audiences directly reflect on the type of legitimacy sought. The latter determines the types of signals it is appropriate to use in order to efficiently communicate the conformity to the stakeholders' expectations.

It is important to note that the widely-accepted typology of legitimacy relates to a specific environment characterized by relative stability. The typology of regulative, normative and cognitive legitimacy is based on the pillars of institutions (Scott 2001). Institutions imply stability. When the environment experiences institutional vacuum – a shift between two institutional frameworks associated with a very high level of instability, the above-mentioned typology is difficult to apply.

Regulatory legitimacy can be hardly established and even if it is (in example, accreditation from government body), in many cases it is meaningless due to the high level of opportunistic behavior experienced and exercised by the economic actors. The high level of corruption implies that an accreditation may be granted not based on merit. Hence, an accreditation can be a noisy signal which does not contain the informational value expected.

The other legitimacy types – *normative* and *cognitive legitimacy* - are also difficult to obtain since the new norms have not been created yet but the old ones are not valid anymore. A valid question in transition environments is: where do new norms and beliefs come from? One way is to import them from more stable environments – i.e. certificates that are globally-recognized (i.e. ISO). Another way is to go back to some cognitive sources of legitimacy that existed in the pre-transition stage of development – i.e. some traditional practices of production, etc.

For the purpose of this study, the above-mentioned typology of legitimacy does not apply due to the specificities of the transition environment. Hence, I propose a new legitimacy typology comprised of two types – functional and relational legitimacy. The new typology addresses in a better way the legitimacy needs of small organizations in transition environments trying to obtain long-term contracts. In the next section, the functional and relational legitimacy are defined and their dimensions – identified.

3. Functional and Relational Legitimacy

Organizational legitimacy is a multi-dimensional construct (Deephouse and Carter 2005). In the literature, different legitimacy typologies have been developed (Scott 2001; Zimmerman and Zeitz 2002; Higgins and Gulati 2006 among others). Each typology reflects the particular context in which the organizations studied evolve and the respective dimensions of the legitimacy concept. The present study focuses on small organizations evolving in transition environments, trying to demonstrate their worthiness as partners (in long-term arrangements). I examine two aspects of the legitimacy concept – the *functional* and the *relational legitimacy* – assuming that the proposed typology reflects in the best possible way the signaling needs of the organizations under scrutiny. I perceive the two constructs of functional and relational legitimacy as building blocks of the organizational legitimacy concept.

The most important evaluating audiences in transition contexts are mainly the ones that transact directly with the focal organization, such as clients, distributors, employees. Some of the stakeholders' groups (i.e. government agencies) are not relevant in transition environments since even if they exist, it is very likely that they do not perform their functions in the expected manner. For example, they do not sanction the organizations that engage in illegitimate behavior.

The above-mentioned audiences that transact directly with the focal organizations experience two main type of risks (uncertainties) based on the existing information asymmetry: (1) risk linked to the partner's deficient resources and capabilities, and (2) risk of over-dependence on the partner (Quélin and Duhamel 2003: 656) . The proposed new typology, namely functional and relational legitimacy, addresses successfully the above-mentioned risks.

Functional legitimacy signals the worthiness of a partner based on its access and/or control of important and valuable organizational resources and capabilities. It demonstrates an organization meets the requirements in terms of resources and capabilities and addresses the potential partner's concern regarding deficient competencies.

Relational legitimacy is associated with whether an organization is reliable as a partner and will comply with the specifications of a contract (i.e. in terms of respecting the quality requirements and deadlines). Relational legitimacy reflects the concern of the legitimacy-granting audiences regarding the dependence on the focal organization.

It is considered that functional and relational legitimacy are independent from one another. This means that organizational resources and competencies are independent from the perception of a firm's trustworthiness (and other relational aspects) as a partner. A firm may have certain resources and competencies but this does not imply that it will fulfill the requirements of a contract in a proper way. At the same time, a company may be a reliable partner, which does not have the necessary resources and capabilities to accomplish the project.

In this study, I adopt a strategic perspective of organizational legitimacy (Ashforth and Gibbs 1990; Dowling and Pfeffer 1975) and assume that any organization can handle the above-mentioned concerns or perceived risks by employing concrete signals of functional and/or relational legitimacy. Signaling certain organizational characteristics helps the focal company bridge the information asymmetry that exists between the exchange parties and communicate its adherence to the evaluating party's requirements and expectations.

Before I identify concrete observable organizational characteristics that enhance the legitimacy of the organizations under scrutiny, I explore the dimensions of functional and relational legitimacy as latent (not directly observable) variable constructs. Based on the review of the literature on organizational legitimacy and other related concepts, I try to specify the content of the two concepts, which is indeed the first stage of the process of building a latent variable construct. In the second part of the thesis, I continue with the latent variable construction by identifying relevant indicators per dimension (second stage), checking for multicollinearity (third stage) and checking for external validity (forth stage) (Diamantopoulos and Winklhofer 2001). I first look at the dimensions of the functional legitimacy construct followed by the dimensions of relational legitimacy construct.

3.1. Dimensions of Functional Legitimacy

As it was discussed above, functional legitimacy signals the worthiness of a partner based on its access and/or control of important and valuable organizational resources and capabilities.[23] In early research, the distinction between firm's resources and capabilities was not made (Spanos and Lioukas 2001). Herein though, following Amit and Schoemaker (1993), I perceive *resources* as assets that are either owned or controlled by the firm. In general, they are divided in two main groups - *tangible* and *intangible* (Spanos and Lioukas 2001). And the *capabilities* are the ability to exploit and combine resources through routine processes in order to accomplish organizational goals (Spanos and Lioukas 2001). Herein, I call resources and capabilities with the term organizational competencies.

According to the resource-based view, the distinct resources and capabilities of an organization can be the basis for creating and sustaining competitive advantage if they are valuable, rare, imperfectly imitable and non-substitutable (Barney 1991). Firms are heterogeneous in terms of their resources and capabilities (Peteraf 1993). Hence, signaling the access or control of the above-mentioned resources and capabilities can help an organization increase its attractiveness as a partner to potential exchange parties and thus enhance the functional aspect of its legitimacy. I look at the types of competencies that if possessed and demonstrated can enhance the functional legitimacy of an organization. More specifically, I name them task-related competencies in order to emphasize the direct link between the competencies and the task in question.

Task-related competencies have been defined in the joint venture partner selection literature (Geringer 1991, Gleister and Buckley 1997) and the definition provided is similar to the definition adopted for the purpose of this research. Hence, I first look at the definitions of task-related competencies in the joint venture literature followed by the definition adopted in this study.

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[23] As Peteraf (1993) mentioned there is subtle variation in terminology across papers. According to Barney (1991): "Firm resources include all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm." Herein, a clear distinction between firm's resources and capabilities is made.

Geringer (1991) introduced the term "task-related" selection criteria referring to the criteria companies use to choose a joint venture partner.[24] Following Geringer (1991:45), the task-related competencies are "the operational skills and resources which a venture requires for its competitive success." The task-related competencies are associated with the "viability of a proposed venture's operations" (Geringer 1991: 45). These competencies include resources and capabilities and can be tangible, intangible, human or non-human in nature (Geringer 1991). Some examples of task-related competencies are patents or technical know-how, financial resources, experienced managerial personnel, and access to marketing and distribution systems (Geringer 1991). Based on Geringer's typology, Gleister and Buckley (1997) tried to rank the relative importance of a set of selection criteria, including task-related and partner-related variables (p. 207). In example, criteria, such as knowledge of local market, distribution channels, links with major buyers, and knowledge of local culture are identified as being very important in choosing a joint venture partner (Gleister and Buckley 1997).

While in the literature on joint venture partner selection, the task-related competencies are variables used by an organization in order to make a decision on its joint venture partner, for the purpose of this study, I adopt a different perspective – I look at the signals that a small organization in transition environment can send to its potential partners in order to demonstrate that it has the necessary task-related skills and resources.

Similarly, the definition of task-related competencies adopted is: *resources and capabilities that demonstrate the company can perform the task in question*. Signaling task-related competencies (resources and capabilities) can help small organizations in transition environments gain the support of the evaluating audiences.

The resource-based view (Penrose 1959; Rumelt 1984; Wernerfelt 1984) places a lot of attention on firm's distinctive competencies as the basis for creating and sustaining

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[24] Indeed, Geringer (1991) introduced a typology of joint venture partner selection criteria that was comprised of two groups of criteria – task-related and partner-related criteria. The author distinguished between the two groups based on whether the investment mode involves the presence of multiple partners. Some examples of partner-related criteria include partner's national or corporate culture, the degree of favorable past association, compatibility and trust between partners' top management teams, and a partner's organizational size or structure (Geringer 1991: 46).

competitive advantage when they are valuable, rare, imperfectly imitable and non-substitutable (Barney 1991). Some authors (Leonard-Barton 1992) perceive the distinctive (Hitt and Ireland 1985) and core competencies (Prahalad and Hamel 1990) as being two different names of the same concept, which is defined as the competencies that differentiate a company strategically.

By adopting knowledge-based view of the firm, Leonard-Barton (1992) identified several dimensions of the firm's core competency – (1) *employee knowledge and skills*, including firm-specific techniques and scientific understanding; (2) the knowledge embedded in *technical systems*, including information and procedures; (3) *managerial systems* representing formal and informal ways of knowledge creation and control; (4) the *values and norms* associated with the various types of embodied and embedded knowledge.

When evaluating the task-related competencies of small technology-based organizations evolving in transition environments, I identify several distinctive competencies signaling the possession of which can enhance the functional legitimacy of organizations – informational, managerial, organizational, innovative and symbolic reputational. In their totality, they represent different dimensions and hence build the formative latent construct of functional legitimacy. All of these dimensions of functional legitimacy are regarded in detail in Chapter 4.

3.2. Dimensions of Relational Legitimacy

Relational legitimacy is associated with the perceived worthiness of an organization as an attractive partner (Dacin, Oliver and Roy 2007). Herein, I regard one particular aspect of relational legitimacy (according to Dacin *et al.* 2007 definition) – whether an organization is reliable as a partner and will comply with the specifications of a contract (i.e. in terms of respecting the quality requirements and deadlines). In the context of transition environments, small organizations trying to receive long-term contracts have to signal not only their ability to perform the task in question (functional legitimacy) but also to perform it by respecting the initially set deadlines and quality specifications (relational legitimacy).

Relational legitimacy includes valid signals of the worthiness of a partner based on the communicating two sets of elements: *partnership-related* (considering the relationships of the focal organization with other entities) and *organization-related* (considering characteristics specific to the focal organization). The elements of relational legitimacy cannot be directly experienced by the exchange party because this would mean being engaged in a contractual arrangement with the focal organization. Thus, the organization can utilize other observable organizational characteristics (signals) to imply its worthiness as a partner in a potential long-term arrangement.

The evaluating audiences in transition environments are mainly concerned with whether a potential partner is trustworthy and/or reliable, which can be demonstrated based on past performance (Zott and Huy 2007). In addition, they are concerned with whether their potential partner can successfully manage the processes inside (accountability) and outside the organization (stability). Another dimension of relational legitimacy, which may be typical only for small organizations evolving in transition environments, is organizational visibility. The latter is comprised of the physical footprint (in terms of the offices as a physical access point for the stakeholders) and virtual footprint (website) of an organization. In transitional contexts characterized by a sense of chaos and experiencing a high degree of opportunistic behavior, the physical and virtual footprint of the organizations under scrutiny becomes very important. The dimensions of relational legitimacy are regarded in detail in Chapter 4.

3.3. Organizational Legitimacy

The enhanced organizational legitimacy leads to more stakeholders' support for the focal organization's actions (Scott 2001), and consequently improves the survival chances of organizations (Hannan and Freeman 1984). Organizational legitimacy is conferred by different groups of external constituencies (Singh *et al.* 1986) but not all of them have equal weight in providing an assessment of the focal organization (Ruef and Scott 1998). The actions that an organization needs to take in order to be granted legitimacy differ by stakeholder group (Shepherd and Zacharakis 2003).

In the transition context, the most important legitimacy-granting groups are the ones that have high bargaining power in direct exchanges towards the legitimacy-claiming organizations. Since these entities are directly involved with the organization under scrutiny, they affect its short-term survival.[25] Based on the criteria discussed above, some examples of legitimacy-granting audiences include: clients, employees and distributors.

The stakeholders' support increases the survival chances of an organization. . Furthermore, the ultimate sign of a legitimate organization is its profit-making ability (Mazza 1999: 42). Therefore, in this study, I go a step further and try to establish a positive relationship between organizational legitimacy expressed in terms of stakeholder support and its profit-making ability.

To conclude, a signaling theory of legitimacy is proposed in order to address the link between the liability experienced by an organization and the need to signal its legitimacy or the adherence to the evaluating audiences' expectations. In addition, since the particular group of firms we regard in this study is comprised of SMEs evolving in transition environment, I propose a new legitimacy typology – functional and relational legitimacy – in order to better address their needs.

The next part (Chapters 4 and 5) looks at the theoretical and empirical setting for this research. The theoretical setting examines the outsourcing arrangements between the outsourcer and the outsourcee. The suppliers of services (outsourcees) are small organizations evolving in transition environments. In many global industries, there are many companies that compete for outsourcing arrangements on an international/global, national and/or local level. Thus, keeping in mind that the environment in which they originate and operate poses certain constraints on the ability to meet the expectations of the outsourcing party, these organizations have to demonstrate/communicate their legitimacy. According to Pollock and Gulati (2007)

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[25] I did not consider the government agencies and the community because of low level of institutionalization of the sector. I also disregarded the suppliers and the alliances since the suppliers are very fragemented and the alliances are opportunistic and exist via non-formalized arrangements between the organizations. Since most of the companies are SMEs, they are not publically traded. Hence, I did not consider the shareholders as an important legitimacy-granting stakeholder group.

there was not enough attention paid to how companies get included in the so-called "consideration set" (Roberts and Lattin 1997, Zuckerman 1999) of the decision maker. In this study, I look at the attempts of small organizations in transition environment to gain long-term outsourcing contracts by using signals of functional and relational legitimacy.

PART II: THEORETICAL AND EMPIRICAL SETTING

PART I: THEORY DEVELOPMENT AND POSITIONING OF THE RESEARCH

| **CHAPTER 1:** Organizational Legitimacy | **CHAPTER 2:** Legitimacy Issues in Transition Environments | **CHAPTER 3:** Signaling Theory of Legitimacy |

PART II: THEORETICAL AND EMPIRICAL SETTING

CHAPTER 4: Outsourcing

CHAPTER 5: The Bulgarian IT Sector

PART III: RESEARCH METHOD AND RESULTS

| **CHAPTER 6:** Research Method | **CHAPTER 7:** Data Collection, Data Analysis and Results |

PART IV: DISCUSSION AND CONTRIBUTIONS

CHAPTER 8: Discussion, Contributions, Limitations and Avenues for Future Research

CHAPTER 4: OUTSOURCING

Outsourcing is "one of the greatest organizational and industry structure shifts of the century." James Brian Quinn[26]

At the end of the 20th century, the organizational form is experiencing a great change (Corbett 2004). The large, hierarchical organizations have been replaced by loosely coupled, leaner and more flexible firms focused on core activities (Achrol 1997; Schilling and Steensma 2001). There are several reasons why companies switched to this modular form (Schilling 2000), which allows them to easily change between different providers of loosely-coupled organizational components (Schilling and Steensma 2001). Flexibility or the organizational ability to do new things quickly is an important gain based on modularity of organizational forms (Schilling and Steensma 2001). The hyper-competitive, performance-driven environment, which pressurizes organizations to constantly reduce the costs and improve the quality (Apte and Mason 1995; Corbett 2004: 10) as well as the increased number of information-based operations made flexibility an important organizational characteristic in order to respond to the changing requirements (Apte and Mason 1995).

In addition, organizations started thinking in a different way about their competitive advantage – the rise of the resource-based view of the firm where the emphasis is placed on the core competencies (Prahalad and Hamel 1994) (see Fig. 5) and not on the favorable organizational positioning in the environment and the resulting higher bargaining power (Porter 1980). Managers started leveraging the inter-organizational relations based on the understanding that an organization can derive equal if not higher value from partnerships for complementary activities (Mol 2007: 12) (see Fig. 5).

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[26] James B. Quinn (1992) cited by Corbett (2004).
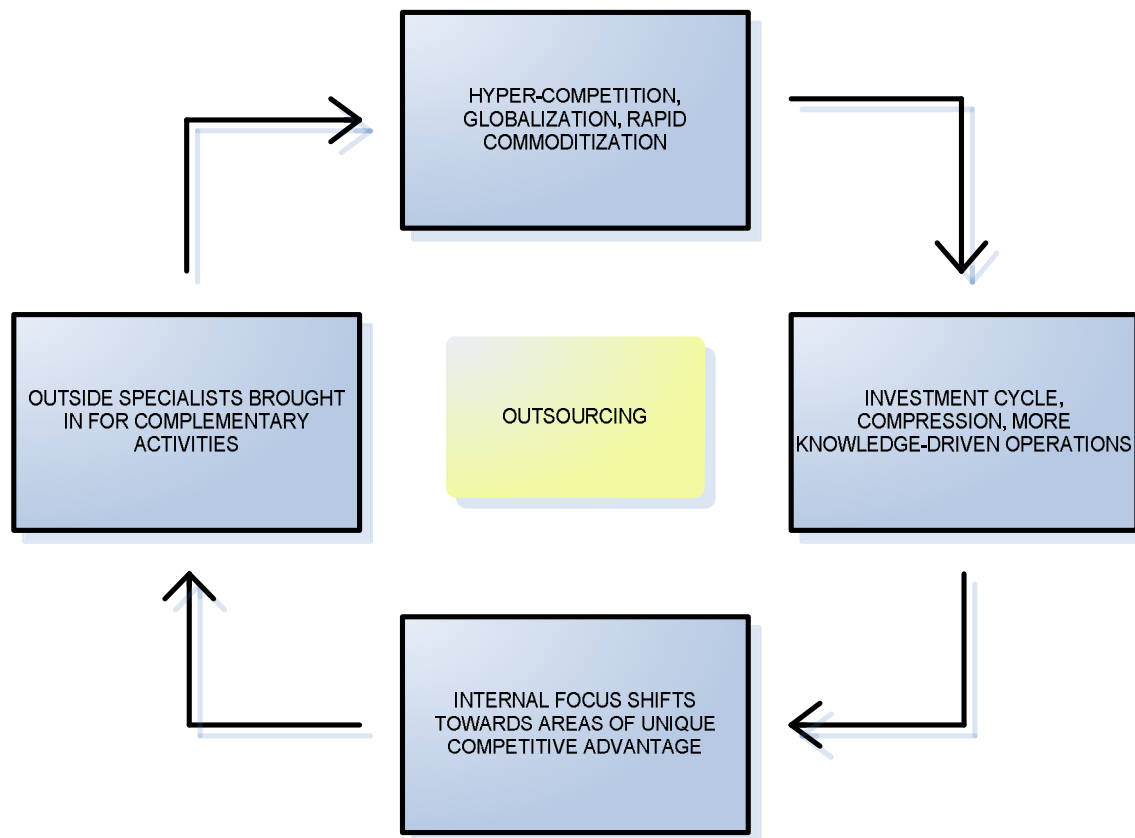
Fig. 5: Outsourcing – at the Center of a Fundamental Business Restructuring (Corbett 2004)

Outsourcing has become a key restructuring tool for organizations in the late twentieth century (Mol 2007) and there are many industries that are undergoing the process of vertical disintegration (Jacobides 2005). Some examples include automotive companies outsourced the production of their parts (Jacobides 2005), PC manufacturers transferred the final assembly to their distributors, banks outsourced back-office operations, and retailer and hospitals – their inventory operations (Cachon and Harker 2002). The entire industries dealing with providing professional services, such as accounting, legal services, marketing, advertising, consulting today are based on outsourcing (Corbett 2004).

In this study, the focus is not on the outsourcer's decision to externalize some of its value-chain activities but on the organizations that compete for outsourcing contracts.

The chapter is organized as follows. First, I define outsourcing followed by a discussion on the different types of outsourcing. Then, I examine the outsourcing process from the point of view of the company initiating the outsourcing - the outsourcer (Tiwana 2008) - as well as the point of view of the company receiving the outsourcing contract - the outsourcee (Tiwana 2008). The chapter finishes with a discussion on the specificities of the intermediate markets for outsourcing services.

1. What is Outsourcing?

Initially, the term "outsourcing" was coined in relation to the subcontracting of information systems in the late 80s (Espino-Rodríguez and Padrón-Robaina 2006). Today, the term is applied broadly to any type of value-chain activity (marketing, manufacturing, human resources, etc.), which is not performed in-house. Other terms that have been used to label the outsourcing are "externalization," "external sourcing," (Murray, Kotabe, and Wildt 1995; Murray and Kotabe 1999), "offshoring" (Kotabe 1989), "vertical deintegration" (Walker and Weber 1984), "vertical disintegration" (Jacobides 2005) and "hollowing-out" (Kotabe 1989).

There are different definitions of outsourcing but as Espino-Rodríguez and Padrón-Robaina (2006) state all of them agree on the fact that through outsourcing a company decides not to make certain product/service internally (Gilley and Rasheed 2000; Lacity and Hirschheim 1993; de Fontenay and Gans 2008) but to rely on resources and competencies of external parties (Lacity and Hirschheim 1993; Lei and Hitt 1995)[27] on ongoing basis (Linder 2004). Holcomb and Hitt (2007: 466) define [strategic] outsourcing as "the organizing arrangement that emerges when firms rely on intermediate markets to provide specialized capabilities that supplement existing capabilities deployed along a firm's value chain." Since outsourcing alters the boundaries of the firm (McCarthy and Anagnostou 2004; Rothaermel *et al.* 2006) it is considered to be an integral part of the overall strategy of an organization (Quélin and

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[27] Kotabe (1989) regarded outsourcing as being done in two ways: (1) independent foreign suppliers on a "contractual" basis; (2) from foreign affiliates of the focal company on an "intrafirm" basis. Herein, I adopt the first view of outsourcing.

Duhamel 2003) and as such it aims to achieve (sustainable) competitive advantage (Espino-Rodríguez and Padrón-Robaina 2006).

1.1. Outsourcing as a State and a Process

Mol (2007: 5) distinguishes between outsourcing as *a state* and as *a process*. As *a state*, outsourcing is defined as "the procurement of goods and services from external suppliers" (Mol 2007: 5). The counterpart of outsourcing as *a state* is *vertical integration* (Harrigan 1985) – internally produced goods and services or procured from units that are part of the corporate system (Mol 2007: 5). Any type of activity within a firm can be outsourced or internally performed (integrated) (Mol 2007: 5). In addition, for many value-chain activities, organizations can integrate backward or forward and at the same time rely on external parties for a portion of its supplies and distribution, an organizing approach labeled as *taper integration* (Rothaermel *et al.* 2006),

As *a process*, outsourcing is defined as "a range of actions within a clearly identifiable timeframe that lead to the transfer of outside suppliers of activities, possibly involving the transfer of assets (including people) that were previously performed in-house or procured from other units within a corporate system" (Mol 2007: 5). The counterpart of outsourcing as a process is the *insourcing* - when the organization decides to internally produce goods and services that have been previously procured from outside providers (Apte and Mason 1995).

In order to increase our understanding of the concept of 'outsourcing,' I look at its relationship with other related concepts, such as alliances and try to distinguish between them.

1.2. Strategy vs. Method of Strategic Development

Herein, following Holcomb and Hitt (2007), I distinguish between the two concepts – [strategic] alliances and [strategic] outsourcing – and will perceive them as being two separate concepts.

1.2.1. Alliances

There are only two types of inter-firm relationships that are excluded from the category of alliance partnerships – market-based transactions and mergers and acquisitions (M&As) (Inkpen 2001). Alliance partnerships are short- or long-term voluntary collaborative arrangements (Inkpen 2001) between at least two sovereign organizations concerning one or more areas of activity (Dacin, Oliver and Roy 2007) in contexts involving competitive markets and uncertainty over outcomes (Arino, de la Torre and Ring 2001). In these arrangements, both parties regulate their future conduct by means of "more or less formally specified contractual mechanisms" (Dacin, Oliver and Roy 2007).

Companies can enter into alliance partnerships in order to gain: improved competitive positioning (Eisenhardt and Schoonhoven 1996; Kogut 1988; Hedgedoorn 1993), access to new resources (Kotabe *et al.* 2000) and competencies (Hedgedoorn 1993), new capabilities (Hamel 1991; Mowery, Oxley and Silverman 1996), strategic renewal (Borys and Jemison 1989), risk and investment sharing (Anderson 1990; Ring and Van de Ven 1992), economies of scale and scope (Contractor and Lorange 1988), reduction in liability of foreignness (Zaheer 1995; Mezias 2002), legitimacy (Baum and Oliver 1991; Dacin, Oliver and Roy 2007), and access to new markets[28] (Hagedoorn 1993; García-Canal et al. 2002).

In general, companies are more prone to enter alliance partnerships when they occupy vulnerable strategic positions, which means that they are either in difficult market situations or are undertaking expensive and risky strategies (Anderson 1990; Eisenhardt and Schoonhoven 1996). More specifically, for many multi-national enterprises (MNEs), entering into alliance partnerships is a way to reduce the liabilities of foreignness (Mezias 2002) and gain access to emerging markets (García-Canal *et al.* 2002).

1.2.2. Outsourcing

Outsourcing involves a focal company's decision to deploy certain activities of its value chain to a company at the intermediate market (Holcomb and Hitt 2007) and as

such, it is an organizational strategy[29]. The focal company chooses one of the outsourcing providers based on cost and/or quality consideration (as well as location consideration when it comes to international outsourcing).

Hence, the biggest difference between these two concepts is that while outsourcing is a type of organizational strategy, the alliance is a method of strategy development. This means that an organization may take the strategic decision to deploy one or more of its value chain activities to external parties and one of the ways to do it is through an alliance partnership. As it will be mentioned later, another way may be simply purchasing or contract manufacturing (Mol 2007: 7-8).

Thus, from the outsourcer's point of view, part of the outsourcing arrangements (but not all) are alliance-like arrangements since many of them are developed as long-term partnerships and require higher level of involvement from the two (or more) parties involved. They are associated with accessing valuable competencies, which the company does not want to produce internally. Hence, the focal organization does not want to internalize those competencies or overall it goes back to the make-or-buy decision. This is the reason why Holcomb and Hitt (2007) stated while the alliances are based on appropriation logic – the economic value created is most likely appropriated by the company with larger bargaining power (Alvarez and Barney 2001), the outsourcing decisions are not based on appropriation logic *per se*. They are rather based on economic terms defined by a focal firm after considering the different cost/performance trade-offs (Holcomb and Hitt 2007).

On the other side though, for the ones that receive the outsourcing contracts (the outsourcees), the distinction between alliance and outsourcing becomes very clear – when the arrangement is an alliance the company participates, invests, and shares the risks and the gains from the partnership. When the arrangement is an outsourcing one, the outsourcee renders a service to the outsourcer. In general, the outsourcee has a limited role in setting the specifications regarding the outsourcing contract, such as product design, cost, quantity requirements, etc. Those specifications are set in

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[29] Or at least it has to be. Bettis *et al.* (1992) stated that many companies fail in their outsourcing efforts just because they did not view outsourcing strategically.

advance and determine the conditions of the contract in order to decrease the transaction costs for the outsourcing party (Schilling and Steensma 2001).

Based on the above-said, I do not look at the alliance literature. Instead, I examine the outsourcing research since this research focuses on the specificities of the outsourcing arrangement from the outsourcee's point of view. I especially regard the benefits that can arise for the suppliers of outsourcing services based on signaling certain organizational characteristics.

The definition of outsourcing includes different forms of outsourcing. Thus, in the next section, I try to shed light on the way the contract can be arranged between the two parties, which determines the form of the outsourcing. It is important to note that most of the literature thus far has regarded the outsourcing forms and types from the point of view of the organization that has decided to externalize some of its activities (the outsourcer). In this study, the emphasis is based on the other side of the coin – the suppliers' perspective. This means that even if for the supplier, the outsourcing arrangement implies its basic/normal activity, the services rendered and its motivation to enter into an arrangement will differ.

2. Forms of Outsourcing

In this section, I discuss the forms of outsourcing from the outsourcer's and the outsourcee's point of view.

2.1. Forms of Outsourcing from Outsourcer's Point of View

The outsourcing arrangements differ depending on the nature of the relationship between the outsourcer and the outsourcee in terms of level of involvement and interdependence, on whether the organization has been engaged in certain activity or not, as well as the geographic scope of the relationship (Mol 2007).

Based on the *nature of the relationship* between the outsourcer and the outsourcee, Mol (2007) distinguished between three different forms of outsourcing – purchasing,

subcontracting and strategic outsourcing – all of which are part of the definition of outsourcing from outsourcer's point of view.

2.1.1. Purchasing, Subcontracting and Strategic Outsourcing

Purchasing is considered to be the simplest form of outsourcing arrangement – the supplier delivers a good/service according to certain specifications and no communication is needed between the two parties while the production of the good/service is taking place (Mol 2007: 7). The level of interdependence between the two parties is at its lowest level (Mol 2007: 7).

Subcontracting is a process driven by the buyer and a lot of operational information is exchanged between the two parties – i.e., a project with limited duration (Mol 2007: 7). The level of interdependence is higher in comparison with purchasing and this determines the need of more intensive communication regarding operational matters between the two parties (Mol 2007: 8).

Strategic outsourcing – the buyer and the supplier exchange higher level of information in order to create competitive advantage (Mol 2007: 7). In this case, the buyer and the supplier work more closely by continuously communicating between each other and what the buyer does has serious consequences on the supplier and vice versa (Mol 2007: 8). Thus, joint objectives may arise due to the tight interdependence of the two parties in the process (Mol 2007: 8).

Another way of looking at the forms of outsourcing is whether the company decides to *discontinue* certain value-chain activities and find external suppliers or decide *not to even invest* in those but rather acquire them from the intermediate markets for outsourcing services. Based on this criterion, there are two types of outsourcing – substitution-based and abstention-based outsourcing (Gilley and Rasheed 2000).

2.1.2. Substitution-Based vs. Abstention-Based Outsourcing

The s*ubstitution-based outsourcing* (Gilley and Rasheed 2000) is the decision to discontinue internal production of certain goods and/or services and replace those activities with capabilities provided by external parties on the intermediate markets (Holcomb and Hitt 2007). The second form *abstention-based outsourcing* is the

decision to acquire capabilities from the intermediate market rather than invest in order to internalize production (Gilley and Rasheed 2000).

Another criterion, which is applied to distinguish between different types of outsourcing arrangements, is the *geographic location*. Based on it, two types of outsourcing arrangements can be identified – on-site and off-site (Power, Desouza and Bonifazi 2006: 12).

2.1.3. On-site vs. Off-site Outsourcing

On-site outsourcing arrangement is when the supplier conducts the work according to the specifications of the contract on the premises of the client and *off-site* is when the supplier conducts the work on its own premises (Power, Desouza and Bonifazi 2006: 12).

The *off-site* outsourcing arrangement can be divided into the following three groups – onshore, nearshore and offshore (Power, Desouza and Bonifazi 2006: 12). *Onshore* is when the supplier conducts work within the same country, *nearshore* – when the work is done in neighboring locations, and *offshore* – when the geographical distance between the outsourcer's location and the location where the outsourcing work is done is considerable (Power, Desouza and Bonifazi 2006: 13).

2.1.4. Domestic, Foreign and Global Sourcing

Depending on the location of the outsourcer and the outsourcee(s), there are three types of outsourcing – domestic, foreign and global. *Domestic sourcing* is when the customer and the supplier of outsourcing services are located in the same country (Murray and Kotabe 1999). *Foreign sourcing* is when they are located in different countries (Murray and Kotabe 1999).

Many organizations (especially, the multi-national enterprises) today follow global sourcing strategy. G*lobal sourcing* is related to accessing resources and competencies worldwide and using them as part of the value chain of the company – i.e., production operations in different countries, buying and assembling components, parts or finished products worldwide (Murray, Kotabe and Wildt 1995). Following global sourcing

strategies, the organizations are always on the run to find more cost efficient and/or higher quality destinations for their value-chain activities.

2.2. Forms of Outsourcing Arrangements from Supplier's Point of View

From the outsourcee's point of view, depending on the motivation of the latter to enter into an outsourcing arrangement, there are two types – capability-enhancing and performance-enhancing arrangements.

2.2.1. Capability-Enhancing Arrangements

The *capability-enhancing arrangements* are outsourcing deals that help the outsourcee develop new resources and/or competencies. These new capabilities may increase the firm competitiveness and in the long-run, it may turn to be very beneficial. Of course, the capability-enhancing arrangements can improve the organizational performance but the underlying value of these arrangements is mainly to help the organization develop new capabilities.

2.2.2. Performance-Enhancing Arrangements

The *performance-enhancing arrangements* are arrangements that help the organization improve its performance but they are not related to the process of new capability development. Even though one can argue that any arrangement to deliver outsourcing services is an opportunity for the outsourcee to learn and improve, not all of them are related to developing new valuable capabilities. The impact of some outsourcing deals on new capability acquisitions is marginal. The organization engages in some outsourcing projects merely to maintain its performance objectives (in terms of sales volume, net profit, etc.)

2.2.3. Local, National and International Arrangement

In addition, I use another criterion to distinguish among the types of outsourcing deals from the outsourcee's point of view – where the output goes. Based on this criterion, I regard *local*, *national* (or *domestic*) and *international* (or *foreign*) *arrangements*.

From the outsourcee point of view, the arrangements can also be regarded as *domestic* (when the customer and the provider are in the same country) and *foreign* (when the customer and the provider are in different countries) (Murray and Kotabe 1999).

In addition, based on the length of the outsourcing arrangement, the latter can be short-, medium- and long-term arrangements.

2.2.4. Short-, Medium- and Long-Term Arrangements

Short-term outsourcing arrangements are considered to be up to one year, *medium –* from one to five years, and *long* – more than five years. Determining the type of the outsourcing arrangement based on the length of the contract is difficult because if the arrangement is not related to huge investment (i.e., the GIS systems in the IT sector), then usually the contract is signed for one year with an option to be extended. Some studies though estimate the average contract duration being 6-7 years (Barthélemy 2001; Quélin and Duhamel 2003)

It is clear, that very often the benefits expected from the outsourcing arrangement determine the type of arrangement. In the next two sections, I try to examine the benefits for the outsourcer (section 3) and the outsourcee (section 4).

3. Outsourcing – the Outsourcer's Perspective[30]

By adopting the outsourcer's perspective, herein I present the reasons for outsourcing based on different theoretical approaches as well as some of the downsides of outsourcing for the supplier of the outsourcing services.

James Quinn (1999: 10) very well summarized the benefits for engaging in outsourcing arrangement for the outsourcer: "…lowers costs, risks and fixed investments while greatly expanding flexibility, innovative capabilities and opportunities for creating higher value-added and shareholder returns (Quinn 1999: 10).

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[30] It is important to note that outsourcing is not an entry mode strategy. The entry modes are export, licensing and foreign direct investments (FDI) (Zhang, Zhang and Liu 2007). Outsourcing is the process of externalization of some of the value-chain activities of a company, which can be done in many different countries (global sourcing). Thus, a company gets certain parts of the product or the services done in another country through the outsourcing arrangement but this has nothing to do with the selling of final goods/services. Thus, from the outsourcer's point of view outsourcing is not a foreign entry mode.

There are several theoretical approaches[31] that provide explanation to why companies engage in outsourcing, which eventually goes back to the make-or-buy decision and relates to the question of firm boundaries (Steensma and Corley 2001). The transaction cost economics (Holcomb and Hitt 2007), resource-based view (Holcomb and Hitt 2007), bargaining perspective on strategic decisions (de Fontenay and Gans 2008), and relational view (Dyer and Singh 1998[32]) are among the theories trying to answer the question of firm boundaries. And even though some authors present those theoretical approaches as being a competitive views on organizational decision whether to externalize certain value-chain activity, they are indeed complementary (Steensma and Corley 2001). Below, the most popular approaches – the transaction cost economics and resource-based view of the firm – are presented.

3.1. Transaction-Based Arguments for Strategic Outsourcing

Concerned with the boundaries of the firm, transaction-cost economics regard the make-or-buy decision as being the hallmark of the theory itself (Coase 1937, Williamson 1975). Thus, the transaction-cost theory is directly linked to the decision to deploy one or more value-chain activities to an external party. Regarding outsourcing, the transaction cost theory considers two types of costs – the production and the transaction costs (Mol 2007: 35). The *production costs* are the costs associated with the process of producing products/services (Mol 2007: 35). The *transaction costs* are very broad in scope and include all the costs of using markets rather than producing in-house (Jacobides 2005). Examples of transaction costs are: searching, negotiation, contracting, monitoring progress, enforcement costs, costs incurred when resolving disputes (Alexander and Young 1996;, Holcomb and Hitt 2007). In other words, the theory explains the company's decision to outsource certain activities by its drive to achieve cost efficiency (Holcomb and Hitt 2007). If the cost of externalizing certain value-chain activities is lower than producing them in-house

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[31] Mol (2007) discussed several approaches that deal with the outsourcing decisions within a firm. Besides the ones mentioned in the text, those approaches include: transaction cost economics, resource-based view, core competence, micro-economics, industrial organization, agency theory, real options, industrial voids, costly contracting, social networks and others. Since I take the stance of the companies that receive outsourcing contracts, I assume it is not needed to go in depth in what drives organizations' decisions to outsource or not.

[32] Dyer and Singh (1998) proposed a relational view of competitive advantage. The authors state that firm's critical resources may extend beyond firm boundaries. Furthermore, they looked at the sources of relational rents from a pair or network of firm relationships.

or in other words if the transaction costs are lower, firms will rely on the market (Jacobides 2005).

3.1.1 Where Do Cost Savings Come From?

A company that decides to outsource certain value-chain activities indeed reduces the total level of assets and other related facilities and technologies (Bettis *et al.* 1992; Gilley and Rasheed 2000). In some cases, the organization that has initiated the outsourcing can transfer some assets to the supplier – i.e. machines, buildings, products and other (Mol 2007: 23). All of this leads to lower fixed costs and break-even point for the initiator (Gilley and Rasheed 2000). This way, the organization can improve its financial indicators in the short run (such as return on assets) (Gilley and Rasheed 2000; Mol 2007: 23).

Furthermore, cost savings can come from the specialization of the outsourcing supplier and the related economies of scale, knowledge and capital investments in proprietary technology, which help the latter perform the same business activity more efficiently and effectively (McCarthy and Anagnostou 2004; Kakabadse and Kakabadse 2000). Even though a lot of research reports that the scale economies of the outsourcee very often do not surpass the scale economies of the outsourcers (Alexander and Young 1996), many decisions are still based on the expectations that a specialist supplier will achieve economies of scale and thus reduce cost per unit.

Moreover, a company can save on bureaucratic costs associated with the production of certain goods/services internally (Mol 2007: 25). The main issue is that very often there are no price mechanisms and economic incentives for the employees within the organization to increase efficiency (Mol 2007: 25). This can make the internal production very expensive (Mol 2007: 25).

3.1.2. When do Markets Work?

Thus, the question is then under which conditions a company will decide to outsource certain value chain activities rather than performing those internally? Since Williamson (1995) looks at the market as the default mode of a transaction (Mol 2007: 36), the question then can be translated into: when do markets work (as opposed to *when do markets fail?*)

According to the transaction cost theory, there are several conditions under which a company will prefer to outsource rather than internalize certain value chain activities – when the assets are not highly specific or they are of general use (Holcomb and Hitt 2007; Jacobides 2005), when there is certain level of certainty about the business conditions surrounding a transaction (as opposed to the technological uncertainty as of Holcomb and Hitt 2007, or uncertainty in general as of Coase 1937; Williamson 1975), and lower frequency with which a transaction occurs (Mol 2007: 37). There is an additional condition discussed by Mol (2007: 37) - ease of measurement - which means that the easier it is to monitor the behavior of the counterpart, the more likely it is that the outsourcing will occur. All of these are reasons that can make a company decide to outsource certain value-chain activities and create demand on the intermediate markets. Indeed, the intermediate markets for outsourcing services are demand-driven markets – even when a provider of a certain service does not exist, one can be expected to appear very quickly if demand for this outsourcing service is created (Corbett 2004: 6).

3.1.3. Downsides of Outsourcing

The transaction-cost economics looks at the downsides of strategic outsourcing by postulating that in certain situations, outsourcing can impose significant transaction costs on the party that has undertaken the outsourcing initiative (Schilling and Steensma 2001). Moreover, some companies rely on excessive outsourcing and maintain a portfolio of suppliers, which implies higher coordination costs (such as logistics, inventory, nationalism and cultural distance (Kotabe 1990). In addition, some transaction costs may arise from the opportunistic behavior of the supplier (Schilling and Steensma 2001), which can "provide the supplier with a greater rent from the relationship than it would normally do" (Mol 2007: 27). An example of opportunistic behavior exercised by the outsourcee is supplying goods/services with lower than agreed quality (Steensma and Corley 2001).

Moreover, outsourcing decreases the scope economies based on the relatedness of activities within an organization (Bettis *et al.* 1992). When one or more of these related activities is externalized, the optimization that arises at the interface between these activities will go down (Mol 2007: 26; Porter 1980).

Besides the transaction-cost perspective, another theoretical approach that can be applied to outsourcing is the resource-based view of the firm (Espino-Rodríguez and Padrón-Robaina 2006).

3.2. Resource-Based Arguments for Outsourcing

According to the resource-based view, any organization is perceived as a bundle of resources and capabilities (Grant 1991). The decision to outsource certain value-chain activities makes the company access the intermediate markets for specialized capabilities (Holcomb and Hitt 2007). Indeed, as Holcomb and Hitt (2007) mentioned "the ability to access new and potentially more valuable capabilities is a critical driver of strategic outsourcing because these actions can fundamentally alter a firm's capability endowments."

From resource-based view perspective, a successful outsourcing strategy requires a company to have a clear idea of its core versus non-core activities (Espino-Rodríguez and Padrón-Robaina 2006), which is directly linked to its degree of outsourceability[33] of an activity (Mol 2007: 52). In addition, outsourcing includes the concept of business processes since resources by themselves cannot be sources of competitive advantage but they can become one if they are exploited efficiently through certain business processes (Espino-Rodríguez and Padrón-Robaina 2006).

3.2.1. Core vs. Non-Core Activities

An organization can increase its strategic focus through outsourcing (Mol 2007: 23). This can be accomplished when the company knows its unique resources and core competencies or those resources and competencies that define the firm's fundamental business (Teece, Pisano and Shuen 1997). Their value lies in the difficulty to transfer them from one organization to another due to their high transaction costs and their tacit nature (Teece, Pisano and Shuen 1997). Thus, it is not feasible for any organization to outsource its core activities (Prahalad and Hamel 1990) since the strategic risk increases as outsourced activities come close to the core (Bettis *et al.* 1992). It is feasible though to externalize the non-core or supporting activities along the value-chain (Prahalad and Hamel 1990). This is perceived to increase the short-

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[33] Degree of outsorceability is to which extent it is beneficial to outsource that activity (Espino-Rodríguez and Padrón-Robaina 2006).

term returns (Lei and Hitt 1995) by better controlling the short-term costs and the reduced capital expenditures. In addition, by deploying tangential activities to external parties, companies can concentrate their (financial and other) resources to build core competencies[34] (Bettis *et al.* 1992; Lei and Hitt 1995) and thus stimulate innovation (Kakabadse and Kakabadse 2000).

Espino-Rodríguez and Padrón-Robaina (2006) stated that organizations differ in terms of the amount and attributes of their resource endowments. The attributes of the resources are whether they are valuable, rare, inimitable, and non-substitutable (Espino-Rodríguez and Padrón-Robaina 2006). Thus, the authors established a relationship between the outsourcing strategy and the gap of capabilities in order to determine the decision to outsource:

$$Outsourcing = f\ (gaps\ in\ capabilities)$$
$$Gaps = f\ (resources\ attributes,\ resources\ allocations)$$

In the tradition of resource-based view of the firm, it is perceived that outsourcing of non-core activities can significantly improve firm performance (Espino-Rodríguez and Padrón-Robaina 2006).

Furthermore, outsourcing of peripheral activities increases organizational flexibility (especially in industries where technology innovation is fast-paced) (Kotabe 1990). Externalizing certain value-added activities can help an organization adjust its scale and scope upward and downward more easily and at a lower cost in response to the changing demand conditions (McCarthy and Anagnostou 2004). Thus, it is said that outsourcing reduces firm's risk during economic downturns (Lei and Hitt 1995) since an organization is more flexible in making its strategic decisions (Schilling and Steensma 2001).

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[34] Prahalad and Hamel (1990: 85) define core competencies as "collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple teams of technologies."

3.2.2. Downsides of Outsourcing

Each firm has an optimal level of outsourcing[35] - beyond this level, if an organization outsourced an activity, it will be an activity that is better to be kept in-house (Mol 2007: 58). Thus, the excessive reliance on outsourcing can be very detrimental for the long-term development of valuable capabilities (Bettis *et al.* 1992). When an organization deploys those activities to outside parties, it affects its ability to learn and acquire new competencies, knowledge and technologies (Lei and Hitt 1995) and consequently innovate (Mol 2007: 28). In the long run, the deteriorated knowledge base of an organization can affect company's attempt to sustain competitive advantage (Bettis *et al.* 1992; Lei and Hitt 1995). Thus, the decision on which organizational competencies are core and non-core and can be outsourced is of great importance to the management team of any organization (Bettis *et al.* 1992; Lei and Hitt 1995). In addition, having certain activities being outsourced can deter the ability of a firm to take advantage during economic upturns (Lei and Hitt 1995).

The above-discussed theoretical approaches explain *when* and *why* the outsourcers deploy some of their value-chain activities to external parties rather than performing them internally. Besides the importance of these two questions, the question of *who* they will decide to outsource to is also crucial. De Fontanay and Gans (2008) shed some light on this question by regarding the strategic decision on whether to outsource to an established company or to an independent company, which eventually may become a competitor.

With this research, I try to provide an insight on which criteria (organizational characteristics/signals) might be important when outsourcers decide who to outsource to. As an initial step, in the next section I examine the reasons why an outsourcee will enter into outsourcing arrangement.

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[35] According to Mol (2007: 58), the optimal level of outsourcing is an intermediate level – it can never be when all activities are integrated or when all activities are outsourced.

4. Outsourcing – the Outsourcee's Perspective

Outsourcing is not simply a purchasing decision for the outsourcer (Gilley and Rasheed 2000:764) and not simply selling an output for the outsourcee since it involves transfer of the responsibility of a business activity as well as the associated knowledge from one party to another one (McCarthy and Anagnostou 2004). In addition, outsourcing requires an ongoing relationship between the interacting parties (Linder 2004). Indeed, the relationship between the outsourcer and the outsourcee is characterized by: (1) its ongoing character, which requires an interaction in the long-run; (2) a transfer of a whole business activity from one party to another one and the associated knowledge with it, and (3) a dependency (to a certain extent) between the two parties.

Looking at the outsourcing process from outsourcee's perspective is very important because as Corbett (2004: 6) mentioned in the outsourcing process "a number of inherent factors work together to shift the balance of the value equation toward the "buy" side more and more every day." According to the author, there are several factors for this: (1) the increased number and enhanced capabilities of the suppliers, (2) technology development related to an increased number of outsourcing destinations – physical barriers are not considered barriers anymore as well as the fact that internal technology investment is becoming riskier, which makes more and more companies outsource it to outside parties and (3) hyper-competitive markets for outsourcing services, which has increased the standard of performance (Corbett 2004: 7).

In the outsourcing arrangement, the outsourcer presents its specification. By meeting those specifications, the outsourcee develops capabilities, which can help it gain future contracts. Thus, it is very important to make the first "break" or get the first contract. After that, the process of new capability development is unlocked. Not all outsourcing arrangements will lead to the development of capabilities though. As it was mentioned earlier, some of them are performance-enhancing arrangements.

4.1. Benefits for the Outsourcees

Even though Holcomb and Hitt (2007) stated that the outsourcing arrangement serves the interests of the organization that has initiated it, the outsourcing deal can be beneficial even for the suppliers of outsourcing services. Cachon and Harker (2002) found out that with outsourcing all firms are better off. For the service providers, outsourcing is a way for future growth and expansion. The resource-based view of the firm[36] can be used to explain the benefits for the suppliers of outsourcing services.

In the long run, the benefits for the supplying organization can arise based on their engagement with the outsourcing contracts. The latter implies working and interacting with an external (sometimes foreign) counterpart. Thus, the outsourcee will develop new resources and competencies (Bettis *et al.* 1992). Sometimes, the outsourcees use the capabilities they developed based on the outsourcing contracts in order to start competing on their own in the same market (for examples, see Bettis *et al.* 1992 and de Fontaney and Gans 2008). I distinguish between the two types of capabilities that the supplier can develop in the process of completing the outsourcing contract: (1) related to the outsourced activity (i.e. IT, manufacturing and not only regarding economies of scale and scope (Bettis *et al.* (1992), which is indeed the fundamental business activity (or core) of the supplier and (2) managerial capabilities related to managing the project itself.

The new resources and competencies can be the basis for the development of dynamic capabilities defined as "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments" (Teece, Pisano and Shuen 1997: 516). The dynamic capabilities are the key to achieve sustainable competitive advantage and this way outperform the rest of the providers of outsourcing services on the intermediate market.

Unfortunately, to the extent of our knowledge, in the academic literature there are still no empirical studies done on partner selection issues in outsourcing arrangements (except de Fontenay and Gans (2008), who looked at the dichotomous choice between

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[36] The TCE is not applicable here because the companies that receive the outsourcing contracts do not face the choice whether to go on the intermediate market for outsourcing services. The market for outsourcing services is basically the market where they offer their main product/service.

outsourcing to an established company or an independent company). Thus, even though the supply chain literature presents models (based on linear programming, mixed integer programming, goal programming, multi-objective programming, and non-linear programming, etc.) that can be applied in order to make the best choice in terms of suppliers (for a review, look at Ting and Cho 2008), it is still not known how exactly outsourcers choose their outsourcing counterparts when deciding to farm out certain value-chain activities.

In the practitioners' literature though, Power, Desouza and Bonifazi (2006) looked at the process of supplier assessment (pp. 100-111). Based on their practical experience, the authors identified several stages of the process of vendor assessment. It is assumed that knowing what the important attributes the outsourcers use to assess their potential partners at each stage of the process will be important to develop the framework of valid signal that the latter can use to communicate their legitimacy.

4.2. Supplier Evaluation at the Market for Outsourcing Services

In the practitioners' literature, many authors try to convince managers that outsourcing should not be done for cost reduction purposes only (Doig *et al.* 2001; Power, Desouza and Bonifazi 2006: 108; Quélin and Duhamel 2003; Quinn 1999). If done only on cost considerations, outsourcing may turn to be a bitter game, as many consulting companies report – i.e. Diamond Cluster International stated that 78% of the organizations that outsourced their IT activity stopped the contract prematurely (Quélin and Duhamel 2003); offshore outsourcing initiatives have 50% failure rate according to Gartner survey (Rottman 2008), almost half (46%) of the companies that outsourced their software development viewed the work of their suppliers as being low-quality (Rottman 2008). In addition, Hirshheim (1998) noted a trend to "backsourcing" – organizations that outsourced certain value-chain activities take them back in-house due to their dissatisfaction with the performance of the outsourcer (Quélin and Duhamel 2003).

As a result, today many academicians and practitioners promote the idea that outsourcing should be a well-thought process undertaken only after in-depth analysis of the strategic value of key activities followed by an examination of the match between the strategic needs of the focal company and the efficiency and capabilities

offered by the suppliers (Doig *et al.* 2001). Assuming that the company has taken the strategic decision to externalize some of its value-chain activities, they go through the following stages of assessment of the potential suppliers (Power, Desouza and Bonifazi 2007), illustrated in Fig. 6 below.

```
                    ┌─────────┐
                    │  START  │
                    └─────────┘
                         │
                         ▼
   ┌──────────────────┐            ┌──────────────────┐
   │   BACKGROUND     │            │  EVALUATING THE  │
   │   PREPARATION    │            │  VENDOR PROPOSAL │
   └──────────────────┘            └──────────────────┘
                         │                    │
                         ▼                    ▼
   ┌──────────────────┐            ┌──────────────────┐
   │ MANAGEABLE LIST  │            │  IN-DEPTH VENDOR │
   │   OF VENDORS     │            │    ASSESSMENT    │
   └──────────────────┘            └──────────────────┘
                         │                    │
                         ▼                    ▼
   ┌──────────────┐  ┌──────────────────┐  ┌─────────┐
   │ IMPORTANCE OF│→ │  EVALUATING THE  │  │  STOP   │
   │  SIGNALING   │  │     VENDOR       │  └─────────┘
   └──────────────┘  └──────────────────┘
```
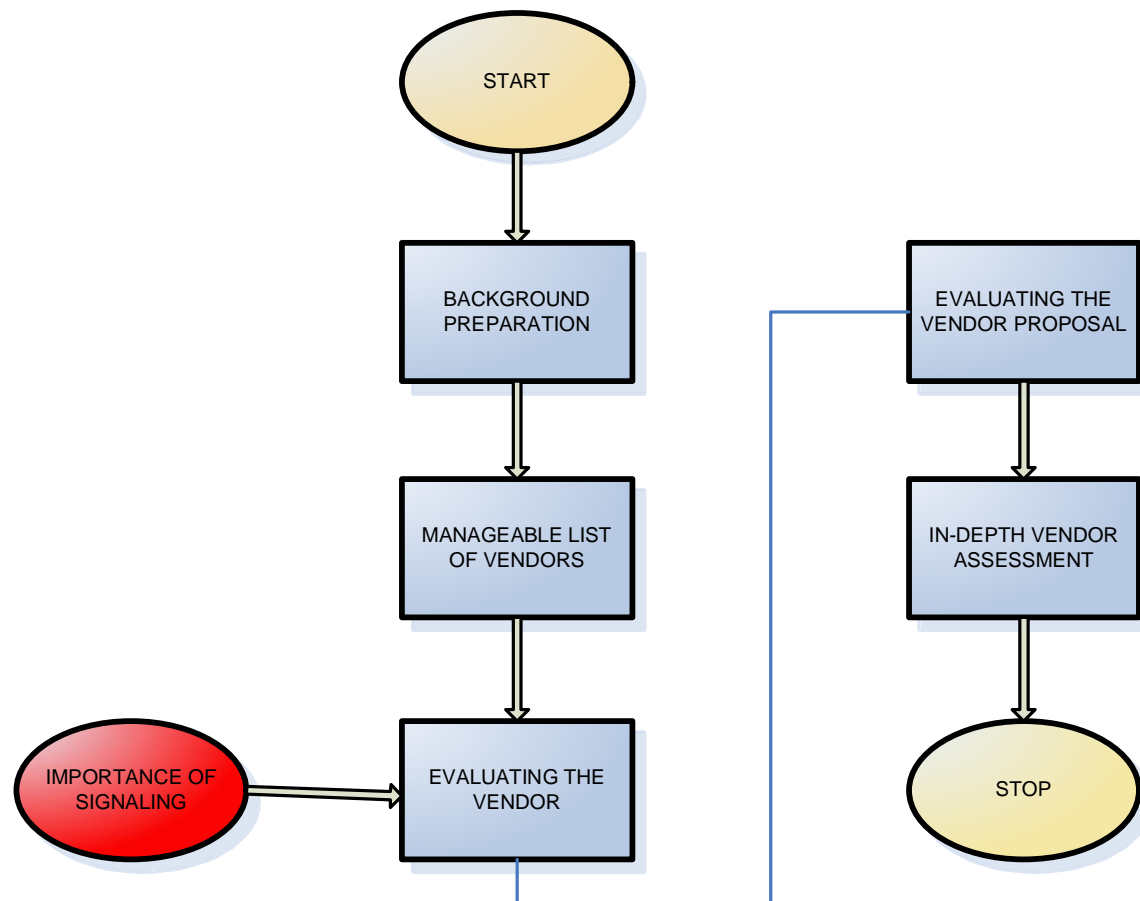
Fig. 6: The Vendor Assessment Process (adapted from Power *et al.* 2006).

Below, the specificities of each stage are presented.

Preparation – the outsourcer has to compile a cross-functional team of firm representatives, which following a well-defined process (standardized, fair and documented) conduct vendor evaluation.

Assembling a manageable list of candidates – herein, based on the needs of the outsourcer, the team applies broad criteria in order to reduce the number of potential

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partners to a more manageable list of candidates. In example, here the team can eliminate vendors by geographical location, etc.

Evaluating the vendors – herein, the team evaluates the capabilities of each vendor from the pre-selected group according to a list of desired attributes. This list of attributes includes: past dealings with the supplier, trust, brand name, references from current clients, area of specialization. One way to do this is getting in contact with supplier's current customers. Additional criteria for evaluation are the business strategy, management practices and procedures, years of experience, types of certification and the award and reward mechanisms they use.

The major information an organization needs to gather when evaluating potential suppliers can be divided into two groups: (1) the outsourcee should have certain technical capabilities (i.e., quality methodologies); (2) the outsourcee should be able to meet schedules and budget commitments (can be gathered from current or past customers).

Evaluating the vendor's proposal – at this stage, the most important decision criteria is pricing. Besides pricing, additional criteria are completeness, clarity, detail and rigor. When the outsourcer evaluates the completeness of the supplier's proposal, it assesses whether all the outsourcer's needs are taken into consideration. Clarity demonstrates how easily the vendor is able to communicate with the outsourcer on the areas of the proposal. With the detail and rigor, the outsourcee indeed demonstrates the mastery of the process.

In-depth look at the vendors – risk assessment of each vendor is mandatory in order to secure a good choice. The risk assessment will include whether the vendor is focused on one client, the political environment in the home country of the supplier, adequate financial portfolio, and the adoption of industry innovations.

Power, Desouza and Bonifazi's book (2007) provides some advices for the practitioners on how to choose their supplier of outsourcing services. As it was stated before, it is not clear whether outsourcers in fact go through these stages of evaluation since there is no empirical study on the outsourcing partner selection. Even though

this is an area that deserves researchers' attention, herein, I look at the opposite side of the same process – how the suppliers increase their chances to be picked. According to the proposed signaling theory of legitimacy, a supplier can increase its attractiveness by signaling its adherence to the stakeholders' requirements in terms of resources and capabilities as well as its reliability as a partner.

From Fig. 6, one can see that signaling the possession of certain capabilities and signaling attributes of being a reliable partner is crucial at the stage of evaluating the vendors. Other stages though, such as being part of the list of vendors considered (the stage before) as well as the stage when the proposal of the vendor is evaluated (the stage after) are also important.

The outsourcer and the outsourcee meet at the intermediate market for outsourcing services, which in some industries has global scale (i.e. the high-tech industries). In the next section, the specificities of these markets are presented.

5. Intermediate Markets for Outsourcing Services

The intermediate markets for outsourcing services (also called supplier markets) are indeed the markets where the outsourcer and the outsourcee meet. They are demand-driven markets - once the outsourcer creates demand at the market, the providers of the demanded outsourcing services will appear (Corbett 2004). The intermediate markets for outsourcing services emerge when the previously integrated production processes between two sets of specialized firms in the same industry have been divided and are considered as separate entities (Jacobides 2005). This process is called vertical disintegration and it is associated with rather invisible but radical industry transformation (Jacobides 2005).

Since lately the intermediate markets for outsourcing services shifted from the developed countries to emerging economies (including transition economies), I specifically focus on the latter. This clarification is necessary because those markets have their specificities, which are important in order to understand the behavior of organizations getting outsourcing contracts.

5.1. Characteristics of the Intermediate Markets for Outsourcing Services

Herein, I specifically examine markets that are comprised of many small-and-medium enterprises (SMEs)[37] (i.e. customized software development), which compete among each other for clients. When competition among outsourcees is high and the buyer can easily switch to an alternative supplier, the transaction costs for the outsourcers are low since they do not have to spend additional costs on monitoring and contract specification (Walker and Weber 1987). At the same time, the competition among outsourcees constantly drives the production costs down.

On the other side, I consider suppliers located in transition environments. The uncertainty based on the underdeveloped market-supporting institutions, lack of well-defined property rights and others (Peng 2003) induces market players to exercise opportunistic behavior. Thus, as it was already mentioned, these small organizations supplying products/services at the intermediate outsourcing markets face a liability of origin. Therefore, from one side the presence of numerous suppliers in many low-cost destinations decreases the transaction costs for the outsourcer (and increases its bargaining power) and on the other side, the fact that they come from transition environments increases the transaction costs.

This made some researchers state that the markets for outsourcing services are not totally predictable and reliable both for the buyer and the supplier (Quinn and Hilmer 1994). The challenges in those markets lie in the risk that can arise regarding price, quality, time, or other terms (Quinn and Hilmer 1994).

5.1.1. Outsourcing Markets are Uncertain Markets

Uncertainty is defined as the inability of decision-makers to specify a complete decision tree (Walker and Weber 1984 following Williamson 1975). The uncertainty in the outsourcer-outsourcee relationship is related to environmental complexity and the bounded rationality of the decision maker (Walker and Weber 1984 following Williamson 1975). Thus, an *information asymmetry* exists between the outsourcer and the outsourcee, which is related to the lack of information available on the marketplace or from individual supplier regarding their performance (Quinn and

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[37] In this study, I use the terms 'small- and medium-size enterprise' and 'small organization interchangeably.

Hilmer 1994). In other words, the supplier has superior information about its own qualities. Hence, in case they have superior resources and capabilities, as well as reliability as potential partners, they need to find a way to communicate this to clients through signaling.

According to the transaction cost economics, when the outsourcer is faced with high level of market uncertainty, they prefer to internalize the value-chain activity (Coase 1937; Williamson 1975). More recent research started questioning this fundamental premises of the transaction cost economics based on some studies showing that when the market instability and unpredictability increases, individual companies tend to interact more, rather than less with other organizations, therefore increasing the overall volume of their market transactions (Podolny 1994). Thus, some researchers proved that in uncertain environments, organizations try to reduce costs, transfer the uncertainty in performing certain value-chain activities to the outside parties and access to specialized skills and outputs (Abraham and Taylor 1993; McCarthy and Anagnostou 2004).

5.1.2. Outsourcing Markets are Reputational Markets

Even though many markets for outsourcing services are global markets characterized by a large number of suppliers (many of which are small organizations with low bargaining power), reputation plays a role. The role of reputation (based on past performance) is augmented due to several reasons: (1) the high level of uncertainty at the market for outsourcing services associated with the country-specific characteristics; (2) information asymmetry between the buyer and the supplier related to the lack of market information about the supplier of outsourcing services.

Herein, organizational reputation is considered as one of the building blocks of the legitimacy of SMEs evolving in transition environments. In transitional contexts, gaining organizational reputation based on past performance is easier than acquiring legitimacy since the rules, norms and values (against which legitimacy is matched) have not been completely established yet.

5.1.3. Outsourcing Markets are Relational Markets

The outsourcing markets are relational markets which implies that outsourcers rarely go through the process of vendor evaluation once they have found a supplier that satisfies their basic needs. This means that once a satisfactory relation is established between the outsourcer and the outsourcee, the former rarely undertakes the process of assessing additional suppliers of outsourcing services even if better suppliers may exist at the market.

5.1.4. Outsourcing Markets are not Commodity Markets

Some authors (Davenport 2005) state that in many outsourcing markets, there are process standards (activity, performance and management standards) that will eventually lead to commoditization of the outsourcing services. The effect of the commoditization will be a dramatic increase in the number of organizations willing to externalize some of their value-chain activities as well as an increase in the number of suppliers of those services (Davenport 2005). The expected overall impact will be a decrease in the prices of the outsourcing services (Davenport 2005).

Herein, I adopt the view that the commoditization of outsourcing services has not happened yet due to the low adoption rate of the above-mentioned process standards by SMEs in emerging and transition environments. Hence, the providers of outsourcing services do differentiate themselves not only on the basis of price but also on the basis of quality (in the broadest sense) of the products/services offered. And in evaluating the outsourcing providers, organizations consider a set of organizational characteristics besides the price of their products/services.

Therefore, the analysis lies on an important assumption – the decision on which organizations choose their outsourcing providers is not based solely on cost considerations (Quélin and Duhamel 2003; Quinn 1999) but on a combination of quantitative and qualitative criteria, such as price, quality, on-time delivery, supplier location, after-sales services, etc. (Ting and Cho 2008).

In this study, I particularly look at SMEs in transition environments trying to obtain long-term outsourcing contracts. Signaling certain organizational characteristics helps the focal company bridge the information asymmetry that exists between the

exchange parties and communicate its adherence to the evaluating party's requirements and expectations. As it was mentioned earlier, the outsourcers (clients) consider two main aspects of the organization they evaluate in outsourcing arrangements (Quélin and Duhamel 2003) – whether the latter has the needed resources and competencies (captured by the concept of functional legitimacy) and whether it is a trustworthy player (captured by the concept of relational legitimacy)

By operating in the markets for outsourcing services, outsourcees can rely on signals of functional and relational legitimacy in order to communicate their adherence to the requirements and expectations of the evaluating audiences. The conformity to stakeholder's expectations is a condition signifying organizational legitimacy.

Hence, it is hypothesized:

H 1: The higher the functional legitimacy of an organization, the higher its organizational legitimacy.

H 2: The higher the relational legitimacy of an organization, the higher its organizational legitimacy.

Legitimacy helps organizations secure additional resources necessary for their survival (Hannan and Freeman 1984). The legitimacy stock of an organization comprised of different signals or characteristics is costly and lengthy to obtain. In a transition environment, an organization with higher legitimacy stock based on signals should be able to demonstrate a better profit-making ability. In example, a company with higher legitimacy stock (or organizational legitimacy) should be able to charge more its clients due to the better prospects of providing reliable services in the long-run. The relationship legitimacy $\rightarrow$ performance has already been discussed in the literature based on the assumption that the additional resources an organization can attract are positively correlated with its profitability (Mazza 1999: 42). The ultimate sign of legitimate organization is its profit-making ability (Mazza 1999: 42).

Hence, I hypothesize:

H 3: The higher the organizational legitimacy, the higher its profit-making ability.

The dimensions of the functional and the relational legitimacy constructs were already identified in chapter 3. In the next section, I look at each dimension of the two constructs keeping in mind the organizations under scrutiny – small firms evolving in transition environments trying to obtain long-term outsourcing arrangements.

6. Dimensions of Functional Legitimacy

As it was discussed earlier, functional legitimacy signals the worthiness of a partner based on its access and/or control of important and valuable task-related resources and capabilities. When evaluating the task-related competencies of small technology-based organizations evolving in transition environments, several distinctive competencies were identified – informational, managerial, organizational, innovative and symbolic reputational. In their totality, they represent different facets which build the construct of functional legitimacy.

As a next step, I look at the dimensions of functional legitimacy starting by information competencies.

6.1. Information Competencies

The resource-based view looks at the effective deployment and exploitation of information as an important asset (Peppard, Lambert and Edwards 2000). Usually, the information competencies relate to the ability of organizations to derive value from its information systems' (IS) output (Peppard, Lambert and Edwards 2000). Tippins and Sohi (2003) even defined the IT competency as "the extent to which a firm is knowledgeable about and effectively utilizes IT to manage information within the firm" (p. 748). Therefore, information competencies, the way they have been defined so far, are associated with the information processing within the firm and the consequent value creation.

For the purpose of this study, informational competencies are defined as being related to the ability of an organization to ensure access to relevant industry information. This

implies an external focus on information gathering rather than information processing. Small organizations evolving in transition environments need to rather access information regarding the latest developments in the sector on global and national level than to try to derive value of their information systems (if in place at all).

Tippins and Sohi (2003) mentioned three ways for information acquisition – (1) based on direct experience, (2) based on the experience of others (i.e. customers and suppliers), and 3) based on the company's own memory. This point of view is extended by the observation that a small organization in transition environment can directly acquire information via its clients and/or suppliers, via the social network of the founding team members and/or membership in industry associations. In this study, I examine the external representation (an observable signal) of the possessed information competencies. The evaluating audiences may consider the ability to ensure access to up-to-date industry information as an important organizational feature, especially in fast-paced industries/sectors. Hence, I hypothesize:

H 4: Organizational characteristics signaling superior informational competencies will affect positively the functional legitimacy of SMEs evolving in transition environments.

The second dimension of the functional legitimacy construct is the managerial competencies of the founding team members.

6.2. Managerial Competencies of Founding Team

The firm's founding team is the group of entrepreneurs that initiated and consequently manages the venture. In general, managers are perceived as a unique organizational resource (Hitt *et al.* 2001). There are several observable managers' characteristics – age, tenure in the organization, functional background, education, socioeconomic roots, and financial position – that affect the management style and the strategies adopted by the organization (Hambrick and Mason 1984).

In transition environments, managerial weaknesses are recognized as one of the most important factors that can inhibit the firm's ability to grow (Child and Pleister 2003). Founding managers may experience deficiencies in terms of their managerial and

decision-making capabilities (Hitt *et al.* 2004). They may also lack the appropriate mindsets in order to successfully compete in an environment which shifts from planned to open market economy (Filatotchev *et al.* 1996). The instability of the transition environments makes managers very short-term oriented (Hitt *et al.* 2004). Therefore, managers show less commitment to long-term arrangements (Hitt *et al.* 2004).

If the founding team members had Western or Western-like education and/or work experience, this leads to transfer of some knowledge and skills from the institution where the education and/or experience was acquired to the newly-created venture. Hence, managers will demonstrate a better ability to manage long-term arrangements in a market-based context. The Western education and/or work experience influences the way the managers communicate and negotiate as well as their commitment to the success of the arrangement.

In addition, if the founding managers had business education, this affects their approach to managing the company. The prior education and training influences directly the quality of enterprise management (Child and Pleister 2003). Moreover, business education in transition environments could be acquired after the beginning of the process of institutional change. During the socialist era, education in business was non-existent. Thus, even if acquired domestically, the business education is very likely to reflect the principles promoted by the Western educational systems.

Hence, superior managerial competencies (i.e., business education and/or Western education and work experience) influence positively the ability of founding managers to manage and exert commitment in the long-term arrangements of their organizations. Hence, I hypothesize:

H 5: Organizational characteristics signaling superior managerial competencies of founding team members will affect positively the functional legitimacy of SMEs evolving in transition environments.

Besides the managerial competencies residing in the founding team members, there are some competencies on organizational level, or the so-called organizational competencies. They are examined in the section below.

6.3. Organizational Competencies

One can argue that any competency of a firm is "organizational" and this is correct. For the purpose of this study though, organizational competencies are the competencies that cannot be associated with a smaller unit of the organization – i.e. an asset or a resource. For example, the employees' or managerial competencies are inherent to the stuff employed or the founding team members, respectively. Organizational competencies pertain to the organization as a whole and cannot be related to its employees, managers, information processing or any other resource. I particularly examine the organizational competencies derived from affiliation with prestigious industry players and the organizational form (specialist versus generalist).

Prestigious Affiliates' Certification

The certificates granted by prestigious affiliates can be the external representation of some organizational competencies. In general, the association with prestigious affiliates decreases the uncertainty associated with the future prospects of the firm and consequently affects stakeholders' evaluation of the company in a positive way (Titman and Trueman 1986; Carter and Manaster 1990; Gulati and Higgins 2003; Stuart *et al.* 1999). In order to be granted certificates by prestigious industry groups, organizations have to demonstrate the possession of certain competencies. Hence, it is hypothesized that certified partnerships enhance the functional aspect of organizational legitimacy since it is a demonstration of organizational competencies.

Specialist/Generalist

Specialist organizational structure is characterized by lean exploitation of a narrow niche (Usher 1999) and lower requirements for excess capacity (Hannan and Freeman 1977). On the contrary, generalist structures rely upon wide variety of resources simultaneously and maintain large excess capacities (Hannan and Freeman 1977). While in stable environments specialism is always favored (Hannan and Freeman 1977), in unstable environments (such as transition environments) generalism is not always the successful organizational form (Hannan and Freeman 1977). As Hannan and Freeman (1977) mentioned when "the environment shifts uncertainty among

states that place very different demands on the organization, and the duration of the environmental states is short relative to the life of the organization, populations that specialize will be favored." Hence, generalist structures are "not optimal to any environmental configuration" (Hannan and Freeman 1977: 946).

Small organizations in transition environments competing for long-term partnerships will benefit from signaling their specialist form since this form communicates having lower levels of slack and better efficiency in performing the task in question. Hence, I hypothesize that superior organizational competencies in the form of prestigious affiliates certification and specialist organizational form will enhance the functional aspect of organizational legitimacy.

H 6: Organizational characteristics signaling superior organizational competencies will affect positively the functional legitimacy of SMEs evolving in transition environments.

Another dimension of the functional latent construct is the ability of the focal organization to innovate, or its innovative competencies. In the section below, I look at the specificities of the innovative competencies of SMEs evolving in transition environments.

6.4. Innovative Competencies

In general terms, innovation is the application of knowledge in order to produce new knowledge (Drucker 1993: 190). Organizational innovativeness contains new products or services, new processes and new organizational structures that firms use to compete with one another and meet customer demands, and also the adoption of a new idea, process, product, or service developed internally or acquired from the external environment (Pouder and St. John 1996).

There are two main research streams in the literature on innovation: (1) innovation diffusions (or adoption) across nations, industries and organizations and (2) development and marketing of new products (Li and Atuahene-Gima 2001). For the purpose of this study, I concentrate on product innovations, associated with "firm's commitment to the development and marketing products that are new to the firm

and/or the market" (Li and Atuahene-Gima 2001). New products can take different forms: upgrades, modifications, and extensions of existing products as well as completely new for the market (Li and Atuahene-Gima 2001).

I examine the link between innovativeness and functional legitimacy of an organization based on the assumption that organizational innovativeness "manifests its capability to explore new possibilities" (Cho and Pucik 2005: 557) and it requires systematic effort and a high degree of organization (Drucker 1993: 190).

Due to the high level of environmental uncertainty, small organizations in transition environments are occupied to ensure their survival in the short run (which I previously called organizational shortsightedness) rather than to engage in systematic innovative efforts. In addition, due to their small size, they experience lack of managerial and financial resources to spend on the development of new product technologies (Hitt *et al.* 2000, Li and Atuahene-Gima 2001). Nevertheless, there are still some companies (namely technology ventures) that engage in innovative efforts and manage to develop and market new products/services. Furthermore, some extant research has proved that in volatile environments, engaging in product innovation leads to better organizational performance (Covin and Slevin 1989).

If an SME in transition environment has some innovative capacity and it demonstrates it to the external constituencies, this affects positively its functional legitimacy since it shows not only that it has sufficient resources but also that it had developed the competencies to re-organize or re-group them in order to create new knowledge (Li and Atuahene-Gima 2001). Hence, I hypothesize that:

H 7: Organizational characteristics signaling firm's innovative competencies will affect positively the functional legitimacy of SMEs evolving in transition environments.

The last dimension of the functional legitimacy latent construct is the symbolic reputational competencies. In the section below, I regard the specificities of the symbolic reputational competencies of SMEs in transition environments.

6.5. Symbolic Reputational Competencies

First, it is important to distinguish between symbolic reputational competencies and organizational reputation based on past performance. I use the latter as a building block of the relational legitimacy latent construct, which is discussed in the next section. The symbolic reputational competencies are related to receiving some kind of a distinctive award.

Similar to certification contests (Rao 1994), awards are associated with ranking of organizations (Wade *et al.* 2006). The difference comes from the fact that organizations agree voluntarily to participate or not in the evaluation process. Hence, it is not clear whether the organization that has received the prize is indeed the best in the category of evaluation. At the same time, the award is an external representation of certain organizational competencies. This is the reason why awards are considered as being part of the functional legitimacy latent variable construct.

Second, I distinguish between quality awards and certificates, which can be perceived as quality awards as well (Hendricks and Singhal 1997). Some examples of certificates include ISO 9000, Capability Maturity Model I (CMMI), etc. The difference is that the quality awards are given to organizations as one-time recognition for superior performance in a certain field. They are usually based on rankings of organizations publicized in the media (Wade *et al.* 2006). The certificates are based on the evaluation of internal processes and practices in the organization and have to be renewed every year. To maintain a certificate, a company is expected to show a continuous improvement of its internal processes and practices. Hence, the two have an important but different signaling value. The signaling value of quality awards demonstrates superior competencies in a certain field in comparison to the competition (rankings). The signaling value of the certificates demonstrates organizational accountability (discussed in the next section).

Quality awards can be a valid signal of superior competencies of small organizations evolving in transition environment since they are costly (in terms of effort) and observable (based on media coverage). They are particularly important in uncertain

environments where judgments on quality should be made (Wade *et al.* 2006). Hence, I hypothesize:

H 8: Organizational characteristics signaling symbolic reputational competencies will enhance the functional legitimacy of SMEs evolving in transition environments.

After the dimensions of the functional legitimacy were presented, in the next section, I look at the dimensions of the other type of legitimacy – relational legitimacy.

7. Dimensions of Relational Legitimacy

Relational legitimacy is associated with whether an organization is reliable as a partner and will comply with the specifications of a contract (i.e. in terms of respecting the quality requirements and deadlines). In the context of transition environments, small organizations trying to receive long-term contracts have to signal not only their ability to perform the task in question (functional legitimacy) but also to perform it by respecting the initially set deadlines and quality specifications (relational legitimacy).

Relational legitimacy includes valid signals of the worthiness of a partner based on communicating two sets of elements: *partnership-related* (trustworthiness and reliability) and *organization-specific* (accountability, stability and visibility).

Below, I specify the content of each dimension of the relational legitimacy latent construct, as follows: I start with organizational trustworthiness (including reliability) as the only partnership-related characteristic examined in this study. Then, I continue with accountability, stability and visibility as organization-specific characteristics.

7.1. Organizational Trustworthiness

As a precondition for trade and production, trust is important in any business transaction (Akerlof 1970). There is a difference between *trust* and *trustworthiness* of an organization as a partner. Trust is the confidence in other's goodwill (Ring and Van de Ven 1992) or that "no party to an exchange will exploit another's vulnerabilities" (Sabel 1993: 1133). A company is trustworthy when it will not exploit

the vulnerabilities of others (Barney and Hansen 1994). While trust is an attribute of the relationship between the exchange parties, trustworthiness is a characteristic of individual exchange partner (Barney and Hansen 1994). Relationships between trustworthy partners are more stable to external pressures and show greater adaptability (Mohr and Spekman 1994).

Reliability is an organizational characteristic associated with the ability to reproduce collective products of a given minimum quality repeatedly (Hannan and Freeman 1984, Ingram and Baum 1997). In uncertain environments, interested stakeholders may value reliability more than efficiency (Hannan and Freeman 1984). This means that rational actors may be willing to pay high price for the certainty that a given product or service will have relatively small variance in quality (Hannan and Freeman 1984). Some researchers consider reliability as being part of trust (Nahapiet and Ghoshal 1998). For the purpose of this study, I adopt this point of view and perceive reliability as being part of organizational trustworthiness.

The need to signal trustworthiness is even higher for small organizations in transition environments due to their shortsightedness and the fact that they are often prone to behave in an opportunistic way. In addition, the organizations under scrutiny are trying to obtain long-term contracts. Hence, it is important to demonstrate that the organizations under scrutiny will not take advantage of the vulnerabilities of potential partners in the long run and will be able to perform the outcome repeatedly. Usually, the assessment is based on the past performance of the organization under scrutiny. Hence, I hypothesize:

H 9: Organizational characteristics signaling organizational trustworthiness will enhance the relational legitimacy of SMEs in transition environments.

The second dimension of the relational legitimacy latent construct is organizational accountability. The specificities of organizational accountability of SMEs in transition environments are presented below.

7.2. Organizational Accountability

Accountability is an organizational characteristic related to the ability of an organization to account rationally for their actions (Hannan and Freeman 1984). This means both that they must be able to document how resources have been used and to reconstruct the sequences of organizational decisions, rules, and actions that produced particular outcomes (Hannan and Freeman 1984). It does not mean that the organization has to tell the truth to their members and to the public about how resources were used. It is enough to be able to make internally consistent arguments that appropriate rules and procedures existed to reproduce rational allocation of resources and appropriate organizational actions (Hannan and Freeman 1984). Researchers found out that organizations have to accomplish their technical work internally and demonstrate that they follow ordered, rational procedures to evaluating audiences by utilizing symbolic displays (Basu, Dirsmith and Gupta 1999). Furthermore, corporate actors favor other corporate actors that can signal reliable performance and account rationally for their actions (Hannan and Freeman 1984).

Having in mind the instability of the transition environment (which affects all organizational actions), small organizations trying to receive long-term contracts will be even more interested to demonstrate their internal processes follow certain procedures that have been widely accepted within a sector or in general (in the economy). This will assure the evaluating audiences that the organization under scrutiny follows certain guidelines in order to perform the task in question. This is the reason why the signals of accountability are building blocks of the relational legitimacy construct. Hence, I hypothesize:

H 10: Organizational characteristics signaling organizational accountability will enhance the relational legitimacy of SMEs evolving in transition environments.

Besides organizational trustworthiness and organizational accountability, another dimension of the relational legitimacy construct is stability. Below, I look at the specificities of organizational stability of SMEs in transition environments.

7.3. Organizational Stability

Generally speaking, organizational stability is based on routines. An organizational routine is "a repetitive, recognizable pattern of interdependent actions, involving

multiple actors" (Feldman and Pentland 2003). Routines are perceived as sources of organizational stability (Feldman and Pentland 2003) but also inertia (Hannan and Freeman 1983) and inflexibility (Weiss and Ilgen 1985). At the same time, a new view on routines emerges where they are perceived as sources of both flexibility (Pentland and Rueter 1994) and change (Feldman 2000). Routines become sources of change in early stages of organizational development, in times of crisis but also in old, established organizations in stable environments due to the agency factor (Feldman and Pentland 2003). The latter is related to the fact that eventually routines are performed by people which adds an element of subjectivity to the repetitive process of routine performance (Feldman and Pentland 2003). As a result, Feldman and Pentland (2003) draw the attention to the dual character of routines – they inhibit but at the same time cause change.

Both population ecologists (Hannan and Freeman 1977) and neo-institutionalists (Meyer and Rowan 1977; Scott 2001) look at routines as being the basis for organizational stability associated with reliable performance. When evaluating potential partners, interested audiences want to be assured that an organization is stable to perform the task in question. Or in other words, decision-makers look for signals which carry the legitimacy-enhancing information that the routines ensuring reliable performance exist within the organization.

When I talk about routines that underlie organizational stability of small organizations in transition environments, I disregard the endogenous change they may cause due to the agency factor (Feldman and Pentland 2003). I rather focus on the way routines bring stability to organizations exposed to exogenous shocks (Feldman 2003). I look at routines as internal structures, processes, roles that incorporate or reflect the instability and volatility inherent to transition environments. The presence of the above-mentioned routines is an important aspect of the day-to-day operations because they allow the organization to successfully manage the environmental volatility and reproduce the expected output. The lack of institutional framework that guides organizational behavior makes the transition environment more complex and unstable. Hence, external representation (signals) of the existence of routines (which due to their nature are hardly observable) will provide valuable information to the evaluating audiences.

H 11: Organizational characteristics signaling organizational stability will enhance the relational legitimacy of SMEs evolving in transition environments.

The last dimension of the relational legitimacy latent construct is organizational visibility. The specificities of organizational visibility of SMEs in transition environment are presented in the section below.

7.4. Organizational Visibility

In general, visibility is defined as "the extent to which phenomena can be seen or noticed" (Bowen 2000: 93). Organizational visibility "is based upon characteristics that are likely to result in the organization having a publicly recognized name" (Fuller *et al.* 2006). It is "an important attribute of organizations" (Brammer and Millington 2006) and a symbol of organizational success (March and Simon 1958; Fuller *et al.* 2006).

Visibility has an important role in reducing the information asymmetry existing between an organization (and more precisely the management team) and its stakeholders (Brammer and Millington 2006). More visible organizations are under an increased level of stakeholders' regulation (Brammer and Millington 2006). On the other side, when stakeholders are more informed about company's actions, they are more likely to take actions themselves towards this company (Brammer and Millington 2006).

For large organizations, size is a crucial factor that affects and indeed enhances organizational visibility (Boje and Whetten 1981; Goodstein 1994; Pfeffer and Salancik 1978). When a sector is fragmented and populated by many SMEs, size is not the best way to capture the visibility of a small firm and a good way to measure the visibility of large firms. Size does affect visibility (Meznar and Nigh 1995) even of small organizations but it is moderated by the layer of the environment on which an organization functions.

In addition, the environment for small enterprises in transition environments is characterized by high level of uncertainty and volatility. In unstable environments,

organizational visibility is an important attribute that an organization has to build in order to communicate not only its presence but also that "it is there to stay." Hence, I look at particular organizational attributes that can ensure that an organization has the intention to evolve in a particular market in the long run. Even though organizational visibility is a multi-dimensional construct, herein I particularly look at the dimensions associated with the relational legitimacy[38] - the access points where the stakeholders meet the focal organization.

H 12: Organizational characteristics signaling organizational visibility will enhance the relational legitimacy of SMEs evolving in transition environments.

Due to the multi-dimensional character of organizational visibility, there are two measurements of the concept – physical footprint and virtual footprint. This is the reason why hypothesis 12 is in fact regarded as hypothesis 12a and 12b.

In the section above, I presented the two independent constructs – functional and relational legitimacy. In the section below, I look at the specificities of the dependent construct – organizational legitimacy. In addition, the model is extended to test the relationship between organizational legitimacy and the profit-making ability of the firm.

8. Organizational Legitimacy

As it was mentioned earlier, in transitional contexts the most important legitimacy-granting constituencies are the ones that are directly involved with the focal organization and that have high bargaining power towards it. Some examples include: clients, employees and distributors.

Firm's clients is the most important legitimacy-granting group of stakeholders since if they make the conscious decision to partner with a particular organization in the long-

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[38] Some studies regard visibility as an important antecedent of firm's prestige (Fuller *et al.* 2006, Stern 1981) and reputation (Brammer and Millington 2006). Based on the above-said, the organizational visibility is said to enhance organizational legitimacy in general and its relational aspect in particular.

run, this means that the latter is perceived to be more legitimate than the competition (Shepherd and Zacharakis 2003). The mere fact of buying products/services has a legitimating effect on the organization from which it is bought, especially in unstable environments where numerous noisy (unreliable) signals exist.

The clients can also be considered as the most important legitimacy-granting group because the rest of the stakeholders (or institutions) have not been established yet, or even if existent, they do not fulfill their purpose (i.e. government agencies). The reason for this is abundance of opportunistic behavior by the economic actors in transition environments.

Moreover, one can pose the question of why the current client support is not a part of the functional or the relational legitimacy constructs (which are perceived to be independent from one another). This can be explained by the fact that the data used for this study is cross-sectional – I compare organizations based on certain attributes at one particular point in time. This means that potential partners make a decision whether to engage with a particular organization relying on present information but which has been generated in the past. Information about whether the current clients are satisfied with their partner organization is not easily accessible. In addition, the current clients themselves may not be aware of whether they are satisfied or not since often it is difficult to evaluate the quality of performance during the process of performing a task.

In addition, I regard the support of another stakeholder group – the employees. The employees are an important legitimacy-granting stakeholder group. In transition environments, securing qualified employees is difficult due to labor shortages. The employees with certain qualifications have a large pool of organizations to choose from. Hence, the number of employees a small firm was able to secure has a strong legitimating effect on the organization.

Moreover, the number of employees is often used as a measure of organizational size for technology firms. The relationship size $\rightarrow$ legitimacy has been already established in the literature on organizational legitimacy (Freeman *et al.* 1983; Shane and Foo

1999) and in the literature which examines organizations in transition economies (Shinkle and Kriauciunas 2010).

Another stakeholder group whose support may have an important legitimating effect on the focal organization is the group of the distributors. The logic is similar since the distributors agree to distribute the products of a company they perceive as having the necessary resources/competencies (i.e. to provide maintenance services) as well as being reliable (to provide them in a timely manner).

In highly fragmented sectors, distributors can choose among a pool of companies and their products. Hence, they go through an evaluation process of the organizations and their products. Since the products distributed imply long-term arrangements, they evaluate the organizations based on signals of functional and relational legitimacy.

Moreover, I extend the analysis and test the relationship legitimacy-profit-making ability of an organization.

9. Profit-Making Ability of an Organization

In general, organizational legitimacy is a valuable resource used to get an access to additional resources organizations need for their activities (Pfeffer and Salancik 1978). Hence, legitimacy ensures the survival of organizations (Pfeffer and Salancik 1978). Some authors claim that based on the enhanced legitimacy, an organization can improve its profit-making ability (Mazza 1999: 42). Therefore, the ultimate sign of a legitimate organization is its profit making ability (Mazza 1999: 42).

To summarize, Fig. 7 presents the proposed research model.
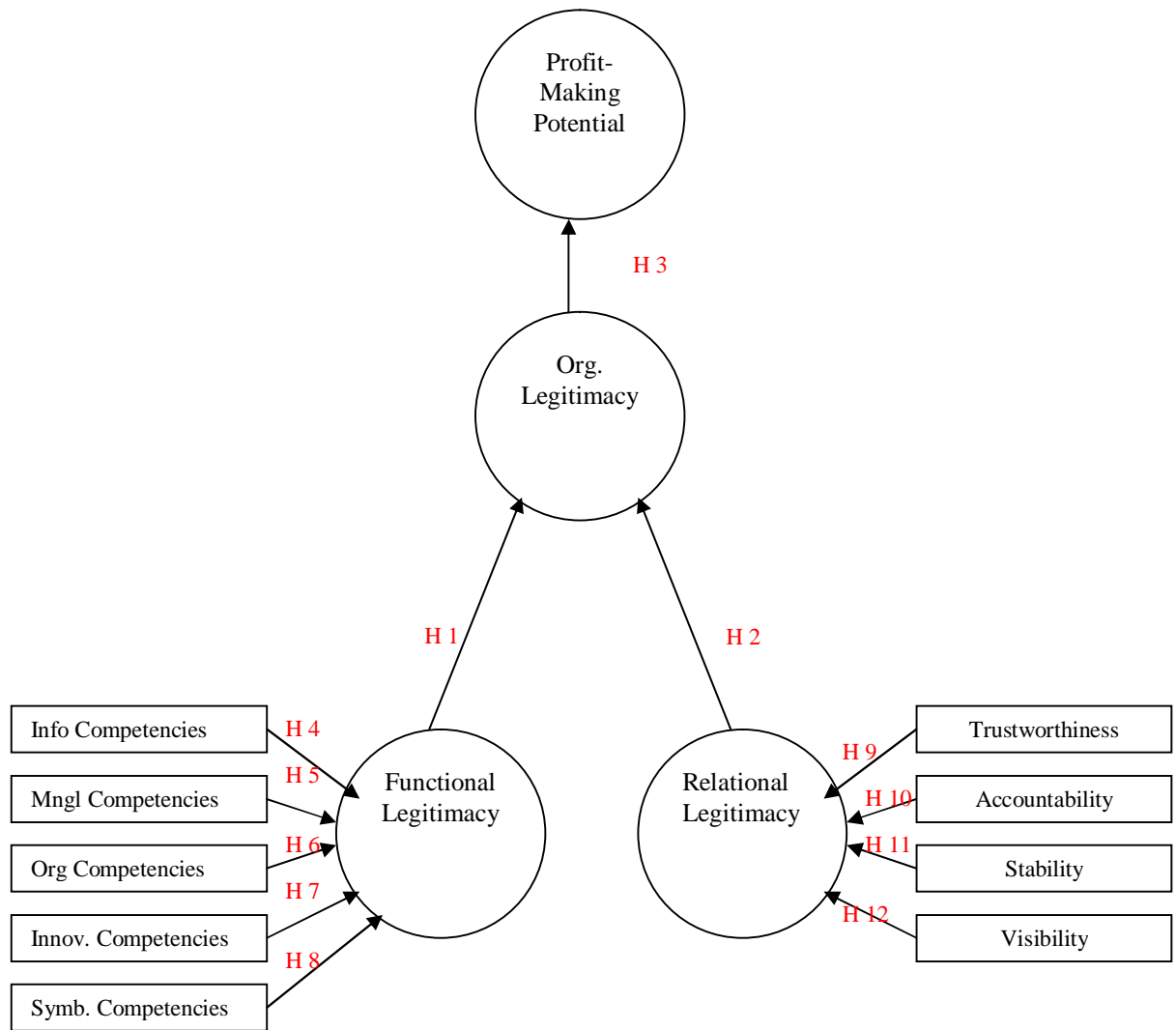
Fig. 7: Research Model

The research model presented in Fig. 7 is tested on data collected from the Bulgarian IT sector. Chapter 5 describes the specificities of the IT sector in Bulgaria.

PART I: THEORY DEVELOPMENT AND POSITIONING OF THE RESEARCH

CHAPTER 1:
Organizational Legitimacy

CHAPTER 2:
Legitimacy Issues in Transition Environments

CHAPTER 3:
Signaling Theory of Legitimacy

PART II: THEORETICAL AND EMPIRICAL SETTING

CHAPTER 4:
Outsourcing

CHAPTER 5:
The Bulgarian IT Sector

PART III: RESEARCH METHOD AND RESULTS

CHAPTER 6:
Research Method

CHAPTER 7:
Data Collection, Data Analysis and Results

PART IV: DISCUSSION AND CONTRIBUTIONS

CHAPTER 8:
Discussion, Contributions, Limitations and Avenues for Future Research

CHAPTER 5: THE BULGARIAN IT SECTOR

"…IT is like steam power in the 1800s and electricity in the 1900s – a general-purpose technology with long-term impacts on the nature of production and consumption throughout the economy."

Alan Hughes and Michael S. Scott Morton

The theoretical framework presented in chapter 4 is tested on the Bulgarian information technology (IT) sector. It provides a perfect empirical setting to test the hypotheses developed in this study due to several reasons. **First**, the organizational environment in Bulgaria represents a real transition environment. Even though some sociologists (Raychev and Stoichev 2008) proclaimed that the transition was over[39] with the accession of the country in the European Union (EU), it is in the process of overcoming some difficulties inherent to the transition (such as opportunistic behavior of economic actors) which show that the context in which the organizations function in Bulgaria is still a transitional one.

Second, most of the companies that belong to the IT sector are small and medium-size enterprises (SMEs). There are approximately 4,000 companies that belong to the Bulgarian IT sector. This means that the sector is highly fragmented and comprised of mainly small organizations.

Third, due to the specificities of the IT business, the IT firms are indeed outsourcees, their clients – outsourcers. Hence, the small IT organizations are trying to receive long-term outsourcing arrangements. This implies that they attempt to demonstrate their adherence to the expectations of relevant stakeholder groups, among which are the clients.

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[39] Peng (2003) mentioned that the question "Are the transitions over?" was asked right after the transition process was initiated. According to Williamson (2000), it may take from one to one hundred years to develop a complete market-supporting infrastructure.

The chapter is organized as follows. In the first section, I define the IT industry, followed by the history of IT outsourcing in section 2. In section 3, the emphasis is on the global aspect of the IT industry. Lastly, I look at the specificities of the Bulgarian IT sector: history and current state, including advantages and challenges and directions for future development.

1. What is Information Technology (IT)?

One definition of information technology (IT) is provided by the Information Technology Association of America (ITAA): "the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware." Powell and Dent Micallef (1997) defined IT as "any form of computer-based information system including mainframe as well as microcomputer applications."

IT, like electricity, is general-purpose technology – it is used by all kinds of organizations for multiple purposes (Carr 2005). This is one of the reasons why the boundaries of the IT sector are blurred and not clearly-defined. Nevertheless, I look at the categories of technology applications within the IT industry in order to define the boundaries of the IT sector. Following McAfee (2006), the IT industry is comprised of the following categories: function (FIT), network (NIT) and enterprise IT (EIT). Below, the IT categories are presented.

1.1. Function IT

Function IT includes "technologies that make the execution of stand-alone tasks more efficient" (McAfee 2006: 144). Some examples of technologies that belong to this category are word processors and spreadsheets. The benefits associated with function IT applications are various but the most common are: enhancing experimentation capacity (i.e. simulation software) and increase precision (McAfee 2006).

1.2. Network IT

Network IT includes technologies based on which people or employees within an organization can communicate with one another (McAfee 2006). This category of IT

includes e-mail, instant messaging, blogs, and groupware like Lotus Notes (McAfee 2006). The benefits associated with network IT applications are: facilitated collaboration, expressions of judgment (since this is egalitarian technology and people can more freely express their opinion) and fostering emergence – high-level of information because of low level of interactions (McAfee 2006).

1.3. Enterprise IT

Enterprise IT applications are technologies that an organization adopts in order to restructure the interactions among groups of employees or between the company itself and its business partners (McAfee 2006). Some IT applications that fall into this category are: customer resource management (CRM), supply chain management (SCM), enterprise resource planning (ERP) as well as electronic data interchange (McAfee 2006). A specific characteristic of these technologies is their top-down, which means that they are imposed by the senior management (McAfee 2006). They are also associated with the introduction of new processes, interdependencies and decision rights. The main benefits associated with this category of IT applications are the following: redesigning business processes within an organization, standardizing work flows and monitoring activities and events efficiently (McAfee 2006).

The three categories of IT service applications – their definitions and examples- are presented in the table below.

IT Category	Definition	Examples
Function IT	IT that assists with the execution of discrete tasks	Simulators, spreadsheets, computer-aided design, and statistical software
Network IT	IT that facilitates interaction without specifying their parameters	E-mail, instant messaging, wikis, and blogs
Enterprise IT	IT that specifies business processes	Software for enterprise resource planning (ERP), customer resources management (CRM), and supply chain management (SCM)

Table 2: The Three Varieties of Work-Changing IT (McAfee 2006)

1.4. IT Outsourcing

In a previous chapter (Chapter 3), I have already discussed the outsourcing concept – its definition, typology and benefits for the outsourcer and the outsourcee. Herein, I particularly look at the historical development of the IT outsourcing or the deployment of the information technology activities to external parties. The history help us better understand the current stage of the global IT outsourcing industry.

2. History of IT Outsourcing

2.1. Pre-1990s Era

The outsourcing of the IT services existed since the beginning of the data processing (Lacity and Hirschheim 1993). In mid-1960s, financial and operational support areas (general ledger, payroll, inventory control) started being externalized to the so-called computer services bureaus (McFarlan and Nolan 1995).

This period of IT outsourcing is characterized by the emergence of large IT service providers, such as Electronic Data Systems (EDS) (in the state and local government sector), ADP and Anderson Consulting (in the private sector), CSC (in the public sector) (McFarlan and Nolan 1995) as well as the smaller firms specialized in one application or another (Mol 2007: 15). As McFarlan and Nolan (1995) noted that until 1990, the main drivers for outsourcing were: (1) cost-effective access to specialized or occasionally needed computer power; (2) avoidance of building in-house IT skills and (3) access to special functional capabilities.

In the 1980s, top managers became aware of the strategic role of information systems (IS) as a key organizational capability that can provide a sustainable competitive advantage (Lacity and Hirschheim 1993). They learned that through IS they can fight competition, develop loyal customer base, maintain long-term supplier relationships and reduce the threat of new entrants (Lacity and Hirschheim 1993). Due to their strategic importance, executives thought they have to be kept in-house.

Very typical for the pre-1990s outsourcing era is that the applications created by the computer services bureaus were both general use and customized programs, which

were mostly done for small- and medium-size companies (McFarlan and Nolan 1995). The early forms of IT outsourcing deals were usually single-system contracts – i.e. they were related to the deployment of payroll, insurance processing, credit cards, or mailing lists (Lacity and Hirschheim 1993). Since organizations in general viewed the IS as a source of sustainable competitive advantage, if they had the ability they kept their IT departments in-house. Thus, large firms rarely outsourced their IT activities and if they did, the activities were either very specialized or confidential (McFarlan and Nolan 1995).

Even though most of the companies tend to outsource domestically during this first wave of IT outsourcing, there were some that started considering offshore destinations. In example, Pacific Data Services (PDS) outsourced its data entry processes to China in 1961 (Apte and Mason 1995). Data entry was one of the easiest service activities to be externalized globally since it does not require high level of literacy and training (Apte and Mason 1995).

This changed in 1988 when Eastman Kodak decided to outsource the company's IT department (including 17 data centers, network and desktop systems and some 650 of its 4,000 employees) to an external IT service provider (Linder 2004). The decision at Kodak created a buzz (Linder 2004) and changed the way large companies looked at IT outsourcing (McFarlan and Nolan 1995). It was a radical outsourcing decision at the time (Linder 2004) since once of a sudden executives started viewing the IS as a utility or a commodity rather than a source of sustainable competitive advantage (Lacity and Hirschheim 1993). As Lacity and Hirschheim (1993) mentioned there was a shift in the way they think about IS and as the authors stated *information* rather than *information systems* was perceived to be the new source of competitive advantage. This set the beginning of a new era in the IT service outsourcing, which herein is called 'post-1990 era."

2.2. Post-1990s Era

Once the way the top managers perceived the IT activity changed (from strategic capability to a commodity-like value-chain activity), companies started looking for ways to provide the IS services at the lowest possible cost (Lacity and Hirschheim 1993). Thus, they started outsourcing the IT activity to large, specialized vendors

(which can realize economies of scale and thus provide the services at a much lower price) (Lacity and Hirschheim 1993). This led to a tremendous decrease in the cost of outsourcing IT services – since the late 1950s, the price of computing power has fallen more than 2,000-fold (Hughes and Morton 2006).

Very soon, a bandwagon effect occurred due to the outsourcing success of several large corporations (i.e., Kodak, American Bankshares, Southeast and other) (Lacity and Hirschheim 1993). As some authors mentioned the outsourcing decisions within many companies were not well-thought and carefully implemented (Lacity and Hirschheim 1993). As it happened with many other organizational forms or strategies, they were adopted by companies not because of the increased efficiency but due to the institutional pressures coming from the environment. Indeed, Lacity and Hirschheim (1993) argue that the outsourcing of IT is rarely more efficient than the internalization of the activity but at one point in time it became 'management fashion" (Abrahamson 1996).

Due to the two above-mentioned factors – the shift in the perception of the IT outsourcing and the bandwagon effect that it caused – there was a dramatic change in the scope of the IT outsourcing (Lacity and Hirschheim 1993). IT outsourcing now is multiple-system and it is associated with significant transfer of assets, leases and staff to the supplier (Lacity and Hirschheim 1993).

According to McFarlan and Nolan (1995), there are two factors that contributed to the recent boom of IT outsourcing – the acceptance of strategic partnerships as a method of strategic development and the development of the information technology itself. The importance of the first factor lies in the fact that most of the IT outsourcing happens through strategic partnerships between the outsourcer and outsourcee. The importance of the IT development is associated with the industry convergence between computer and telecommunication industries.

McFarlan and Nolan (1995) have identified the factors that drive the development of IT outsourcing after 1990s. These drivers include: concerns about costs and quality, breakdown in IT performance, intense supplier pressures, simplified general

management agenda, financial factors, corporate culture, elimination of internal irritant, etc.

There are different opinions on how the IT industry will develop in the future. Carr (2005) stated that as a general-purpose technology, if the supply of IT can be consolidated, huge economies of scale can be realized (Carr 2005).

3. Global Information Technology Industry

3.1. What is a Global Industry?

There are only few industries (if any) that are not influenced by the global competitive forces (Inkpen and Ramaswamy 2006: 3). The degree of globalization though differs from industry to industry with some sectors proclaimed to be really 'global' (Inkpen and Ramaswamy 2006: 14). The question what 'global industry' means does not have one answer (Inkpen and Ramaswamy 2006: 14). The higher the degree of globalization within an industry, the greater the need to coordinate activities across national borders as well as the higher the difficulty of making a decision where to deploy the value-chain activities of the organization (Inkpen and Ramaswamy 2006: 15). The global industries have several characteristics that reflect the competitive dynamics. Among these characteristics are the facts that the industry products are sold internationally, companies can serve international customers, the same groups of competitors are placed in all markets (Inkpen and Ramaswamy 2006: 15) and other (see Appendix 1). Along with automobile, commercial aircraft, oil and gas, consumer electronics, the IT industry is also considered to be a global industry (Inkpen and Ramaswamy 2006: 17).

3.2. The IT Industry as a Global Industry: The Outsourcing Process

The list of the above-mentioned characteristics of a global industry (see Appendix 1) shows that the IT industry experiences a high level of globalization. The IT companies serve international clients and they realize that no one location can provide them all they need (Ewing 2007). Thus, as some experts state, an IT company needs "a multi-geography footprint" in order to draw from the pool of talent around the

world (Ewing 2007). The globalization of the IT industry is directly associated with the process of outsourcing of the IT activities to external parties located worldwide. In terms of the outsourcing destinations, even though they change often, the leading position for the past several years is kept by two countries - India and China.

3.3. IT Outsourcing in India and China

India is the unmatchable leader in the global services outsourcing (including IT) by getting 11.5% of the global market in 2007 or $34.1 billion (Pinaroc 2007). In the same year, China got 4.4% share of the global outsourcing market or $13.1 billion (Pinaroc 2007). According to some analysts, China is lagging behind due to the fact that English is not that widely-spoken in the country as well as the not very well developed infrastructure (Ferguson 2007).

The Indian IT service providers also gained on their rivals worldwide – they hold 9% of the global IT service outsourcing market. The future prospects sound promising for India – the country is expected to lead the offshore segment up to 2010 with 15% (Pinaroc 2007). Besides India, China also shows great potential to increase its outsourcing capacity (Nairn 2004).

The two countries are leaders in the IT outsourcing attracting projects mainly due to their unmatchable labor cost (Wagstyl 2004b). Labor cost is an important element of any IT project (Wagstyl 2004s) and thus, a central consideration for the companies' CIOs when considering which outsourcing destination to choose. Even though India and China continue to lead the outsourcing revolution in terms of growth rate (101% in 2007 for business process outsourcing (BPO) contracts), there is a large number of cities worldwide that are trying to attract the attention of the big outsourcers – i.e. Budapest, Buenos Aires, Sofia, Moscow and other (Nairn 2004). Indeed, EMEA region (Europe, Middle-East and Africa) outweighed the two other regions (Asia-Pacific and America) by getting $12.45 billion of the BPO contracts in absolute value terms (Yeo 2008). In comparison, Asia-Pacific got $8.62 billion and America - $2.09 billion of the global BPO market in 2007 (Yeo 2008).

A lot of Western European companies choose Central and Eastern Europe (CEE) as their outsourcing destinations since they are geographically and culturally close to

them (Nairn 2004). In addition, some of the big Indian providers of outsourcing services open offices in CEE region to take advantage of the same time zone and physical proximity with their clients (Nairn 2004). Thus, the importance of the region as an outsourcing destination grows. Below, the focus is on Central and Eastern Europe (CEE) as a region with growing importance in terms of IT outsourcing.

3.4. IT Outsourcing in Central and Eastern Europe (CEE)

The region has developed as an outsourcing destination for many companies from different industries, such as DHL (Wagstyl 2004a), Philips (Wagstyl 2004b), Lufthansa, Accenture (Cienski, Anderson, and Condon 2006) as well as companies from the IT sector – HP, Microsoft, IBM, Oracle. After the big privatization deals have been almost completed and the investment in key manufacturing industries and domestic services has slowed, the second wave of investment in the countries of CEE is expected to be export-oriented services (Wagstyl 2004b), including the IT service sector.

Many executives have acknowledged the advantages of the CEE region in terms of market growth, highly-skilled work force, well-developed education system and governments that support business (Wagstyl 2004a). In addition, people in CEE are accustomed to change, which is important when it comes to dynamic technology sectors (Wagstyl 2004a). Moreover, the countries in CEE offer language proficiency not only in English but also in German, Spanish and French (skills hard to find in Asia-Pacific), cultural affinity (important in fields, such as debt collection and handling complaints), and geographic proximity (Wagstyl 2004b). The latter is important for services that require frequent contacts with clients (Wagstyl 2004b). Indeed, those are the main advantages of the region used to fight the low cost advantage not only of India and China but also of other outsourcing destinations of Asia-Pacific (Wagstyl 2004b).

In general, those advantages are common among many different industries. They are particularly important for the IT service outsourcing sector and the reason why many European companies prefer the CEE region as their outsourcing destination over India and China. But besides the outsourcing initiatives of the global players in the IT industry, which had an important legitimating effect for the region, there is another

development associated with the intensive entrepreneurial activity of the local people as well as some international entrepreneurship projects (or when foreigners establish operations in a particular country).

Due to the foreign direct investments of the global IT players, government subsidies and the intensive entrepreneurial activity in the countries of CEE, the IT market in Central and Eastern Europe is one of the sectors growing with the fastest rates. In general, it grows at a rate two or three times the overall rate of economic growth of any country in the region (Wagstyl 2004a).

The region is characterized with a very big contrast between the fast developing members of the EU, such as Estonia and the lagging behind ex-members of the Commonwealth of Independent States (CIS) (EIU Report 2006). There is a sort of intra-regional competition that has been observed due to the fact that countries like Hungary and the Czech Republic are losing ground to Romania and Bulgaria due to the availability of skilled labor at lower cost (EIU Report 2006).

One of the Eastern European countries which became a real hot spot for the development of IT is Bulgaria. Along with electronics, machine-building and electro-technical industries, Information and Communication Technology (ICT) sector is one of the sectors with good perspectives for development in Bulgaria (Stanchev 2007). The IT market is one of the most developed and dynamic markets in Bulgaria with traditions going back the Communist Era when according to the Warsaw agreement COMECON (Council for Mutual Economic Assistance), the country had to specialize in informatics. Today, many Bulgarian companies try to get an access to the international/global markets by getting outsourcing contracts in the IT services sector. In order to better understand the specificities of the Bulgarian IT market, in the next section I present the political and socio-economic situation in the country and the current stage of development of the Bulgarian IT sector.

4. The IT Sector in Bulgaria

4.1. Bulgaria – Economic Overview

Bulgaria is an Eastern-European country which was under the communist regime for almost 45 years – after World War II until 1989 when the communist regime was overthrown (Raychev and Stoichev 2008). Even though some sociologists claim the opposite (Raychev and Stoichev 2008), Bulgaria is still considered an economy in transition (Shinkle and Kriauciunas 2010).

Indeed, the extent to which the transition was completed is country-specific and it depends on the communism legacy and the governmental policy. Bulgaria was one of the countries lagging behind some Central European countries in its attempt to incorporate some of the necessary reforms. There is a high level of corruption and misuse of the cohesion and structural funds from the European Union (Vassilev 2008). In addition, due to the immigration of around 1.5 million young Bulgarians during the transition period and the negative demographic trends (the work force is predicted to shrink by 50% by 2050). Hence, there is a shortage of skilled and unskilled labor (Vassilev 2008) in many sectors.

On the positive side, I have to mention the economic growth, estimated at more than 5% for 2008, is one of the highest in the European Union (Vassilev 2008). The country has a competitive edge in critical sectors, such as energy transit, food processing and agriculture (Vassilev 2008). The property and construction markets are very appealing for foreign investors (Vassilev 2008).

Bulgaria has one of the lowest tax rates in Europe – 10% flat rate on personal and corporate income (Vassilev 2008). This stimulates the entrepreneurial activity within the country (Vassilev 2008). In addition, the dynamism of the Bulgarian economy is not related to the political cycle (Vassilev 2008).

The IT has always been one of the traditional sectors of development in Bulgaria. In the next section, I look at the history of the Bulgarian IT sector going back to the socialist era and continuing with the period of transition from planned to open market economy.

4.2. History of the IT Sector in Bulgaria

4.2.1. The Socialist Era

As part of the former Soviet Bloc, Bulgaria had to specialize in creating, developing and improving new technologies that were after that implemented in all member states of COMECON (Bulgarian ICT Sector Profile). This way, Bulgaria has gained more an experience in the development of hardware, software and electronic products (Bulgarian ICT Profile @ CEBIT 2006). As a result, Bulgaria has nurtured a pool of highly qualified experts in IT as well as some large IT enterprises (Bulgarian ICT Sector Profile). The country has long had an image of being technology and innovation hub of Eastern Europe, often called the "Silicon Valley" of the region (Bulgarian ICT Sector Profile).

4.2.2. The Period of Transition

The period of transition from planned to open market economy started in 1989 with the fall of the communist regime and has continued for almost 20 years. In the beginning of the 90s, the activity in the IT sector fell down but then quickly went up (Bulgarian ICT Sector Profile). The enormous human potential of the country in the IT sector helped it regain the lost position in the IT industry (Bulgarian ICT Sector Profile). During its transition to a free market, Bulgaria managed to build on this long-term tradition as an IT location, and to establish itself as one of the prominent suppliers of software development and IT services in Eastern Europe (Bulgarian ICT Profile @ CEBIT 2006).

Among the clients of the Bulgarian IT companies are the Canadian government agencies, such as the Department of Transport, the Department of Environment as well as some global companies, such as BMW, Boeing, Ford, Lockheed Martin, Nortel, Hasbro, Xerox, Telesis Technologies, and Pricewaterhouse Cooper (Bulgarian ICT Sector Profile).

4.2.3. The Legitimating Role of the Big IT Players

Besides the big clients of the Bulgarian IT sector, it is important to note the decision of the global industry players to build service and call centers in Bulgaria. This is an important moment in the development in any offshore outsourcing destination and has a big legitimizing effect. The companies that set up their facilities in Bulgaria first were SAP (the German enterprise software giant), IBM (International Business Machines – the US-based computer technology and consulting corporation) and HP (Hewlett Packard – the US-based information technology corporation) (2005). Later, Cisco Systems and Oracle followed the first movers to Bulgaria and also set up their own facilities in the country (Robinson 2005).

4.3. The Current Situation of the Bulgarian IT Sector

4.3.1. Factors Contributing to the Current Situation of the Bulgarian IT Sector

One of the most important developments in the Bulgarian IT sector is the increase in the number of outsourcing deals. Bulgaria is riding the outsourcing wave as CEE emerges as a hub of outsourcing deals (Terzieff 2006). The reason for this is called *near-shoring* – shifting work to countries that cost less but are physically close the home market of the outsourcing company (Reinhardt 2004).

In 2005, Bulgaria was ranked number 13th on the global ranking of the best outsourcing destinations by the Economist Intelligence Unit (EIU) before countries such as Romania and Chile (see Appendix 3). In addition, Bulgaria has been ranked 15th in the A.T. Kearney's annual ranking of the most attractive destinations for "offshoring" of service activities such as IT, business processes and call centers (Terzieff 2006). The criteria used to rank the countries are: payroll costs, educational system and infrastructure based on the opinion of 500 business managers from around the world (Terzieff 2006).

Bulgaria is winning recognition as one of the world-class destinations for IT outsourcing due to the growth in IT capabilities (EIU Report 2006). A combination of factors, such as payroll costs, educational system, favorable policies at national and local level, and infrastructure made it a preferred outsourcing destination for

international firms. In addition, many domestic software and services companies have appeared to serve the local market as well as the global marketplace.

A) Payroll Costs

Bulgaria is considered as one of the countries with the lowest pay for IT experts (Simeonova 2007b). According to Mercer Consulting, Bulgaria is second after Vietnam in the ranking of the countries with lowest pay for IT experts (Simeonova 2007b). In Bulgaria, an IT expert is paid on average \$22,240[40] while in Switzerland, the salary is \$140,960, Denmark - \$123,080, Belgium - \$121,170 (Simeonova 2007b). The difference in the wages comes from the outsourcing of many of those jobs from the US and Western Europe to countries with lower labor costs (Simeonova 2007b). This results in lower number of IT experts that are left in the West and they have to do more complex tasks, such as being consultants and IT business partners at the same time, which increases their pay (Simeonova 2007b).

The Bulgarian IT sector is experiencing a steady increase in wages (Robinson 2005). Indeed, after HP created their global delivery center in 2006, they managed to get the best IT experts (system administrators) in Bulgaria (Nikolova and Gavrilov 2007). This led to an increase in the overall pay in the IT sector (Nikolova and Gavrilov 2007). This way, the advantage of having low cost IT labor that got paid 1/3 of the wages in the European Union started to slowly disappear (Nikolova and Gavrilov 2007).

Of course, it is a general opinion that the payroll costs are not the only reason why Western companies decide to outsource to Bulgaria (Nikolova and Gavrilov 2007). Another reason is the pool of talented human capital, which is capable of delivering high quality service solutions (Reinhardt 2004; Nikolova and Gavrilov 2007). This is due to a large extent to the well-developed educational system in Bulgaria in general and the traditions in educating and training IT experts in particular (Nikolova and Gavrilov 2007).

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[40] The wage differentials for the different positions in the field of IT are presented in Appendix 4.

B) Education

With its 8 million inhabitants, Bulgaria is a country that cannot offer unlimited human capital (Bulgarian ICT Profile @ CEBIT 2006). The educational system though is well-developed with a particular focus on electronics, engineering, and computer sciences (EIU Report 2006; Robinson 2005). In Bulgaria, there are more than 47 universities in 26 different cities (Robinson 2005). There are approximately 5,000 Bulgarian students majoring in computer sciences at any one point in time (Robinson 2005). And there are approximately 5,000 in electrical engineering, mathematics, physics, and biotechnology (Robinson 2005).

Besides the technical education, there are specialized language schools where students can learn foreign languages as well as selecting high level of science and technical subjects (Bulgarian ICT Sector Profile). In all district cities there are English Language Schools that teach all of the curriculum subjects in English (Bulgarian ICT Sector Profile). Schools that specialize in math also provide an intensive training in foreign languages (Bulgarian ICT Sector Profile).

The level of the Bulgarian educational system is comparable with the ones of the developed countries (Robinson 2005). Indeed, it is ranked 5th among all countries in sciences and 11th in mathematics according to the World Bank and The Economist (Robinson 2005; Terzieff 2006). The country also ranks 2nd in the world in IQ tests (MENSA International) and 2nd in SAT scores (Robinson 2005). The foreign language education is very intensive – students study in Bulgarian and either English, French, Spanish or German (Terzieff 2006). This results in a multi-lingual workforce (Terzieff 2006).

The Technology Achievement Index (TAI) ranks Bulgaria 28th worldwide and also a leader in the field of information and communications technology (Bulgarian ICT Sector Profile). In addition, Bulgaria hosts 122 local CISCO academics and 12 regional academies that educate around 1,800 people (Bulgarian ICT Sector Profile). In 2003, Bulgarians won 2 out of 6 annual CISCO academy awards ("Best Projects" and "Best Student") (Bulgarian ICT Sector Profile).

The result of the well-developed educational systems in place is that the country provides a pool of highly-qualified, well-educated professionals who can provide high quality services (Nikolova and Gavrilov 2007).

C) Work Force

According to the Eurostat analysis, Bulgaria is well-positioned in terms of number of people employed in high-tech and medium high-tech manufacturing fields, including the knowledge-intensive services (KIS) (Bulgarian ICT Sector Profile). Out of the 2.8 million people employed, 5.3% are working in the field of high-tech sectors, which ranks the country at the 5th place among the 10 Eastern European countries (see Table 3). Approximately 22% of the total workforce in Bulgaria works in KIS (Bulgarian ICT Sector Profile).

Country	Total Employment (thousands)	High tech and medium-high tech manufacturing	Other manufacturing	Other (neither manufacturing, nor services)	Other services	KIS
Czech Rep.	4 763	8.9	19.1	17.0	31.2	23.9
Estonia	581	3.4	18.6	15.4	31.8	30.9
Cyprus	315	1.1	11.1	16.2	45.4	26.2
Latvia	988	1.9	14.5	24.5	34.4	24.7
Lithuania	1 421	2.6	15.2	28.2	29.3	24.7
Hungary	3 846	8.5	16.4	15.3	33.3	26.4
Slovenia	922	9.2	21.9	17.0	29.1	22.8
Slovakia	2 111	8.2	18.8	17.7	31.2	24.0
Bulgaria	**2 800**	**5.3**	**18.5**	**19.5**	**34.5**	**22.2**
Romania	9 768	5.5	16.0	45.8	19.9	12.8

Table 3: Distribution of Employment by Selected Sectors in 2002 (Bulgarian ICT Sector Profile)

Moreover, Brainbench Global IT IQ Report ranks Bulgaria 8th globally in terms of number of certified IT professionals (Robinson 2005).

D) Infrastructure and Government Policy

In comparison to some countries in Asia, Bulgaria and the rest of the countries in CEE have better IT infrastructure. In Bulgaria, the government is actively involved in building the National State Network (NSN) for communication between ministries,

regional authorities and municipalities, which includes high-speed fiber optic ring with an initial transmission capacity of about 2.5Gbps and with an option for further increase to 10Gbps (Stanchev 2007). Moreover, the governmental agencies are working in the direction of developing IT skills in schools and universities – i.e., all schools and universities are connected to the Internet and 80% of the students are online (Stanchev 2007). To improve its IT infrastructure, Bulgaria will receive European Structural Funds in 2007-2013 (Stanchev 2007).

In addition, the Bulgarian government is actively involved in the process of attracting the big IT players to the country. For example, the global delivery center of HP, which opened in 2007, received governmental subsidy of 1.2 million euro for training of the newly-hired employees (Boychev 2006).

The Bulgarian government accepted legislature, which contributes to the development of the ICT sector, such as Electronic Document and Electronic Signature Act (EDESA), Personal Data Protection Act (PDPA), amendments in the Bulgarian Criminal Code associated with computer crimes, amendments in the Copyright and Related Rights Act and the Patent Act (Bulgarian ICT Sector Profile).

In addition, the Bulgarian government has accepted several strategic directions for development – Strategy and National Program for Information Society Development, Strategy and Action Plan for Bulgarian Competitiveness in Global ICT Markets, Electronic Government Strategy (Bulgarian ICT Sector Profile).

E) Geographical Location
The time zone of Bulgaria is UTC/GMT + 2, which is one hour ahead than most of the countries in continental Europe and two hours ahead than the UK and Portugal. This makes the country an excellent location for offshoring services (or the so-called near-shoring), especially when it comes to providing real-time solutions to the final customer. The whole process of near-shoring was initiated due to problems associated with the big time difference between Europe and North America from one side and Asia-Pacific from the other side.

In addition, the country has an important geographical location because it provides an appropriate location for economic center on the Balkans and the entrance to the West Balkans (Nikolova and Gavrilov 2007) and countries, such as Serbia, Macedonia, Albania and Croatia that are currently not members of the EU.

F) Culture

In general, countries in Europe have common historical and cultural background. Many European companies consider certain cultural, linguistic and ethnical factors when deciding where to outsource (Reinhardt 2004). Some examples – French companies are drawn to Romania due to the linguistic and historical closeness and German companies are attracted to countries like Hungary and the Czech Republic due the large pool of German speakers in this country (Reinhardt 2004).

4.3.2. The Bulgarian IT Sector- Current Trends

The Bulgarian IT market has shown a steady growth over the past several years. In 2007, the realized growth rate of the Bulgarian IT market was 23.4% (or $873 million in value terms) based on data provided by the State Agency for IT and Communications (ICT Media 2008). The growth rate of 23.4% in 2007 can be explained with the EU accession of the country as well as the national strategies in key industries, such as healthcare, education, e-government and others (ICT Media 2008).

The analysts predict that the average annual growth rate of the Bulgarian IT market will be close to 15% until 2011 with IT services showing the greatest growth potential – 17% and the hardware sector – 70% annual growth on average (ICT Media 2008).

Bulgarian IT Market Prognosis
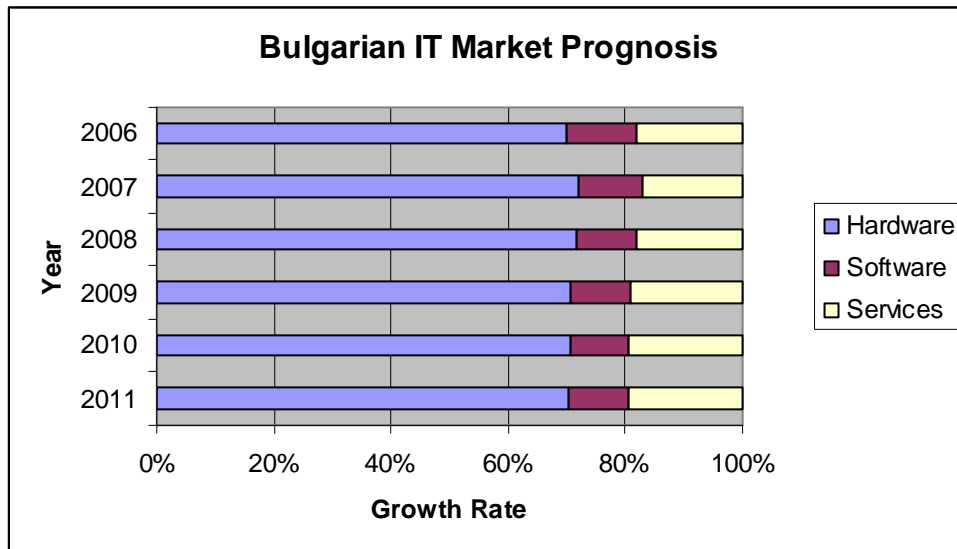
Table 4: Bulgarian IT Market Prognosis (Morozova 2008).

Based on the structure of the growth rates and the most demanded IT skills (Windows administration, network technologies and applications development), the organizations in Bulgaria are in the final stage of building their IT infrastructures (ICT Media 2008). Even though the Bulgarian companies still do not externalize their IT departments completely based on lack of trust[41] (Stefanova 2008b), there is a potential for growth in certain areas, such as the financial sector, utilities, healthcare (ICT Media 2008).

The advantages of Bulgaria (and some other Eastern European countries) as an outsourcing destination come from low-cost, highly educated work force, combined with solid infrastructure, economic and political stability, geographic proximity and fewer security concerns (Terzieff 2006).

Bulgarian ICT Sector –Mapping the Stakeholders

The most important players at the Bulgarian IT market are the Bulgarian companies (most of which are small and medium-size), the global IT companies which have established presence on the local market, and different government and non-government associations and regulating bodies. Below, I present all of the above-mentioned stakeholders.

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[41] Lack of trust is associated with fear of opportunistic behavior from the supplier of IT outsourcing services in terms of stealing confidential information and clients (Stefanova 2008b).

The Bulgarian ICT Companies

According to the Bulgarian ICT profile @ CEBIT 2006, there are approximately 4,350 companies operating in the ICT sector. More than half of those companies (2,344) are part of the computers and related activities sub-sector (Bulgarian ICT Sector Profile).

Most of these companies are small and medium-size enterprises (SMEs) – they employ up to 100 employees (Boychev and Monev 2007). This number includes many small companies that are located out of Sofia (BAIT Expo 2006). There are also 50 to 80 companies that deal exclusively with outsourcing, whose results is difficult to acknowledge because they do not announce their financial outcome (BAIT Expo 2006).

Forty-two percent of the Bulgarian IT employees are involved in software development and distribution – and 70 percent of their annual production is exported, almost exclusively through outsourcing contracts (Terzieff 2006).

The Bulgarian IT companies specialize in several technology niches (see Table 5).

Type of Specialization	Number of Companies
System Integration	102
Testing Application Software	37
Service and Support of Computer Equipment	135
CAD/CAM/CAE systems	18
Custom Software	81
Games	13
Fonts & Cyrilization	40
GIS	25
Graphic Software	32
Management Analysis IS	33
IS for Manufacture Management and Planning	35
Databases	87
Operation Systems	81

Test processing, text editors	59

Table 5: Specialization of the Bulgarian IT Companies (based on 500 companies included in *Who is Who on the Bulgarian Computer Market?)* August 4, 2008.

International IT Companies in Bulgaria

SAP

SAP decision to set up small in Sofia (the capital city of Bulgaria) in 2002 (Robinson 2005) was very important for the development of the IT sector in Bulgaria. SAP sent their Java software development for its worldwide product line (Robinson 2005). Much of the work was done only in the German headquarters and in Bulgaria (Robinson 2005). Indeed, the company chose Bulgaria over India for the development of their Java-platform (Robinson 2005).

Today, there are more than 300 people that work for SAP-Bulgaria (Stanchev 2007) and the company considers their decision to set up their facility in Bulgaria as being very successful (Robinson 2005).

IBM

IBM is one of the US companies that has been very aggressive to move to Central and Eastern Europe (Ewing 2007), in countries such as Poland and Bulgaria. IBM has been in Bulgaria since 1930s when it helped the Bulgarian government to calculate the national census (Robinson 2005). At the time, it also imported typewriting machines (Nikolova and Gavrilov 2007). The company officially moved to Bulgaria in 1995 (Robinson 2005). Big Blue now has about 50 people working there (Robinson 2005). The company is very active in working with the Bulgarian universities – it offers initiatives associated with training of students, summer internships and scholarships (Nikolova and Gavrilov 2007).

The company intends to open global delivery center in Bulgaria and it has started recruiting the personnel for it (Nikolova and Gavrilov 2007).

HP

Another US-based company that did not hesitate to aggressively move to Eastern Europe is HP (Ewing 2007; Wagstyl 2004a). In 2004, the company had 12% of the region's spending on IT, including full product range – personal computers, printers, software and services (Wagstyl 2004a). HP initially had around 40 employees in Bulgaria (Robinson 2005). In 2006, HP opened global delivery service center to provide remote infrastructure management assistance to its clients in Europe, Middle East and Africa (Terzieff 2006). In 2007, the company introduced additional services, such as business and financial analysis, administrative service and supply for HP and other companies in the region (Nikolova and Gavrilov 2007). As of today, the center employs around 1,000 engineers and programmers (Terzieff 2006).

Microsoft

Microsoft has also opened a Call Screening & Pre-Sales Center in Sofia, Bulgaria where they offer technical support, product activation of the customers in Central and Eastern Europe (Nikolova and Gavrilov 2007).

Besides the above-mentioned global players, there are also several other successful stories, such as Oracle, Tumbleweed (US provider of secure Internet messaging software in Bulgaria), and others (Stanchev 2007).

Associations

There are numerous associations at the Bulgarian IT market, including non-government organizations (NGOs), government bodies and some business associations.

Non-government Organizations (NGOs)

An important NGO at the IT market in Bulgaria is the ICT Cluster Association. The ICT Cluster Association, which was created in 2004 by several business associations, facilitates the information exchange between the companies at the Bulgarian IT market as well as between the experts (young and experienced ones) (www.ictalent.bg).

Government Bodies

There are several government bodies that are involved and support the ICT sector – State Agency for IT and Communications, Bulgarian Foreign Investment Agency (www.bfia.org), Information and Communication Technologies (ICT) Development Agency (ICT) (www.ict.org), Consultative Council for ICT Development under the Vice Prime Minister and Minister of Transport and Minister of Communications, Coordination Center for Information, Communication and Management Technologies (www.ccit.government.bg) (Bulgarian ICT Sector Profile).

The main role of the above-mentioned government institutions is to manage the investment, administration, spending of funds and the legal framework related to the ICT sector in Bulgaria (Bulgarian ICT Sector Profile).

In addition, there is another institution with governmental participation - European Software Institute (ESI) Center Bulgaria. The institute was created by the European Software Institute, the Bulgarian Association of Software Companies (BASSCOM) and the Information and Communications Technology Development Agency (ICTDA) at the Bulgarian Ministry of Transport and Communication (http://www.esicenter.bg/en/default.asp).

Private Sector Associations

The private sector in the field of IT is well-organized in order to promote the interests of the participants in the sector through cooperation and coordination with the government and the governmental institutions (Bulgarian ICT Sector Profile). The private sector associations include Bulgarian International Business Association (BIBA), Bulgarian Association of Software Companies (BASSCOM), Bulgarian Association of Information Technologies (BAIT), and Bulgarian Internet Association (BINA) (Bulgarian ICT sector Profile).

4.3.3. Challenges at the Bulgarian Market for IT Services

Based on the development of the IT industry on global and local level, the Bulgarian IT companies face certain challenges. The challenges discussed below are not specific to Bulgaria but to the IT sectors in many transition environments.

A) Rising Costs

In 2007, Bulgaria was accepted in the European Union. This led to changes in the whole economic and socio-political life in the country. The suppliers and customers of IT solutions are not sure whether this is a good thing in the long run because this will lead to increase in wages and costs for the customers along with the positive side of an increase in the market size (Robinson 2006). As some analysts show the wages in the IT sector in Bulgaria grow steadily (Simeonova 2007b, Stefanova 2008b) due to the qualified labor shortage (Simeonova 2007) and the resulting attempt of some IT players to attract Bulgarians working and living abroad by offering competitive wages (Nikolova and Gavrilov 2007). Another reason is the overall increase in the standard of living.

B) Shortage of Qualified Labor

The shortage of qualified labor is one of the main issues that most of the countries in CEE are facing. It challenges the development of many industries, including the IT sector (ICT Media 2008). Some companies in the IT sector became very creative in finding ways to solve the problem with the labor shortage. Indeed, they started attracting Bulgarian employees working in foreign countries to come back to Bulgaria by offering attractive wages (Nikolova and Gavrilov 2007).

Moreover, some companies target directly the universities and create different programs in order to tap the young talent there (ICT Media 2008).

C) New Skills Required

In terms of the IT experts needed, some analysts show that the IT experts of the future will need to have complex skills, including the ability to plan, organize, solve problems and effectively communicate with their clients (Simeonova 2007a) as it happens in the Western countries (Simeonova 2007b). The reason for this is that global companies are always on the search for lower cost locations (Simeonova 2007a). Thus, the IT jobs that are left in locations not that new and characterized with rising labor costs will require new skills, such as project management and analysis of business processes (Simeonova 2007a). Only the outsourcing destinations that will be able to offer those skills will become outsourcing hubs in the long-run.

This new developments at the IT market require an intensive relationship between the IT organizations and the universities since the latter are very good in preparing students in the technical fields but not good in developing business and communication skills in the future IT engineers (Simeonova 2007a).

D) Lack of Investment Funds

Many foreign companies are interested by the Bulgarian IT sector due to the presence of a large pool of highly-talented human capital (i.e. the US-based company VMware, a provider of software solution showed interest toward Scient, one of the biggest outsourcing companies in Bulgaria), the geographic location of the country (i.e. the UK-based Velti bought Mtelecom due to its interest on the Balkan region) as well as their innovativeness (i.e. the US multi-national company Apptix acquired Webmessenger for their innovative corporate communication solution for mobile message exchange in real time (Boychev and Monev 2007). The Bulgarian owners usually agree to have their companies acquired because of the need of new investments to continue the successful development of their organizations (Boychev and Monev 2007).

E) Inability to Absorb the EU Funds

Another factor is the inability of small and medium enterprises to absorb the funding from the EU as part of the structural programs (ICT Media 2008). Even though there are a lot of initiatives to inform the SMEs for the opportunities they can take advantage of after the EU accession, most of them do not rely and do not try to access this funding (ICT Media 2008).

Besides the difficulties that many companies in the Bulgarian IT market face, including the lack of investment funds, some companies manage very well and are highly successful. In the next section, I look at some promising developments in the Bulgarian IT market.

4.3.4. New Developments

A) Governmental Initiatives

The Bulgarian Government is devoted to not only to establish regional, national and international ultra-high speed network infrastructure but also to increase the share of the IT investments, enhance the investments in R&D activities in the ICT sector and develop a competitive, export-oriented ICT industry (Stanchev 2007). Also, the government works to establish a venture capital fund targeted at SMEs with an ICT profile (Stanchev 2007).

B) International Expansion

There are already Bulgarian IT companies that started the process of international expansion within and outside the EU (Grigorova 2007). Some examples include Stone Computers that opened an office in Macedonia, Fadata – in Serbia and Turkey and CableTel in Macedonia and many others (Grigorova 2007).

Besides the corporate expansion, there are several international initiatives that have been promoted by the Bulgarian IT associations, such the ICT Cluster Association and ESI Center Eastern Europe (Grigorova 2007).

To conclude, the Bulgarian ICT sector provides an appropriate empirical setting to test the herein developed hypotheses. The sector is fragmented and comprised of many small organizations (Boychev and Manev 2007) trying to obtain long-term outsourcing contracts with domestic and/or foreign clients. The Bulgarian environment is an example of an environment going through a transition characterized by a high level of uncertainty and vulnerability.

According to the signaling theory of legitimacy, if the organizations, subject to this study, use signals of functional and relational legitimacy in order to demonstrate their adherence to the requirements of the evaluating audiences (on the local, national and international layer), they will obtain the support of interested stakeholder groups.

In the next part, I present the research methodology, including the epistemological orientation of the study. I continue with a discussion on the variables and the

measurement instruments used followed by a description of the data collection and data analysis processes.

PART III: REASEARCH METHOD AND RESULTS

PART I: THEORY DEVELOPMENT AND POSITIONING OF THE RESEARCH

CHAPTER 1:
Organizational Legitimacy

CHAPTER 2:
Legitimacy Issues in
Transition Environments

CHAPTER 3:
Signaling Theory of
Legitimacy

PART II: THEORETICAL AND EMPIRICAL SETTING

CHAPTER 4:
Outsourcing

CHAPTER 5:
The Bulgarian IT Sector

PART III: RESEARCH METHOD AND RESULTS

CHAPTER 6:
Research Method

CHAPTER 7:
Data Collection, Data
Analysis and Results

PART IV: DISCUSSION AND CONTRIBUTIONS

CHAPTER 8:
Discussion, Contributions,
Limitations and Avenues for
Future Research

CHAPTER 6: RESEARCH METHOD

Based on the theoretical development in Part I and II, the current research addresses two main questions: **First**, what are the dimensions (and valid signals) of functional and relational legitimacy (for small organizations in transition environments)? **Second**, does using signals of specific types of legitimacy (depending on the liability faced) enhance organizational legitimacy?

The research questions position the study within the *realist epistemological paradigm* (Healy and Perry 2000) since the researcher tries to construct a reality (the dimensions comprising the two legitimacy types – functional and relational legitimacy), which exists independently from his/her mind (test whether the comprising dimensions of the legitimacy types in fact enhance organizational legitimacy). In addition, a quantitative methodology (structural equation modeling) is used to confirm a general law - the signaling theory of legitimacy.

Based on the existence of multiple dependence relationships among the variables part of the herein proposed research model and the fact that some variables are unobservable (latent), the methodology used is structural equation modeling (SEM) (Hair *et al.* 1998). The latent variables are the two independent constructs functional and relational legitimacy and the dependent variable (organizational legitimacy). Moreover, since the research addresses the relationship legitimacy-profit-making ability of an organization, I add another latent variable – profit-making ability. Depending on the direction of causality, the latent constructs employed are formative and reflective (Diamantopoulos *et al.* 2008; Jarvis *et al.* 2003).

The chapter is organized as follows. **First**, I look at the epistemological orientation of the study. **Second**, the specificities of the SEM as a multivariate statistical technique are presented, including the two types of measurement models. **Third**, assessment of the measurement model and the structural model is discussed. The chapter finishes with a discussion on two particular SEM techniques – covariance-based (LISREL) and variance-based (PLS).

1. Epistemological Orientation of the Research

In order to determine the epistemological orientation of this research, I consider the two main approaches to theory development dominating the debate in social science – *deductive theory testing* and *inductive theory building* (Perry 1998). They reflect different scientific paradigms[42] - the deductive approach represents the positivist paradigm and the inductive approach represents the phenomenological paradigm (Perry 1998).

Positivism is the mainstream scientific paradigm in management science (Johnson and Duberley 2000). There are several reasons for this. Since management research is rooted in many disciplines (sociology, anthropology, mathematics, statistics, etc.), the positivist approach has been suggested in order to overcome this fragmentation (Pfeffer 1995). Recently, researchers in management start pointing the importance and the contribution of the methods pertaining to the phenomenological paradigm (Mir and Watson 2000). The specificities of the two research paradigms are presented below.

1.1. The Positivist Paradigm

Positivism is "an approach to knowledge which restricts itself to observable facts and their relationships and which excludes reference to non-observable entities" (Thomas 2004: 43). For positivists, the objects of scientific knowledge are different phenomena (Azevedo 2005). They exist and possess properties that exist independently of the observer (Thomas 2004). The knowledge itself takes the form of general laws tested by experience (Azevedo 2005). It is obtained by observations expressed in the form of descriptions (Thomas 2004), which consist in showing the logical links between specific phenomena and these laws (Azevedo 2005: 718) and are valid to the extent they depict the properties the object really has (Thomas 2004: 42).

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[42] A scientific paradigm is "a set of basic beliefs" which shapes the "worldview that defines, for its holder, the nature of the world, the individual's place in it, and the range of possible relationships to that world and its parts" (Guba and Lincoln 1994: 107).

1.2. The Phenomenological Paradigm

The phenomenological paradigm can be divided into three parts: *critical theory*, *constructivism* and *realism* (Guba and Lincoln 1994). The *critical theory approach* emphasizes a reality, which is apprehendable but shaped by various social, political, cultural, economic, ethnic, and gender factors (Guba and Lincoln 1994). It is perceived that the values of the investigator influence the research itself (Guba and Lincoln 1994). Hence, findings are value-mediated (Guba and Lincoln 1994).

For the *constructivists,* "rules and principles do not exist independently of our theorizing about them" (Mir and Watson 2000: 942). The theory of the researcher drives all aspects of the empirical investigation (Mir and Watson 2000: 942). In fact, constructivism does not question the existence of phenomena but rather the ability of the researcher to understand them without a specific theory of knowledge (or paradigms) (Mir and Watson 2000).

For the *realists*, the "real" world can be discovered even though it is only imperfectly apprehensible (Healy and Perry 2000). It consists of abstract things that are born of people's minds but exist independently of any one person (Healy and Perry 2000).

The table below compares the differences between positivism, critical theory, realism and constructivism along several dimensions – ontology, epistemology, and methodology.

Approach	DEDUCTIVE	INDUCTIVE		
Elements	Positivism	Critical Theory	Realism	Constructivism
Ontology	Existence of "real" reality but apprehendable; knowledge on the "way things are" is conventionally summarized in time- and context-free generalizations	Virtual reality shaped by social, political, cultural, economic, ethnic, and gender values; crystallized over time	Existence of "real" reality which is not easily accessible in its integrality	Reality is
Epistemology	Objectivist: findings are true	Subjectivist: social and historical values	Subjectivist: findings are probably true	Subjectivist: findings are created

		modify the reality		
Methodology	Experimentation, survey; causal approach, verification of hypotheses chiefly quantitative methods	Dialogical/Dialectical approach: the researcher transforms the social world in which the actors live	Case studies: triangulation, interpretation of data of the research based on qualitative methods and some quantitative methods, such structural equation modeling (SEM)	Hermeneutical/dialectical: the researcher is a part of his/her own research

Table 6: Scientific Paradigms and Epistemological Approaches (adapted from Healy and Perry (2000) and Guba and Lincoln (1994).

In addition to Table 6, in Fig. 8, I present the different epistemological approaches and the methodological orientation of each of them.
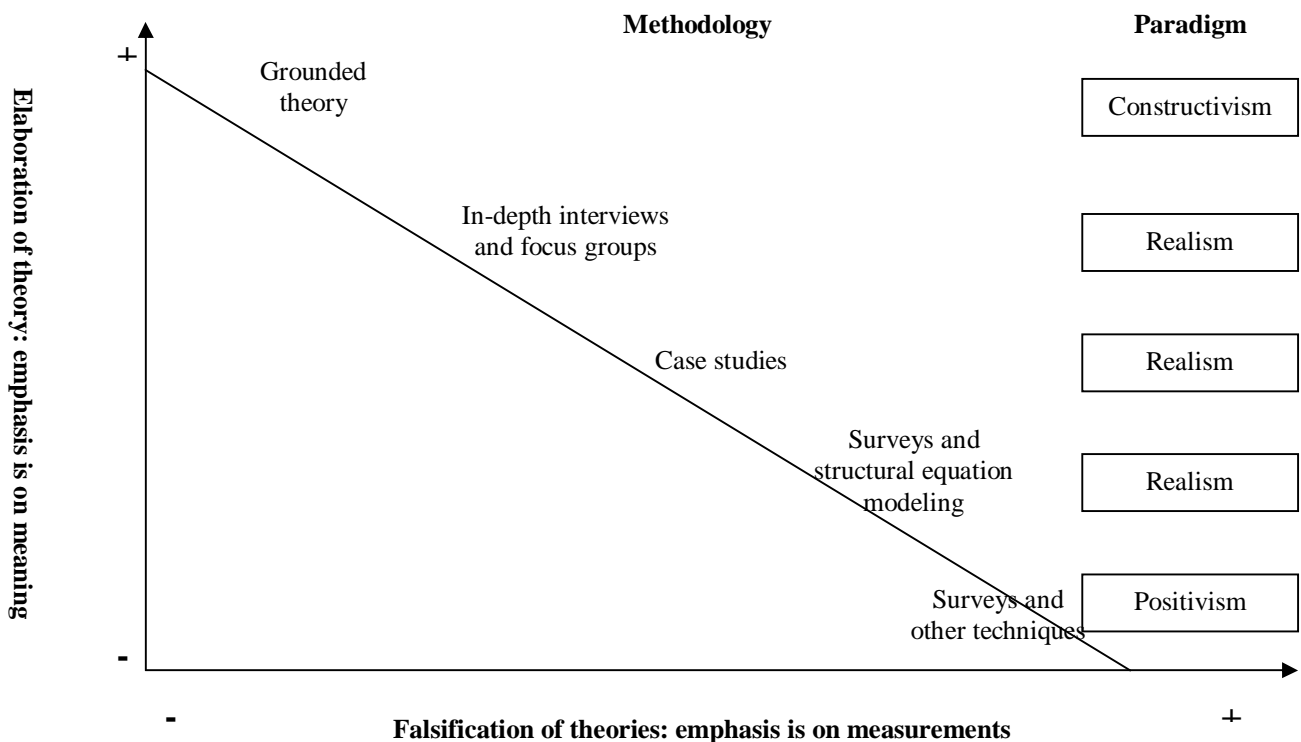
Fig. 8: Epistemological Approaches and Methodology

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Based on the presented epistemological approaches and the overall goal of this research, namely to reveal the dimensions of two particular type of legitimacy (functional and relational) and assess their signaling value, I position it within the realist paradigm. As it is seen from the table and the figure above, in terms of the methodology applied – structural equation modeling (SEM) – the study also falls into the realm of realism. To the extent of the researcher's knowledge, organizational legitimacy has not been regarded in the context of structural equation modeling (SEM).

1.3. The Epistemic Nature of Organizational Legitimacy

In the center of these study is the concept of organizational legitimacy, which is a socially-constructed concept (Berger and Luckman 1967). Legitimacy lies in the eye of the beholder (Ashforth and Gibbs 1990). From the signaling theory point of view, legitimacy is granted on the basis of shared meaning between the sending (legitimacy-claiming) and the receiving (legitimacy-granting) party. The shared meaning is constructed based on signals.

Despite its centrality in institutional theory, the epistemic nature of organizational legitimacy has not been examined yet. Although some qualitative measures of organizational legitimacy exist (Elsbach and Sutton 1992), in general, the measurements of legitimacy used in the extant literature are quantitative and associated with specific legitimacy typology. Some examples include government regulatory ratings used to measure regulatory legitimacy (Deephouse and Carter 2005), media rankings (Shane and Foo 1999) and number of journal advertisements (Barron 1998) for normative legitimacy, and organizational age and size as an example of cognitive legitimacy measurements (Shane and Foo 1999). All of the above-mentioned measures are quantitative and reflect an understanding of legitimacy within the positivist paradigm – the measures of organizational legitimacy are value-free because they are directly observable (Healy and Perry 2000).

The paradigm within which this research is positioned depends on the research questions addressed, namely:

1. What are the dimensions (and valid signals) of functional and relational legitimacy (for small organizations in transition environments)?

2. Does using signals of specific types of legitimacy (depending on the liability faced) enhance organizational legitimacy?

In its essence, I try to build the two latent legitimacy constructs - the functional and relational legitimacy. Since organizational legitimacy is perceived to be multi-dimensional construct (Deephouse and Carter 2005), the same is valid for these two different (and independent) types of legitimacy. Hence, I try to identify their dimensions following the index construction stages suggested by Diamantopoulos and Winklhofer (2001). I base this decision on the literature review, analysis of the content of organizational writings and the opinion of industry experts. At this stage, the researchers construct the meaning of the functional and relational legitimacy largely based on their understanding of the legitimacy needs of organizations but claiming (in the realist tradition) that the constructs exist beyond their minds (Magee 1985: 61).

In addition, I use quantitative methods (structural equation modeling) in order to confirm a general law - the signaling theory of legitimacy. The basic premises of the signaling theory of legitimacy is that evaluating audiences grant legitimacy to organizations experiencing liability based on certain signals used to communicate the adherence to stakeholders' expectations. Later, this general law is confirmed in the context of small organizations evolving in transition environments. It was said that these organizations experience liability of origin (Bartlett and Ghoshal 2000), which can be overcome by using signals of functional and relational legitimacy.

The research model that reflects the two research questions is presented in Fig. 9.
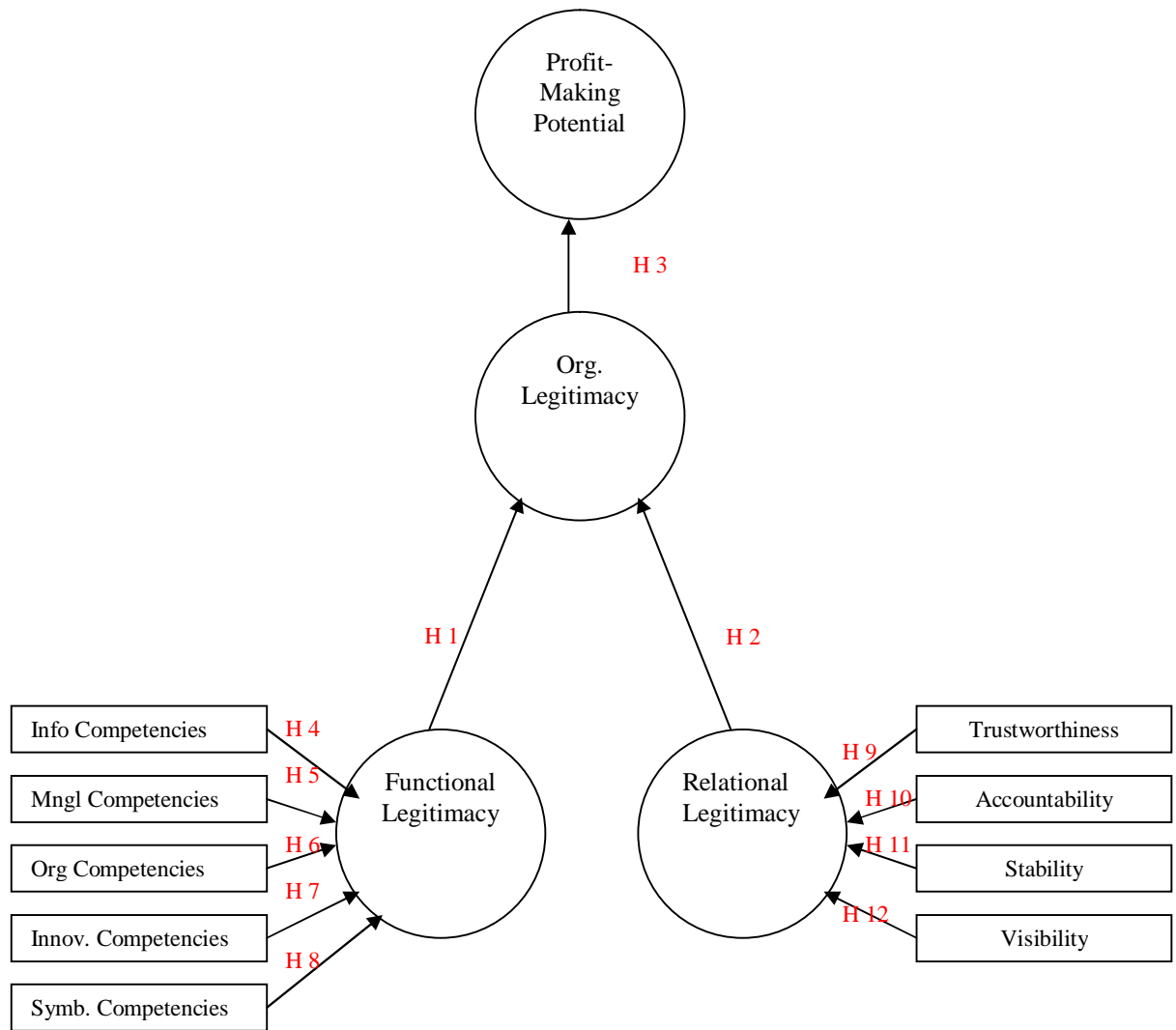
Fig. 9: Research Model

In order to test the proposed research model, the methodology used is structural equation modeling (SEM). As the model shows the concepts of functional, relational and organizational legitimacy as well as the profit-making ability of an organization are not directly observable. They are measured by other items (manifest) variables. The existence of multiple dependence relationships among variables, some of which are unobservable determines the usage of structural equation modeling (SEM) (Hair *et al.* 1998). Below, I examine the specificities of SEM as a multivariate statistical technique.

2. Structural Equation Modeling (SEM)[43]

Besides the traditional statistical techniques (i.e. chi-square, t-test assuming unequal variances, and variance inflation factor) used to perform the preliminary statistical analysis, I employ structural equation modeling (SEM) in order to test the proposed research model. SEM is a multivariate technique which consists of a set of linear equations examining two or more relationships among directly observable (manifest) variables and/or unobservable (latent) variables (Hoyle 1995; Shook *et al.* 2004).

I chose SEM because it is a multivariate technique which provides researchers with the ability to accommodate multiple dependence relationships in a single model (Hair *et al.* 1998). Moreover, the dependent variable in one equation can be an independent variable in another equation (Hair *et al.* 1998). This way, the researchers can model complex relationships that are not possible with any other multivariate technique (Hair *et al.* 1998). Based on the proposed research model, I first try to identify the comprising elements of functional and relational legitimacy and then I test their impact on organizational legitimacy (the dependent variable). As a next step, I also test the relationship organizational legitimacy-profit-making ability of an organization. This way, I try to test multiple dependence relationships among variables, some of which are unobservable (latent) and others are directly observable (manifest) variables (Hoyle 1995; Shook *et al.* 2004).

When applying SEM, the process includes the specification of "two conceptually distinct models" (Anderson and Gerbing 1982: 453) - the measurement and the structural models (Henseler, Ringle and Sinkovics 2009). In the next section, I regard the specificities of the two models comprising the SEM.

2.1. Measurement and Structural Models

The *measurement model* specifies the causal relationships between the *latent variables*[44] or theoretical constructs and the indicators or *manifest variables* (Anderson and Gerbing 1982; Diamantopoulos, Riefler and Roth 2008). The *latent*

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[43] Structural equation modeling was historically called 'causal modeling' (Shook *et al.* 2004).

[44] Different terms are used to name latent variables, such as unmeasured variables, factors, unobserved variables, constructs, or true scores (Bollen 2002). In this study, I use the above-mentioned terms interchangeably.

variables are not present in the dataset (Bollen 2002). They are assessed by *manifest variables* (or *indicators*)[45] that are directly observable (Diamantopoulos, Riefler and Roth 2008).

The *structural model* specifies the relationships between the theoretical constructs themselves (Anderson and Gerbing 1982; Diamantopoulos, Riefler and Roth 2008). In some studies, the measurement model is referred to as the *outer model* while the structural model – as the *inner model* (Henseler, Ringle and Sincovics 2009). For the purpose of this study, I use the terms measurement and structural models.

Anderson and Gerbing (1982: 453) state that "the proper specification of the measurement model is necessary before meaning can be assigned to the analysis of the structural model." Usually, each latent variable is measured by several indicators (Anderson and Gerbing 1982). Each indicator is attached or is a comprising element of only one theoretical construct (Anderson and Gerbing 1982). Hence, the indicators are said to be *unidimensional* and the measurement models are called *multiple-indicator measurement models* (Anderson and Gerbing 1982).

Depending on the direction of the causality, there are two forms of relationships between the constructs and the indicators, or two types of measurement models – *reflective* and *formative* (Diamantopoulos 1999; Diamantopoulos, Riefler and Roth 2008).

2.2. Reflective and Formative Measurement Models

In general, the choice of the measurement orientation and the consequent choice between reflective and formative measurement models should be based in the theory (Henseler, Ringle and Sincovics 2009). The theoretical conceptualization of the construct(s) indicates the nature and the direction of the relationship(s) between the measurement items and their construct(s) (Diamantopoulos and Siguaw 2006). Most studies in social sciences in general assume that the indicators used are reflective (Bollen 1989: 65). Even though they were first introduced in the literature forty years ago, the use of formative indicators for the operationalization of latent constructs is

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[45] Following Bollen and Lennox (1991), I use the terms indicator, item, observed measure, or observed variable interchangeably in regard to manifest variables.

rare (Diamantopoulos, Riefler, and Roth 2008) "despite their appropriateness in many instances" (Bollen 1989: 65).

Before I examine the specificities and the differences between the two types of measurement models, it is important to state that none of these measurement models is inherently superior to the other one (Diamantopoulos 1999). Both of them can be attractive to constructing multi-item measures (Diamantopoulos 1999), depending on the theory used and the needs of the particular research framework.

2.2.1. Reflective Measurement Model

The most commonly used measurement model is the *reflective measurement model,* also called principal factor model (Jarvis *et al.* 2003). It indicates causality from the construct to the indicators, known as *effect indicators* (Bollen and Lennox 1991), *eliciting* (Rossiter 2002) or *reflective indicators* (Diamantopoulos, Riefler and Roth 2008; Fornell and Bookstein 1982). This approach is based on the classical test theory (Spearman 1910), which postulates that "the variation in the scores on measures of a construct is a function of a true score, plus error" (Jarvis *et al.* 2003). In this case, the indicators are functions of the latent variable and any change in the latter gets reflected in them (Diamantopoulos 1999; Diamantopoulos and Siguaw 2006) causing their intercorrelations (Jarvis *et al.* 2003). Or in other words, the indicators are the dependent variables and the latent construct is the explanatory variable (Diamantopoulos, Riefler and Roth 2008) (see Fig. 10).
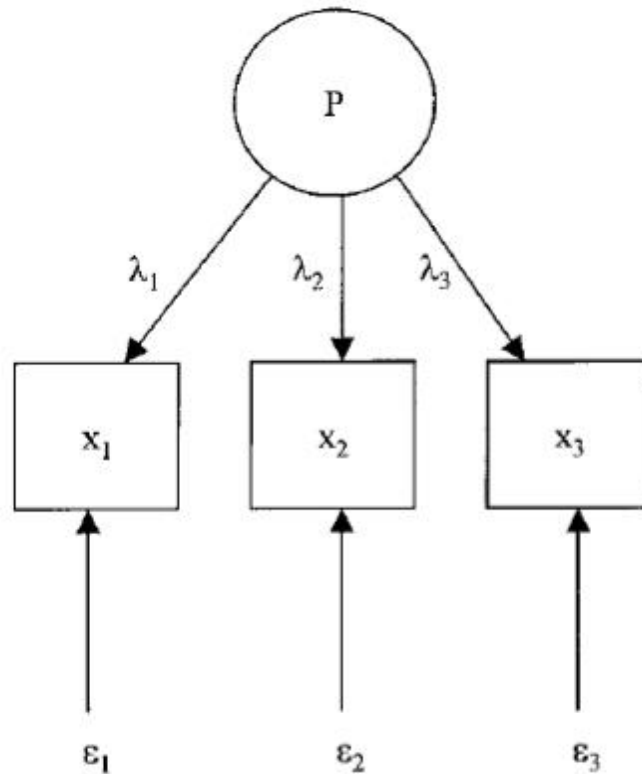
Fig. 10: Path Diagram of a Reflective Measurement Model (Diamantopoulos 1999: 446)

When the measurement model is reflective, the measurement items are reflective indicators of the unobserved (latent) variables and *multi-item scales* can be developed in order to operationalize the latent construct (Diamantopoulos and Siguaw 2006). In addition, high correlation among the indicators is desirable because it enhances internal consistency (Bollen and Lennox 1991), and that dimensionality, reliability, and convergent/discriminant validity assessment are meaningful when reflective indicators are involved (Diamantopoulos 1999).

2.2.2. Formative Measurement Model

The *formative measurement model* or also called composite latent variable model (Jarvis *et al.* 2003) indicates the reverse (in comparison to the reflective model) causality – the indicators jointly form the latent variable(s) (see Fig. 11) (Diamantopoulos and Winkhofer 2001; Diamantopoulos, Riefler and Roth 2008; Jarvis *et al.* 2003). This is the reason why the indicators in this case are called *formative* (Fornell and Bookstein 1982), *formed* (Rossiter 2002) or *causal* (Bollen and

Lennox 1991) (Diamantopoulos and Siguaw 2006). Since the latent variable is caused by its formative indicators, a change in the former is not necessarily associated with a change in the latter (Diamantopoulos 1999). On the contrary, if one or more of the indicators change, this will reflect in a change of the latent construct (Diamantopoulos 1999).

When the measurement model is defined by formative indicators, the approach used to derive multi-item measures of the latent construct(s) is called *index construction* (versus scale development for reflective measurement models) (Diamantopoulos and Siguaw 2006).
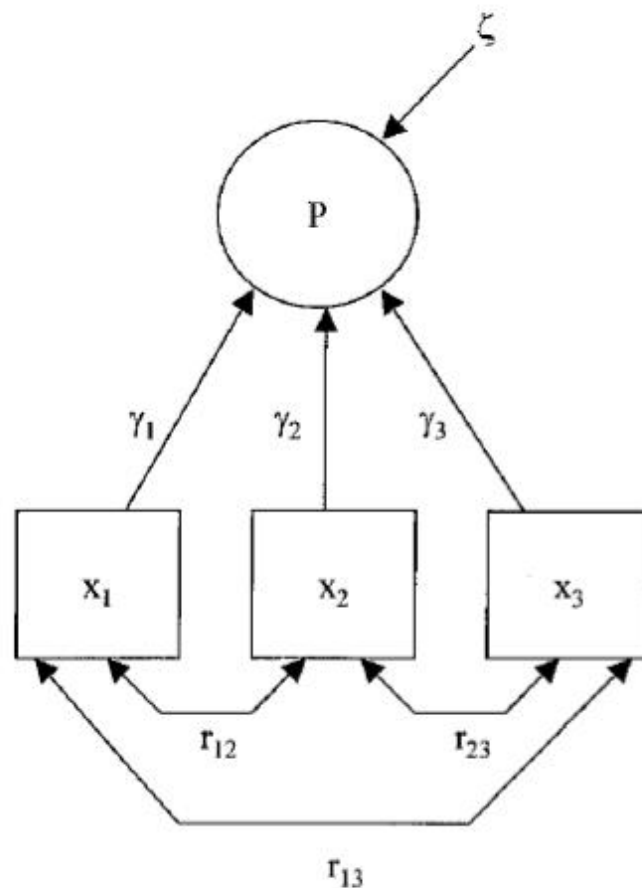
Fig. 11: Path Diagram of a Formative Measurement Model (Diamantopoulos 1999: 446)

For a long time, the formative indicator variables have been largely ignored by the researchers even though in some instances they might have been more appropriate

(Diamantopoulos and Winklhofer 2001). The reason for this is that the researchers assumed all indicators are effect or reflective (Diamantopoulos and Winklhofer 2001).

The formative measurement perspective goes back to the "operational definition" model (Diamantopoulos and Winklhofer 2001). Bagozzi (1982: 15) stated that "the entire meaning of a theoretical concept is assigned to its measurement and any theoretical concept has one and only one measurement." Thus, if **P** represents the concept (i.e. unobserved or latent variable), and **x** is the empirical measure (i.e. observed or manifested variable), then:

(1) $$\mathbf{P} = \mathbf{x}$$

But since one concept can have multiple measures $\mathbf{x_i}$ (i = 1, 2,…n), Bagozzi and Fornell (1982: 32) suggest that "a concept is assumed to be defined by or is a function of its measurements," which results in the following equation:

(2) $$\mathbf{P} = \mathbf{\gamma_1 x_1} + \mathbf{\gamma_2 x_2} + \dots + \mathbf{\gamma_n x_n} \,,$$

where $\mathbf{\gamma_i}$ is a parameter reflecting the contribution of $\mathbf{x_i}$ to the latent construct **P** (Diamantopoulos and Winklhofer 2001). Another specification for multiple measures is shown in Fig. 11. The corresponding equation provided by Bollen and Lennox (1991: 306) is the following:

(3) $$\mathbf{P} = \mathbf{\gamma_1 x_1} + \mathbf{\gamma_2 x_2} + \dots + \mathbf{\gamma_n x_n} + \mathbf{\zeta},$$

where ζ is a disturbance term with $\mathbf{Cov(x_i, \zeta) = 0}$ and $\mathbf{E(\zeta) = 0}$ (Diamantopoulos 2006).

Equation (1) presents the concept (**P**) depending on only one measurement and thus, it makes the assessment of the measurement error problematic (Diamantopoulos and Winklhofer 2001). Equations (2) and (3) differ in terms of the presence of the ζ term (Diamantopoulos and Winklhofer 2001). Indeed, equation 1 is consistent with a

principal component model (Bagozzi and Fornell 1982; Nunnally and Bernstein 1994).

Following Bollen and Lennox (1991: 308), Diamantopoulos and Winklhofer (2001: 271) identified several properties of formative indicators that distinguish them from reflective indicators.

2.2.3. Differences between Reflective and Formative Measurement Models

The differences between reflective and formative measurement models are several. Below, I look at them trying to distinguish between the two measurement models.

First, omitting an indicator is not as problematic for reflective as it is for formative indicators since the former are interchangeable (due to high correlation between them) (Diamantopoulos 1999). Omitting a formative indicator though means that unique part of the latent construct will not be accounted for (Diamantopoulos 1999), and the meaning of the latter might be altered (Jarvis *et al.* 2003). This is another reason why the internal consistency measures should not be used to evaluate the adequacy of the formative measurement models (Jarvis *et al.* 2003). In addition, the existence of multicollinearity among the indicators is a serious problem when the latter are formative; when they are reflective, this is a virtue (Jarvis *et al.* 2003).

Second, the correlations among the formative indicators are not explained by the measurement model (Diamantopoulos 1999). Hence, "...no specific pattern of relationships is necessary among the indicators" (Diamantopoulos 1999: 447). "Indeed, it would be entirely consistent for formative indicators to be completely uncorrelated" (Jarvis *et al.* 2003: 202). This though leads to a difficulty assessing the validity of formative indicators (Diamantopoulos and Winklhofer 2001).

Third, as stated by Bagozzi (1994: 33), reliability and construct validity (the way they are measured in reflective models) lose their meaning when indices with formative indicators are constructed (Diamantopoulos 1999). This is due to the fact that the sign and the magnitude of the correlation among them do not influence their contribution to the unobservable (latent) construct (Diamantopoulos and Winklhofer 2001; Jarvis *et al.* 2003). Low internal consistency does not make formative indicators invalid

when assessing the validity of the construct (Jarvis *et al.* 2003). Thus, in order to assess validity, the researcher should use "nomological and/or criterion-related validity" (Jarvis *et al.* 2003: 202).

Fourth, unlike the reflective counterparts, formative indicators do not have error measurement terms. Error variance is represented only in the disturbance term ζ, which is related to the prediction of latent variable *per se* (Diamantopoulos 1999). The disturbance term ζ is uncorrelated with $\mathbf{x_i}$. It is worth mentioning that with formative measures, the variance in true scores is higher than the variance in the observed scores; in the reflective specification, the opposite is true (Fornell, Rhee, and Yi 1991). Following Fornell, Rhee and Yi (1991), in the formative specification:

$$\mathbf{T = O + \zeta,}$$

where $\mathbf{T}$ = true score, $\mathbf{O}$ = observed score, and ζ = disturbance term. However, ζ captures all the remaining causes of T other than O, and therefore

$$\mathbf{Cov(O, \zeta) = 0},$$

and

$$\mathbf{Cov(T, \zeta) \neq 0.}$$

Thus, $\mathbf{Var(T) > Var(O)}$ (Diamantopoulos 2006).[46] In other words, the disturbance term ζ captures the impact of all remaining causes on the latent variable construct that have not been included in the model (Diamantopoulos 2006: 11).

The error term in the formative measurement models has an important role in the initial measurement model specification, i.e. before the data collection (Diamantopoulos 2006). At this stage, the researcher should generate a

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[46] In reflective measurement models, $O = T + \varepsilon$, where $E(\varepsilon) = 0$, $Cov(T, \varepsilon) = 0$, and $Cov(O, \varepsilon) \neq 0$ (Diamantopoulos 2006, p. 9). The later equation shows that the error term and the observed score are associated since their covariance is not equal to 0 (Diamantopoulos 2006). The fact that $E(\varepsilon) = 0$ shows that the measurement error term is assumed to be random (Diamantopoulos 2006).

comprehensive set of items and possibly exhaust the focal construct's meaning (Diamantopoulos 2006). In this case, the disturbance term ζ can be excluded (Diamantopoulos 2006). In practice though, it is difficult to contemplate that the research framework contains all indicators that fully cover the focal construct's meaning. In this case, the inclusion of the error term is necessary (Diamantopoulos 2006).

There is a very real danger of model misspecification at the indicator specification stage if the omitted indicators are, in fact, correlated with those included in the formative measure (Bollen and Lennox 1991). At the same time, one must be mindful of multicollinearity problems, since in case of high multicollinearity among the measured variables, formative specifications make it difficult to assess the individual contribution of the variables (Fornell *et al.* 1991: 317).

Fifth, in formative indicator models, a necessary but not sufficient condition for identifying the residual variance (i.e. the disturbance term) is that the latent emits at least two paths to other latent variables measured with effect indicators (MacCullum and Browne 1993). Or in other words, the formative model as specified in Fig. 11 is underidentified and it has to be incorporated in a larger model, which includes consequences for the latent variable (Diamantopoulos 1999).

Due to the specific characteristics of formative indicators, conventional procedures used to assess the validity and reliability of scales composed of reflective indicators (i.e. factor analysis and the assessment of internal consistency) are not appropriate for construct variables with formative indicators (Diamantopoulos and Winklhofer 2001). As Bollen (1989: 222) points out, "unfortunately, traditional validity assessments and classical test theory do not cover cause indicators." Similarly, Bagozzi (1994: 333) warns that reliability in the internal consistency sense and construct validity in terms of convergent and discriminant validity is not meaningful when indices are formed as linear sum of measurements." Thus, alternative approaches must be followed to evaluate the quality of measures that are based on formative indicators (Diamantopoulos and Winklhofer 2001).

The decision between the two different measurement models can be made by answering the following questions (Jarvis *et al.* 2003).

DECISION RULES FOR DETERMINING WHETHER A CONSTRUCT IS FORMATIVE OR REFLECTIVE		
	FORMATIVE MODEL	REFLECTIVE MODEL
1. Direction of causality from construct to measure implied by the conceptual definition	Direction of causality is from items to construct	Direction of causality is from construct to items
Are the indicators (items) (a) defining characteristics or (b) manifestations of the construct?	Indicators are defining characteristics of the construct	Indicators are manifestations of the construct
Would changes in the indicators/items cause changes in the construct or not?	Changes in the indicators should cause changes in the construct	Changes in the indicator should not cause changes in the construct
Would changes in the construct cause changes in the indicators?	Changes in the construct do not cause changes in the indicators	Changes in the construct do cause changes in the indicators
2. Interchangeability of the indicators/items	Indicators need not be interchangeable	Indicators should be interchangeable
Should the indicators have the same or similar content? Do the indicators share a common theme?	Indicators need not have the same or similar content/indicators need not share a common theme	Indicators should have the same or similar content/indicators should share a common theme
Would dropping one of the indicators alter the conceptual domain of the construct?	Dropping an indicator may alter the conceptual domain of the construct	Dropping an indicator should not alter the conceptual domain of the construct
3. Covariation among the indicators	Not necessary for indicators to covary with each other	Indicators are expected to covary with each other
Should a change in one of the indicators be associated with changes in the other indicators?	Not necessarily	Yes
4. Nomological net of the construct indicators	Nomological net for the indicators may differ	Nomological net for the indicators should not differ
Are the indicators/items expected to have the same antecedents and consequences?	Indicators are not required to have the same antecedents and consequences	Indicators are required to have the same antecedents and consequences

Table 7: Decision Rules for Determining whether a Construct is Formative or Reflective (Jarvis *et al.* 2003)

Indeed, it is very rare that the researchers defend their choice of measurement model – reflective or formative (Diamantopoulos and Siguaw 2006). Based on the above-mentioned characteristics of the formative and reflective constructs, the latent constructs of functional and relational legitimacy are formative. The items comprising the three constructs indeed are their defining characteristics – they contribute to the constructs' creation (Johansson and Yip 1994). The direction of the causality is clearly from the items to the latent construct meaning that the indicators affect the latent variable in a positive or in a negative way (Diamantopoulos and Siguaw 2006).

An example of a formative construct that comes close to organizational legitimacy is the one of *organizational reputation*, comprised of quality of products, commitment to protecting the environment, customer orientation, value for money for a product, etc. (Helm 2005). If any one of the above-mentioned indicators increases, the reputation of an organization also goes up (Helm 2005).

It is similar for the functional and relational legitimacy constructs – i.e. signaling superior managerial or innovative competencies will enhance the functional legitimacy of the focal organization but the opposite is not true. The increase in the functional legitimacy will not cause enhanced managerial competencies (in this case measured by the Western education of the managers) or enhanced innovative competencies (measured by the development of new products). Same goes for the relational legitimacy – an increase in the stability as one of its building blocks will enhance this latent construct. The opposite – the increase in the relational legitimacy of an organization will not cause an increase in the company's stability (measured as organizational age).

In addition, the two sets of items comprising the functional and relational legitimacy do not covary and clearly do not have the same antecedents. The result is that I build the functional and the relational legitimacy as formative latent constructs.

The latent variables organizational legitimacy and profit-making ability of an organization are reflective constructs. In this case, organizational legitimacy is measured by the number of relevant stakeholders (clients, distributors, employees), which based on the signals received decide to support an organization. The causality

goes from the latent construct to the items meaning that the higher the organizational legitimacy (based on the accumulated legitimacy stock of signals), the higher the stakeholders' support. In addition, the latent construct profit-making ability is also a reflective one. The direction of causality clearly goes from the latent variable to its indicators (average fee/hour and growth rate), which means that higher profit-making ability will get reflected in higher average fee/hour and growth rate for the focal organization.

As it was mentioned above, the latent constructs of functional and relational legitimacy are formative. The process of formative latent variable construction is comprised of four distinctive stages as identified by Diamantopoulos and Winklhofer (2001). Below, I look at the overall assessment of the formative measurement models, including the stages of the process of formative latent index construction.

3. Measurement Models - Assessment

The process of formative index construction is different from the process of developing reflective scales (Helm 2005). While guidelines for reflective scale development are widely discussed in the literature, the process of formative index construction is not well-documented. Following Diamantopoulos and Winklhofer (2001), below I discuss each stage in the process of formative index construction: (1) content specification; (2) indicator specification; (3) indicator collinearity; (4) external validity.

3.1. Stage One: Content Specification

The first step in the formative latent construction process is the *Content Specification* stage which includes the definition of the construct itself (Helm 2005). This means that the researcher has to determine the domain of content or the scope of the index (Diamantopoulos and Winklhofer 2001). This step is very important because indices are "more abstract and ambiguous" than reflective scale indicators (Bagozzi 1994). All dimensions of the construct have to be considered and the relevant indicators included since the failure to do so will result in an incomplete latent construct

(Diamantopoulos and Winklhofer 2001). If all facets are not considered, the content validity of the construct can be questioned (Rossiter 2002).

3.2. Stage Two: Indicator Specification

In the second stage of the formative latent construction *Indicator Specification*, the researcher is required to identify a census of indicators in order to capture all dimensions of the formative latent construct (Diamantopoulos and Winklhofer 2001; Diamantopoulos and Siguaw 2006). The failure to do so may result in not being able to capture the entire scope of the latent variable as described in the previous *Content Specification* stage (Diamantopoulos and Siguaw 2006).

In comparison to reflective indicators, which are picked randomly from the universe of items, the formative indicators have to cover all facets of the construct (Helm 2005). In addition, in contrast to the reflective case, it is not necessary that each facet is measured by multiple indicators (Helm 2005).

Since in this stage, many items are generated, it is important to know which of them tap into the construct of interest. Or in other words, the substantive validity of the measure has to be calculated. The substantive validity of a measure is "the extent to which that measure is judged to be reflective of, or theoretically linked to, some construct of interest" (Anderson and Gerbing 1991: 732). Substantive validity is closely related to construct validity – measures that do not demonstrate adequate substantive validity cannot have adequate construct validity (Anderson and Gerbing 1991).

In order to assess the substantive validity of a measure, Anderson and Gerbing (1991) suggest the researchers to ask representatives of the main study sample or population of interest to sort items and decide to which of the constructs they belong to (item-sort task). Based on the respondents' decision, two indices of substantive validity can be calculated – *proportion of substantive agreement* (p_{sa}) and *substantive-validity coefficient* (c_{sv}).

$$p_{sa} = n_c / N$$

where:

n_c – is the number of respondents assigning a measure to its posited construct

N – is the total number of respondents

$$c_{sv} = (n_c - n_o) / N$$

where:

n_c – is the number of respondents assigning a measure to its posited construct

n_o – is the highest number of assignments of the item to any other construct in the set

N – is the total number of respondents

The values of p_{sa} vary from 0.0 to 1.0 with higher values indicating higher substantive validity (Anderson and Gerbing 1991). The values of c_{sv} range from -1.0 to 1.0 with larger values indicating greater substantive validity (Anderson and Gerbing 1991).

3.3. Stage Three: Indicator Collinearity

The third step in the process of building formative indices is to check for indicator collinearity (Helm 2005). In contrast to reflective scale development, in formative index construction it is desirable that the intercorrelations among indicator items are low (Diamantopoulos and Siguaw 2006). The reason for this is that the formative measurement model is based on multiple regressions and thus, the stability of the indicator coefficients is affected by the sample size and the strength of the indicator intercorrelations (Diamantopoulos and Winklhofer 2001). Strong collinearity among indicators makes it difficult to measure the impact of any individual indictor on the latent variable (Diamantopoulos and Winklhofer 2001). If the intercorrelations are high, this is a signal of existing multicollinearity among the indicator items and one or more of them have to be excluded from the measurement model (Diamantopoulos and Siguaw 2006). In formative index construction[47], any unnecessary redundancy has to be avoided (Rossiter 2002).

Often, (multi)collinearity is assessed based on the variance inflation factor (VIF) (Diamantopoulos and Winklhofer 2001).). A general rule of thumb when using VIF is

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[47] Under reflective measurement models, multicollinearity is not a problem because only simple regressions are used – the latent variable is the predictor and the indicator is the criterion (Diamantopoulos and Winklhofer 2001).

that it should not exceed 10.0 (Hair *et al.* 1998). Above this level, the degree of (multi)collinearity is perceived to be unacceptably high and one or more of the items have to be excluded (Hair *et al.* 1998).

3.4 Stage Four: External and Nomological Validity

The last step in the formative index construction is checking for the external validity and nomological validity of the construct (Helm 2005). Diamantopoulos and Winklhofer (2001: 272) mention that "the very nature of the formative measurement renders an internal consistency perspective inappropriate for assessing the suitability of indicators."

There are several ways to proceed regarding this stage of the formative measurement construction (Diamantopoulos and Winklhofer 2001). First, in order to test for external validity, "the formative index should explain a big part of the variance of an alternative reflective measure of the focal construct" (Henseler *et al.* 2009: 302).

Second, in order to test for nomological validity, the entire construct can be induced in a wider nomological context and linked to another construct with which it is expected to be linked (i.e. antecedents and/or consequences) (Diamantopoulos and Winklhofer 2001). The latter though has to be measured by reflective items (Diamantopoulos and Winklhofer 2001). If the construct has the theoretically hypothesized relationship with the other construct, the nomological validity of the measurement model is confirmed (Helm 2005).

The table below summarizes the different criteria used to assess any formative measurement model.

CRITERION	DESCRIPTION
Significance of weights	Estimated weights of formative measurement models should be significant
Multicollinearity	Manifest variables in a formative construct should be tested for multicollinearity. The variance inflation factor (VIF) can be used for such tests. As a rule of thumb, a VIF greater than ten

	indicates the presence of harmful collinearity. However, any VIF substantially greater than one indicates multicollinearity.
External validity	The formative index should explain a big part of the variance of an alternative reflective measure of the focal construct.
Nomological validity	The relationships between the formative index and other constructs in the path model, which are sufficiently well known through prior research, should be strong and significant.

Table 8: Assessing Formative Measurement Models (Henseler *et al.* 2009)

Next, I look at the assessment of the structural model as an integral part of the SEM multivariate technique.

4. Structural Models – Assessment

The structural model assesses the inner path model estimates (Henseler *et al.* 2009). An important criterion for assessment is R^2 (coefficient of determination) of the exogenous latent variable (Henseler *et al.* 2009) – in the current study, this is the organizational legitimacy latent construct and the profit-making ability of an organization. The acceptable R^2 levels are as follows: weak (0.19), moderate (0.33) and substantial (0.67) (Chin 1998). The substantial level of R^2 is appropriate when the endogenous latent variable is explained by more than two exogenous latent variables while moderate level of R^2 is appropriate when the exogenous variables are one or two (Henseler *et al.* 2009).

In addition, when evaluating the inner structural model, the individual path coefficients can be interpreted as standardized beta coefficients of OLS regression (Henseler *et al.* 2009). If the sign of the path coefficients is in accordance with the theoretically hypothesized relationship, this can be perceived as partial empirical validation (Henseler *et al.* 2009). It is suggested by some researchers that one should look at the total effect (the sum of all direct and indirect effects) for additional interpretations (Albers 2009).

One can also estimate the effect size by looking at f^2 (Cohen 1988). The effect size is the increase in R^2 relative to the proportion of variance of the endogenous latent variable that remains unexplained. The values of f^2 that are perceived to be small, medium and large are as follows 0.02, 0.15 and 0.35, respectively.

The table below presents a summary of the criteria that can be used to assess the structural model:

CRITERION	DESCRIPTION
Of endogenous latent variable	R^2 values of 0.67, 0.33, or 0.19 for endogenous latent variables in the inner path model are described as substantial, moderate, or weak (Chin 1998).
Estimates for path coefficients	The estimated values for path relationships in the structural model should be evaluated in terms of sign, magnitude, and significance (the latter via bootstrapping).
Effect size f^2	$f^2 = (R^2_{included} - R^2_{excluded}) / (1 - R^2_{included})$ values 0.02, 0.15 and 0.35 can be viewed as a gauger for whether a predictor latent variable has a weak, medium, or large effect at the structural level.

Table 9: Assessing Structural Models (Henseler *et al.* 2009)

After I presented the specificities of the SEM methodology applied to test the proposed research, as a next step I look at the particular SEM techniques. I compare LISREL and PLS and justify my choice of PLS as the modeling technique used for data analysis and hypotheses testing in this study.

5. SEM Techniques

The SEM techniques are considered second generation methods (Fornell, Lorange and Roos 1990). There are two big families of SEM techniques – *covariance-based* (i.e. LISREL) and *variance-based* (or component-based) techniques (i.e. PLS) (Henseler, Ringle and Sincovics 2009; Tenenhaus 2002). In the next section, the specificities of each family of techniques are presented.

5.1. Covariance-Based Techniques

The covariance-based modeling techniques are based on "a generalization of path models, principal component analysis and factor analysis to the case of several data tables connected by causal links" (Tenenhaus 2002: 871). The objective is to validate the research model (Tenenhaus 2002). For this purpose the use of covariance-based SEM requires large sample size – more than 100 observations (preferably even more than 200 observations) (Tenenhaus 2002). The types of methods used are full information methods, such as maximum likelihood estimation (MLE) or Unweighted Least Squares (ULS).

LISREL (Jöreskog and Sörbom 1984) is a covariance-based SEM technique which uses MLE (Fornell, Lorangeand Roos 1990).

5.2. Variance-Based Techniques

The variance-based modeling techniques, also called PLS (Partial Least Squares) (Wold 1982), are considered "a generalization of principal component analysis to the case of several data tables connected by causal links" (Tenenhaus 2002: 872). The PLS technique is a two-step method: (1) the PLS algorithm is used to compute the latent variables scores and (2) Ordinary least squares (OLS) regressions on the latent variables scores are used to estimate the structural equations (Tenenhaus 2002). The PLS techniques can be carried out on very small samples – less than 100 observations (Tenenhaus 2002). For example, Tenenhaus (2008) reports studies with 6 observations and 96 variables and another study with 21 observations and 27 variables.

According to Tenenhaus (2002), in comparison to the covariance-based modeling techniques (i.e. LISREL), PLS demonstrates several disadvantages:

- the diffusion of the path modeling software is much more confidential than that of covariance-based SEM software
- the PLS algorithm is more a heuristic than an algorithm with well-known properties

- the possibility of imposing value or equality constraints on path coefficients is easily-managed in covariance-based SEM and does not exist in PLS (Tenenhaus 2002)

At the same time, PLS has some advantages in comparison to covariance-based techniques (such as LISREL):

- PLS path models can be very complex, including numerous manifest and latent variables (in comparison to the number of observations), and still allowing computation without estimation problems (Tenenhaus 2002)

- allows the unrestricted calculation of cause-effect relationship models that employ both reflective and formative indicators (Diamantopoulos and Winklhofer 2001)

- PLS can be used to estimate path models when the sample sizes are very small (Chin and Newsted 1999)

- PLS path modeling can be used when distributions are highly skewed (Bagozzi 1994); As Fornell (1982: 443) states "there are no distributional requirements" when PLS is employed.

The table below presents some of the differences between the PLS and LISREL. The table was built based on the work of Birkinshaw, Morrison and Hulland (1995), Chin 2000, Cool, Dierickx and Jemison (1989), Fornell, Lorange and Roos (1990), Johansson and Yip (1994), Tenenhaus (2008), Tsang (2002).

Criteria	LISREL	PLS
Objective	Model validation	Prediction of empirical and/or theoretical variables
Methodology	Covariance-based	Variance-based
Sample size	>200 observations	<100 observations
Type of methods	Full information (ML, ULS)	Partial information
Type of indicators	Reflective and formative	Reflective
Latent Variables (LV)	Linear combination of their manifest variables	Linear combination of all manifest variables
Manifest Variables (MV)	Multivariate normal distribution	No assumption about normality of distribution
Complexity of the model	Small or moderate (<100 MV)	Big (i.e., 100 LV, 1000 MV)
Identification	Depends on the perfect	Always identified

	model: 4 or more MV for 1 LV	

Table 10: Comparison between SEM Techniques – LISREL and PLS.

The research framework of this study implies cross-sectional design – the data collected reflects the characteristics (signals) of the Bulgarian IT companies at a particular period in time. I compare them based on the signals used and the legitimacy granted by interested stakeholder groups. In this case, "strong theoretical underpinnings are critical to causality inferences" (Shook *et al.* 2004: 398).

The reasons why PLS was chosen over other SEM techniques are the following. **First**, the sample size is small (77 observations). **Second**, the assumptions for normal distribution of the manifest variables do not hold. **Third**, the study is in the early stage of theory building and testing (Birkinshaw, Morrison and Hulland 1995). I develop and test the signaling theory of legitimacy by examining small organizations evolving in transition environments, trying to get long-term contracts. **Forth**, the two latent constructs (functional and relational legitimacy) are formative constructs. As it was mentioned earlier, LISREL does not permit testing formative latent constructs. The latter can be tested only by applying the PLS modeling technique. **Fifth**, it has to be determined whether the measures I developed are valid and reliable within the context of the signaling theory of legitimacy (Chin 2000).

The PLS is already a well-established technique for estimating path coefficients in causal models (Johansson and Yip 1994). It has been widely used in e-business (Pavlou and Chai 2002), organizational behavior (Higgins, Duxbury and Irving 1992), marketing (Reinartz, Kraft and Hoyer 2004), and consumer behavior (Fornell and Robinson 1983).

In strategic management, there are also several studies that employed the PLS path modeling technique in order to examine the risk-return outcomes (Cool, Dierickx, and Jemison 1989), cooperative ventures (Fornell, Lorange and Roos 1990), knowledge acquisition from international joint ventures (Tsang 2002), global strategy (Johansson and Yip 1994), and global integration (Birkinshaw, Morrison and Hulland 1995).

The table below presents research studies done in the field of strategic management which use the PLS modeling technique. Information on the sample size and the number of variables and indicators used by the authors in the particular study is also provided.

Authors	Source	Sample Size	Number of Variables and Indicators
Birkinshaw, Morrison and Hulland (1995)	Strategic Management Journal	124 American firms from 10 industries	6 variables and 17 indicators
Cool, Dierickx and Jemison (1989)	Management Science	21 American banks	8 variables and 18 indicators
Fornell, Lorange and Ross (1990)	Strategic Management Journal	67 Swedish and Norwegian firms	4 variables and 18 indicators
Johansson and Yip (1994)	Strategic Management Journal	36 American and Japanese firms	5 variables and 22 indicators
Tsang (2002)	Strategic Management Journal	2 samples: 73 Singaporean and 89 firms from Hong Kong	7 variables and 30 indicators

Table 11: List of Studies in Strategic Management Using the PLS Modeling Technique

Therefore, the current study contributes to the literature on organizational legitimacy based on the methodology applied to test the proposed research model, namely structural equation modeling (SEM). The direction of causality between the items (manifest variables) and the latent constructs implies the formative nature of the measurement models for functional and relational legitimacy, and reflective nature for the dependent variables (organizational legitimacy and profit-making ability). Hence, the applied statistical technique to test the multiple dependence relationships between the items and the latent constructs and between the latent constructs themselves is PLS. This adds to the contributions of the study since PLS has not been extensively applied in the field of strategic management.

In the next section, I discuss the variables – latent and manifest – as well as the measurement instruments used in this research.

6. Variables and Measurement Instruments

The measurements of the observable (manifest) variables that build the latent variable constructs are introduced in the current section. I propose formative measurement constructs for the two independent latent variables of functional legitimacy and relational legitimacy, and reflective measurement constructs for the dependent variables organizational legitimacy and profit-making ability.

Indeed, organizational legitimacy represents the two aspects of legitimacy-enhancing efforts of the organizations and the legitimacy-granting of the interested stakeholder parties. The emphasis is on the fact that the efforts of an organization to gain legitimacy are different from the stakeholders' evaluation and their subsequent decision to grant legitimacy. According to the signaling theory of legitimacy, organizations use signals to claim legitimacy. At the same time, evaluating audiences use also signals to grant legitimacy. Hence, signals are the building blocks between the two aspects of the legitimacy concept.

6.1. Measures of Organizational Legitimacy

Despite its centrality in institutional theory, there is little agreement among researchers on how to define and/or measure organizational legitimacy (Deephouse 1996; Foreman and Whetten 2002). Legitimacy is a complex, multidimensional construct linked to a variety of stakeholder groups (Deephouse and Carter 2005; Foreman and Whetten 2002). There are several typologies of legitimacy developed in the extant literature and usually the measurements proposed reflect the typology applied.

Based on the three pillars of institutions, the most commonly accepted legitimacy typology includes *regulative, normative* and *cognitive legitimacy* (Scott 2001). Later,

Zimmerman and Zeitz (2002) added a forth type – *legitimacy derived from the industry*[48].

Since regulative legitimacy reflects the conformity of organizational actions to regulatory standards, it is usually measured using government reports and/or accreditation (Deephouse and Carter 2005). Normative legitimacy reflects the congruence of organizational action with broadly-accepted social norms and values (Suchman 1995). Often, it is measured by examining the writings of a society – content analysis of media sources (Deephouse and Carter 2005). Cognitive legitimacy is the conformity to widely-held cultural beliefs and taken-for-granted assumptions or practices (Scott 2001; Zimmerman and Zeitz 2002; Westphal, Gulati and Shortell 1997). Content analysis of newspapers is not only used to measure normative legitimacy but also to measure cognitive legitimacy (Lamertz and Baum 1998) (see Table 12).

Higgins and Gulati (2006) used a different legitimacy typology applied to young entrepreneurial firms. They introduced the concepts of resource legitimacy, role legitimacy and endorsement legitimacy (Higgins and Gulati 2006). *Resource legitimacy* is associated with the access to resources that an organization (especially new ventures) can secure in order to improve its technology, competitive stance and marketing capabilities (Higgins and Gulati 2006). *Role legitimacy* is related to the ability of the TMT members to effectively fulfill certain top management roles of key leadership positions (Higgins and Gulati 2006). *Endorsement legitimacy* is the ability to attract key endorsers from the investment community (Higgins and Gulati 2006).

Table 12 presents legitimacy typologies discussed above and their corresponding measurements.

LEGITIMACY TYPOLOGY	LEGITIMACY TYPES	AUTHORS	MEASUREMENT
Regulative, Normative	Regulative	Deephouse and Carter (2005)	Gov't regulatory ratings (categorical)
		Singh *et al.* (1986)	1) Listing on a community directory

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[48] Industry legitimacy is the conformity to practices derived from the industry (Zimmerman and Zeitz 2002). To the extent of researchers' knowledge, there is no empirical study that proposes a measurement for industry legitimacy.

and Cognitive Legitimacy			(dummy)
			2) Issuance of charitable registration number (dummy)
		Ruef and Scott (1998)	Accreditation by seven external associations (dummy)
		Baum and Oliver (1991)	Linkages with gov't and community institutions
		Delmar and Shane (2004)	Legal incorporation of an entity (dummy)
	Normative	Deephouse and Carter (2005)	Endorsing or questioning organizational legitimacy in local newspapers (content analysis)
		Barron (1998)	Number of advertisements in a specific journal (continuous variable)
		Shane and Foo (1999)	Media rankings (certification): 1) log of annual rankings, 2) Rank1=1 if the organization was ranked (dummy), 3) Rank2=scale 1 to 9 (where 1 was assigned to unranked system)
		Delmar and Shane (2004)	Completion of a business plan (dummy)
	Cognitive	Lamertz and Baum (1998)	Explanatory accounts in newspapers (content analysis)
		Shepherd and Zacharakis (2003)	Probability to purchase products/services (11-point scale)
		Shane and Foo (1999)	Organizational size & age (continuous variable)
Resource, Role and Endorsement	Resource	Higgins and Gulati (2003, 2006)	Number of previous employment affiliations of the TMT (continuous variable)
	Role	Higgins and Gulati (2003, 2006)	Similar work experience of chief officers (dummy)
	Endorsement	Higgins and Gulati (2003, 2006)	Prestige of the underwriter

Table 12: Measures of Organizational Legitimacy

Signaling organizational legitimacy has been considered in contexts characterized by very high level of uncertainty and ambiguity, such as the IPO context. In the IPO context, organizations get evaluated by external constituencies and based on this evaluation the IPO underpricing on the primary markets is determined. The IPO underpricing reflects the legitimacy granted to a particular organization by its evaluating audiences (in this case these are mainly different groups of investors).

There are many signals (legitimacy antecedents) discussed in the literature that can influence the investor valuation of an IPO. Some examples include *CEO stock options* (Certo *et al.* 2003), *reputation of investment banker* (Titman and Trueman 1986; Carter and Manaster 1990; Michaely and Shaw 1994*), reputation of an auditor company* (Titman and Trueman 1986; Balvers, McDonald and Miller 1988; Beatty 1989), etc. The full list of signals is presented in Table 1, chapter 3.

Similarly to the IPO context, in the corporate governance literature, researchers discovered that organizations adopt actions and policies that fit the expectations of evaluating audiences at a broader level. Often, formally adopted policies are decoupled from the on-going routines or actions emphasizing their legitimacy-enhancing rather than efficiency-achieving role (Meyer and Rowan 1977). In the corporate governance context, a common proxy used to measure organizational legitimacy is the stock market reaction to the adoption of certain policies (Zajac and Westphal 1998, 2004). The latter (which in fact represent signals or antecedents of organizational legitimacy) are *stock repurchase plans* (Zajac and Westphal 2004) and *long-term incentives plans* (Westphal and Zajac 1998).

It is clear that the literature on organizational legitimacy lacks widely accepted measures of the concept (Deephouse 1996; Foreman and Whetten 2002). The measurements of organizational legitimacy used reflect the type of legitimacy as well as the context of research. Even though legitimacy is defined as a multidimensional construct (Deephouse and Carter 2005), most of the measurements are one-dimensional with some notable exceptions (Foreman and Whetten 2002[49]).

According to Deephouse and Carter (2005), an ideal study will identify and measure all dimensions of organizational legitimacy. Herein, I make an attempt to identify all dimensions based on which a small organization evolving in a transition environment makes its legitimacy claims in long-term arrangements. Keeping in mind that the organizations under scrutiny evolve in an environment characterized by a lack of institutional framework to guide organizational behavior, the stakeholder group whose assessment will be the most precise and the least influenced by the environmental

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[49] Foreman and Whetten (2002) developed their own scale to assess the cognitive and pragmatic legitimacy of the co-ops as an organization form.

ambiguity is the assessment of the clients. A client purchases the necessary products/services from organizations they perceive to be more legitimate (Shepherd and Zacharakis 2003). Based on the outsourcing literature (Quélin and Duhamel 2003), the outsourcers (clients) consider two main aspects of the organization they evaluate in outsourcing arrangements – whether the latter has the needed resources and competencies (captured by the concept of functional legitimacy) and whether it is a trustworthy player (captured by the concept of relational legitimacy). The functional and relational legitimacy are regarded as formative (versus reflective) latent constructs.

In building the formative latent constructs of functional and relational legitimacy, I followed the stages suggested by Diamantopoulos and Winklhofer (2001). Helm (2005) followed the same approach to build a similar formative latent construct of organizational reputation. Diamantopoulos and Winklhofer (2001) propose a four step approach for formative index construction which includes: (1) content specification; (2) indicator specification; (3) indicator collinearity; and (4) external construct validity.

In this chapter, I regard only stage 1) and 2) of the process of formative latent construction. Stages 3) and 4) are part of the statistical analysis (chapter 7). In the next section, the process of building the formative latent constructs of functional legitimacy is examined followed by the same process for relational legitimacy.

6.2. Designing a Formative Measure for Functional Legitimacy

6.2.1. Content Specification

The first step in the formative index construction process represents the specification of the domain of content the index has to capture (Diamantopoulos and Winklhofer 2001). It is necessary that all facets of the construct are considered (Diamantopoulos and Winklhofer 2001) in order to achieve a fit between the definition and its operationalization (Helm 2005). Drawing on the literature on organizational legitimacy, analysis of the content of the writings of the IT organizations (brochures and websites) and interviews with industry experts, the dimensions of the functional

legitimacy construct were identified in Chapters 3 and 4. These qualitative measures grant *content validity* of the construct (Helm 2005, Rossiter 2002).

In the next stage of the index construction process, I attempt to identify the indicators that represent the dimensions of functional legitimacy. The coding was done by the main researcher and another doctoral student in strategic management. The main researcher performed the literature review while the two researchers proceeded with the analysis of the writings and the interviews with industry experts.

6.2.2. Indicator Specification

At the second stage of the index construction process, a census of indicators is required for formative construct specification (Bollen and Lennox 1991). In order to generate the indicators that enhance the functional legitimacy of a small organization evolving in transition environments, I performed literature review, analysis of the writings (brochures and websites) and interviews with industry experts and academics.

Based on the literature review, I identified the following dimensions of the formative latent construct functional legitimacy - managerial[50], organizational, informational, reputational and innovative (Chapters 3&4). One has to keep in mind that while the dimensions of the functional legitimacy construct are universal, the indicators (measurements) chosen to represent each dimension will be specific to the organizations under scrutiny.

The researchers generated the census of items corresponding to the above-mentioned dimensions of functional legitimacy by undertaking a three-step approach. In the first stage, we looked at the writings of the IT organizations, such as brochures and websites in an attempt to outline important signals used by them. Since valid signals have to be observable, we assumed that this is a good way to proceed. The brochure

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[50] It is important to note that I distinguish between the founding team managerial competencies and the employees' competencies (McKelvie and Davidsson 2009). I perceive the two as being directly related to the task-related competency of a small organization in transition environment. The managerial skills are needed in order to receive and successfully manage an outsourcing project while the employees' skills are needed in order to complete the outsourcing value-added activity.

we worked with is the Bulgarian ICT Profile @ CEBIT 2006. It is important to note that the text entered in the CEBIT brochure does not follow a certain format meaning that each organization decides individually which items to present. A total of 17 companies were presented in the CEBIT 2006 brochures. The researchers went a step ahead and analyzed their websites, as well as the websites of 15 other organizations. This provided us with a total of 32 IT companies, whose websites were analyzed. The researchers coded the signals based on two important criteria – observable and costly (preventing imitation). The third criterion – conveying shared meaning between the sending and receiving party – was difficult to establish since the study looks only at the legitimacy-claiming entities. No information is collected from the receiving side or the legitimacy-granting audiences.

Based on the literature review and the analysis of the writings of organizations, the two researchers agreed upon the following items presented in Table 13 pertaining to the functional legitimacy latent construct. Each item represents organizational characteristic that carries certain informational value for the evaluating audiences (see Table 13).

In the second stage, we interviewed 10 industry experts regarding the importance of the items pertaining to the functional legitimacy construct. For this purpose, they used a 4-point scale (1 – very important, 2 – important, 3 – not so important, 4 – not at all important) (Helm 2005). We tried to recruit founders and/or managers that belong to organizations functioning at the three different layers of the environment – local, national, and international. We assumed that the layer on which an organization functions determines the way the founders and/or managers view the industry as a whole. This overall attitude will affect the way they will perceive the importance of the different signals. The industry experts were as follows: two owners and one manager of local companies, three owners of companies that specialized in international outsourcing, two founders and two managers of companies at the national layer of the environment.

We had to explain to the experts that we are looking at external representation of certain organizational characteristics or signals of legitimacy. Organizational legitimacy was presented as being two main types – functional and relational. While

all experts agreed on the way we divided the two types of legitimacy, they showed concern in terms of the ways the relational legitimacy can be measured. The industry experts had to answer a question regarding how important they consider the items we identified in the first stage.

In the third stage, we asked 6 academics whether they will or not assign the items to the functional legitimacy construct (Anderson and Gerbing 1991). In other words, we try to see how well an item taps into the construct (Helm 2005). Participants were provided with some background information on the organizations under scrutiny – SMEs (and more specifically IT firms) in transition environments trying to get outsourcing contracts with domestic and/or foreign clients. They were also provided with the definition of organizational legitimacy in general, the two types of legitimacy we regard for the purpose of this study – functional and relational legitimacy. In addition, they were explained the basics of the formative latent variable construction process. The results of three stages of the process of item specification are presented in the table below.

No.	Company Characteristic	Functional Legitimacy Dimensions	N_1	1	2	3	4	N_2	n_c	n_o	p_{sa}	c_{sv}
1	Association membership	Informational	10	3	2	4	1	6	4	2	0,7	0,3
2	R&D expenditures	Innovative	10	0	0	2	8	6	2	4	0,3	-0,3
3	Own product	Innovative	10	5	5	0	0	6	5	1	0,8	0,7
4	Business education	Managerial	10	0	0	5	5	6	2	4	0,3	-0,3
5	Western education/experience	Managerial	10	3	5	1	1	6	5	1	0,8	0,7
6	Certified partnerships	Organizational	10	8	2	0	0	6	6	0	1	1,0
7	Specialist organizational form	Organizational	10	2	3	2	3	6	3	3	0,5	0,0
8	Quality product awards	Symbolic reputational	10	3	5	2	0	6	6	0	1	1,0
9	Managerial awards	Symbolic reputational	10	0	3	0	7	6	2	4	0,3	-0,3

Table 13: Importance and Assignment of Items to the Functional Legitimacy Latent Construct

In Table 13, N_1 – number of respondents for pretest on the importance of characteristics; N_2 – number of respondents for pretest on item assignment to

construct; n_c – number of "correct" assignments; n_o – number of incorrect assignment of an item to the construct. The proportion of substantive agreement $p_{sa} = n_c/N_2$. The substantive-validity coefficient $c_{sv} = (n_c-n_o)/N_2$.

According to Helm (2005), only items with $p_{sa} > 0.75$ and $c_{sv} > 0.50$ have to be kept in the measurement model. All the items we kept meet this requirement besides *association membership* – $p_{sa} = 0.70$ and $c_{sv} = 0.30$. Since this was the only indicator identified for the informational dimension of the functional legitimacy construct, we decided to keep it in the measurement model.

We excluded the item *business education* as a measure of the managerial dimension of the functional legitimacy construct due to very low $p_{sa} = 0,30$ and $c_{sv} = -0,30$. This can be explained with the lack of a relationship between managerial competencies and the education acquired. Due to the high level of corruption in the educational system in any transition environment (i.e. a diploma can be bought), a diploma is not considered a meaningful signal of the possession of certain competencies. Hence, a diploma is a *noisy signal* in the labor market, meaning that its informational value is very low. This affects in a negative way the construction of shared meaning between the sending and receiving party resulting in the diploma being not important when considering the managerial competencies of an organization.

The item *managerial awards* was also excluded as an item measuring the symbolic reputational dimension of functional legitimacy due to low $p_{sa} = 0.30$ and $c_{sv} = -0.30$. Based on the comments provided by the interviewees, there is no direct link between the managerial awards and the symbolic reputation of an organization itself. A managerial award is perceived to be a personal rather than an organizational achievement.

R&D expenditures (proposed as a measure of the innovative dimension of functional legitimacy) was also not considered in the further analysis due to the fact that it is not an observable signal. The respondents allocated a $p_{sa} = 0.30$ and $c_{sv} = -0.30$.

In addition, we did not consider the manifest variable *organizational form* (specialist versus generalist) since we got $p_{sa} = 0.50$ and $c_{sv} = 0.00$. The interviewees shared

different opinion on whether following a specialist or a generalist structure is more beneficial for small organizations in transition environments.

In the next section, the dimensions of the functional legitimacy and the respective items that were chosen to represent each dimension are presented. There is only one item per dimension since in formative constructs there is no need to have several indicators that pertain to the same dimension (Jarvis *et al.* 2003).

A) Informational Competencies - Measurement

The only observable organizational characteristic that applies to the informational competencies dimension of the functional legitimacy construct is the association memberships. The rest of the possible indicators, such as the social network of the founding team members, are not directly observable by the evaluating audiences.

Industry association membership of a small organizations evolving in transition environment reflects an access to industry information. Industry (or trade) associations are voluntarily collective strategies with moderate level of formalization (Bresser 1988). In general, industry associations are initiated by the largest industry organizations (Aldrich and Ruef 2006) and they are often related to major industry changes – unexpected strong growth or decline, threats from external competition (Pfeffer and Salancik 2003: 177). Those organizations are particularly important in fragmented industries with low level of industry concentration (Fombrun 1986).

Usually for a small cost, membership in industry association provides an access to a bundle of intangible resources. It can help organization access valuable information on trade statistics (such as industry sale, prices and costs) (Bresser 1988; Bell 2005) credit references on customers (Bresser 1988), etc. It can also provide access to support activities - i.e. legal and technical advice; help collect the bills (Bresser 1988). Moreover, industry association membership provides several knowledge-based benefits, such as new ideas (Sharma and Henriques 2005), "best practices" (Sine, Haveman and Tolbert 2005).

In this study, the manifest variable association membership(s) (ASSOC) is a continuous variable and it is coded as the total number of associations the focal

company is a member of. More association memberships are expected to provide a better access to various informational resources. In the questionnaire, a list of the ICT (Information and Communication Technology) cluster associations was provided to the respondents. In addition, they were left a field *Other*, where they could mark any other association their organization is a member of, which was not part of the presented list. Then, the total number of memberships was counted.

ASSOC = Number of association memberships

B) Innovative Competencies - Measurement

Organizational innovativeness can signal superior competencies and influence the perception of the evaluating audiences regarding the focal organization. In volatile environments, engaging in product innovation is more difficult but it leads to better organizational performance (Covin and Slevin 1989). Some studies regard innovativeness of organizations evolving in transition environments as administrative and/or product-related innovativeness (Luk *et al.* 2008). Administrative innovativeness aims at improving operational efficiency by cost reduction while product-related innovativeness aims at differentiating the company based on developing new features to existing products and/or new products (Luk *et al.* 2008). To measure the two types of innovativeness Luk *et al.* (2008) used 5-point Likert scales (see Appendix 5).

In addition, a common proxy for organizational innovativeness is R&D intensity (Schoenecker, Daellenbach and McCarthy 1995). R&D intensity can be measured by using a quantitative measure – R&D expenditures/sales (Schoenecker, Daellenbach and McCarthy 1995), or a qualitative measure – categorical variable capturing the degree to which a company is research-oriented (Coeurderoy and Murray 2008).

R&D intensity is not an appropriate measure for the current study because as a general rule, small IT companies in transition environments do not allocate budgets for R&D. Also, the R&D intensity of an organization is not an observable variable that can be easily evaluated by the legitimacy-granting audiences. Due to the above-mentioned reasons, the item *R&D expenditures* received very low substantive agreement and substantive-validity coefficients $p_{sa} = 0.3$ (<0,75) and $c_{sv} = - 0.3$

(<0,5). The same reasoning applies to the administrative innovativeness suggested by Luk *et al.* (2008).

An appropriate external representation (or a signal) of a small IT firm's innovativeness is its ability to develop and market its own product, or the so-called product-related innovativeness (Luk *et al.* 2008). Developing a product (i.e. ERP system, anti-virus program, etc.) shows that the organization has mastered the competencies related to its main business activity. Furthermore, it demonstrates the capability of developing innovative solutions to solve and meet clients' needs. Herein, the manifest variable organizational innovativeness (coded as OWNPR) is dichotomous taking the value of 1 when the company has its own product(s) and 0 when the company does not have its own product.

OWNPR = 1(if the company has its own product) and 0 (if the company does not have its own product)

C) Managerial Competencies - Measurement
The educational and work background of the founding team members are the most important characteristics influencing the management style in dealing with potential clients.

There are many ways to measure the education and management competencies and different studies capture different aspects of them. Some examples include top management team industry experience measured as the average amount of time spent working in a particular industry (Boeker and Wiltbank 2005), top management functional diversity measured as the percentage of managers that have worked across several functional areas (Boeker and Wiltbank 2005), level of education, business education, managerial experience and industry experience measured as binary variables (1/0) (McKelvie and Davidsson 2009).

For the purpose of this study, it is assumed that the managerial competencies of the founding team members will be influenced if one or more members of the latter have

Western or Western-like[51] education and/or work experience. As it was mentioned earlier, based on the low substantive agreement $p_{sa} = 0.3 \ (<0,75)$ and even negative substantive-validity coefficient $c_{sv} = -0.3 \ (<0,5)$, the manifest variable business education is not considered in the analysis. The interviewees did not see a direct link between the type of education of the managers and their competencies.

Western or Western-like education and/or work experience impacts the attitude and commitment exerted by small firms' founding team members. Hence, herein, I would like to capture the number of founding team members with Western or Western-like education and/or work experience – a manifest variable called WEST.

The variable WEST is measured by the percentage of founding team members that have acquired their education in a Western country and/or that have worked for Western companies, including their subsidiaries in Bulgaria. The higher percentage of founding team members with Western education/experience, the higher the managerial capabilities since this captures the diversity of experiences. The latter impacts positively the available stock of managerial knowledge and skills within an organization.

WEST = (Number of founding team members with Western or Western-like education and/or experience)/the total number of founding team members)*100

D) Organizational Competencies - Measurement
The organizational competencies examined in this research are related to the certified partnerships of organizations as well as the organizational form. Indeed, certified partnerships and organizational form are external representations (signals) of certain task-related competencies.

In terms of affiliation with prominent industry players, I looked at the global IT corporations which offer certified partnership programs – IBM, Microsoft, Oracle, Macromedia, Sun and others. Since organizations vary in terms of the number and level of partnership (registered, silver and golden), the variable PART is designed to

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[51] By Western-like, I mean an experience acquired by the founding team members in a subsidiary of a Western company in Bulgaria.

reflect these two dimensions – the possession of a certificate and the level of partnership. For simplicity, I adopted three level of partnerships – registered (the lowest), silver (middle) and golden (the highest). In addition, different weights were allocated to the three levels since the higher the level of partnership, the more capabilities a company has to prove to possess in order to be granted the latter. In example, being a Registered Microsoft Partner means that the company only distributes the products of Microsoft while being a Golden Microsoft Partner means that the company's employees went through a certification process and got Microsoft certificates for the possession of certain skills. In addition, the higher the level of partnership, the higher the technical support provided by the particular company that granted the certificate. Hence, the following weights were allocated – 0.1 for registered, 0.3 for silver and 0.6 for golden partner. And, the variable PART is measured as follows:

PART = (# of Registered* 0.1 + # of Silver*0.3 + # of Golden*0.6)*100

The manifest variable organizational form (specialist versus generalist) was not considered since the substantive agreement coefficient $\mathbf{p_{sa} = 0,50 \ (<0,75)}$ and the substantive validity coefficient $\mathbf{c_{sv} = 0,00 \ (<0,50)}$. Even though according to population ecologists (Hannan and Freeman 1977), the specialist form is preferable in any environment, there was no one opinion among the interviewees regarding whether following a specialist versus a generalist structure is better for small organizations in transition environments. Hence, this manifest variable was disregarded in this research.

E) Symbolic Reputational Competencies - Measurement
As it was mentioned earlier, awards are perceived as valid signals for superior competencies of small organizations evolving in transition environment since they are costly and observable.

Herein, I consider only the quality awards associated with superior product/service offered to the clients, or in other words product and/or service awards. The item managerial awards was excluded from the measurement model due to low values of the proportion of substantive agreement coefficient $\mathbf{p_{sa} = 0,3 \ (<0,75)}$ as well as

substantive validity coefficient $c_{sv} = -0,3$ (<0,5). The reason stated by the interviewees is that the managerial awards signify an individual achievement rather than an organizational one. In addition, some evidence exists in the literature that managerial awards (such as CEO contests) does not affect firm's profitability (accounting profits and stock returns[52]) (Wade *et al.* 2006).

In comparison to managerial awards, quality awards were evaluated as follows – proportion of substantive agreement coefficient $p_{sa} = 1$ and substantive validity coefficient $c_{sv} = 1$. Hence, I decided to use the variable quality awards as representing the symbolic reputational dimension of functional legitimacy latent construct. The manifest variable AWARD was measured by the total number of quality product/service awards that an organization received over the years of its existence. It is assumed that the higher the number of awards, the higher the perceived superior task-related competency of the organization under scrutiny. Even though issues related to corruptions of the institutions (associations, fairs, government bodies) granting the awards were raised, the "stakeholders prefer organizations to be publically evaluated even if the evaluative criteria are not completely comprehensive" (Wade *et al.* 2006). Examples of quality awards include Best Product Award (from fairs).

AWARD = total number of quality awards that an organization has received over the years

In the next section, I follow the same stages as of functional legitimacy in presenting the development of the formative latent construct of relational legitimacy.

6.3. Designing a Formative Measure for Relational Legitimacy

6.3.1. Content Specification
Similar to the development of the functional legitimacy construct, I drew on the literature on organizational legitimacy, content analysis of the writings of the IT organizations (brochures and websites) and interviews with industry experts and

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[52] Increased stock returns can be used as an indicator of enhanced legitimacy (Wade et al. 2006).

academics in order to identify the dimensions of the relational legitimacy construct. As it was mentioned earlier, this step ensures the *content validity* of the construct (Helm 2005; Rossiter 2002).

Relational legitimacy is associated with the perceived worthiness of an organization as an attractive partner (Dacin, Oliver and Roy 2007). Relational legitimacy includes valid signals of the worthiness of a partner based on the communication of two sets of elements: *partnership-related* (trustworthiness including reliability) and *organization-specific* (accountability, stability and visibility). Below, I specify the indicators of each of the above-identified dimensions.

6.3.2. Indicator Specification

At this stage of the index construction process, a census of indicators is required for formative construct specification (Bollen and Lennox 1991). I try to identify the items that measure in the best possible way the different dimensions of relational legitimacy identified based on the literature review - trustworthiness, stability, accountability and visibility. As with the functional legitimacy, I keep in mind that while the dimensions of the relational legitimacy construct are universal, the indicators (measurements) chosen to represent each dimension are specific to the organizations under scrutiny.

Herein, a three-step approach was also undertaken. In the first stage, the researchers looked at the writings of the IT organizations, such as brochures (the Bulgarian ICT Profile @ CEBIT 2006) and websites in order to outline important signals of relational legitimacy used by the organizations under scrutiny. We analyzed the writings in the CEBIT brochure of 17 companies and the websites of a total of 32 companies. As a result, the researchers agreed upon the following items presented in Table 14 pertaining to the relational legitimacy latent construct.

In the second stage, we tested for the importance of the items. For this purpose, we asked the same 10 industry experts (as we did with functional legitimacy) to determine the importance of each item on a 4-point scale.

In the third stage, in order to see whether an item taps into the construct, we asked 6 academics whether they will or not assign the items to the relational legitimacy

construct (Anderson and Gerbing 1991). As with functional legitimacy, participants were provided with some background information on the organizations under scrutiny (small IT firms) in transition environments, the definition of organizational legitimacy in general and the two types of legitimacy we regard for the purpose of this study – functional and relational legitimacy. They were also explained the basics of the formative latent variable construct. The results of the three stages of the process of item specification for the relational legitimacy construct are presented in the table below.

No.	Company Characteristic	Relational Legitimacy – Dimensions	N_1	1	2	3	4	N_2	n_c	n_o	p_{sa}	c_{sv}
1	ISO Certificate	Accountability	10	2	3	1	4	6	5	1	0,83	0,67
2	Capability Maturity Model	Accountability	10	3	3	0	4	6	6	0	1	1
3	Age	Stability	10	7	3	0	0	6	5	1	0,83	0,67
4	Client reputation	Trustworthiness	10	7	2	1	0	6	6	0	1	1
5	Strategic alliances	Trustworthiness	10	6	2	2	0	6	6	0	1	1
6	Number of refs	Trustworthiness	10	4	1	3	2	6	3	3	0,5	0
7	Number of offices & HQ location	Visibility	10	9	1	0	0	6	6	0	1	1
8	Website	Visibility	10	5	3	1	1	6	5	1	0,83	0,67

Table 14: Importance and Assignment of Items to the Functional Legitimacy Latent Construct

In Table 14, N_1 – number of respondents for pretest on the importance of characteristics; N_2 – number of respondents for pretest on item assignment to construct; n_c – number of "correct" assignments; n_o – number of incorrect assignment of an item to the construct. The proportion of substantive agreement $p_{sa} = n_c/N_2$. The substantive-validity coefficient $c_{sv} = (n_c-n_o)/N_2$.

Only items with $p_{sa} > 0.75$ and $c_{sv} > 0.5$ have to be kept in the measurement model (Helm 2005). Hence, the manifest variables *number of references* ($p_{sa} = 0.5$ and $c_{sv} = 0.0$) was excluded. We also excluded the manifest variables *capability maturity model* and *strategic alliances* from the measurement model due to additional reasons. This is explained in the next section where I look at all dimensions of relational legitimacy and the respective items picked to represent or measure each dimension. Herein, for

some dimensions, such as organizational visibility, more than one item is considered since this dimension is a complex multidimensional construct itself.

A) Organizational Accountability

As it was mentioned earlier, organizational accountability is the ability of an organization to account rationally for its actions (Hannan and Freeman 1984). It is related to both that it can document how resources have been used and to reconstruct the sequences of organizational decisions, rules, and actions that produced particular outcomes (Hannan and Freeman 1984).

In order to signal their accountability, small organizations in transition environments can use certified standards. Two relevant certified standards were identified – the quality management standard ISO 9001: 2000 (Terlaak and King 2007) and the certified software development standard Capability Maturity Model Integration (CMMI) (Davenport 2005). ISO 9001: 2000 is a type of standard that documents how the resources have been used since it is a standard on the management process within an organization. Being specific to the IT sector, the CMMI standard captures the dimension of accountability related to following certain rules and standards in the main business activity (i.e. software development). Even though the substantive agreement $p_{sa} = 1$ and substantive validity coefficient $c_{sv} = 1$, I had to drop it from the measurement model because I was not able to collect sufficient data on it. Only 3 out of 95 IT companies reported that they have completed one or more levels of CMMI. Hence, I measure the accountability dimension only by looking at ISO 9001.2000 standard.

ISO 9000 was created by the International Organization for Standardization (Terlaak and King 2007). ISO 9000 is a quality certificate, which assures better documentation, greater quality awareness by employees, enhanced internal communications, increased operational efficiency and productivity, reduced scrap and rework expense, and lower costs (Docking and Dowen 1999; Anderson, Daly and Johnson 1999). In general, the costs associated with ISO certification varies from company to company based on the size and the scope of the company but they are perceived to be high

(Docking and Dowen 1999). It is more costly but at the same time more beneficial for small firms to acquire ISO 9000 certification (Docking and Dowen 1999).

For the purpose of this study, the adoption of ISO 9000 is not coded as a binary variable, which takes the value of "1" if the organization has an ISO certificate (Terlaak and King 2007). Instead, I considered the number of years that a company has had the ISO 9000 certificate for since the length of possession is expected to have a direct influence on the management processes and practices within an organization and therefore, its accountability. The longer a company had the certificate, the higher the compliance with the set of required management practices. Companies certified with ISO are subject to an ongoing evaluation by the third-party certificate-delivering institutions. Thus, herein the manifest variable ISO is metric reflecting the number of years of ISO possession:

ISO = number of years of possession of the certificate[53]

B) Organizational Stability

As it was mentioned earlier, organizational stability is associated with the existence of certain routines within an organization. Organizational routines are not easily observable and cannot be directly evaluated by interested constituencies. The latter can use proxies implying that the routines are in place within an organization. Herein, only one measurement of organizational stability was considered– organizational age. Age is an important attribute because it shapes "the internal ability and behavior of firms while simultaneously interacting with the external environmental context to shape the behavior and performance of firms (Shinkle and Kriauciunas 2010).

With age, an organization overcomes the liability of newness (Stinchcombe 1965). This implies that the organization has developed certain rules, processes and roles (routines) (Hannan and Freeman 1977) based on which its performance becomes more reliable (Scott 2001). In transition environments, age is associated with the level of

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[53] If a company does not have an ISO 9000 certificate, the value of this variable was coded as 0. In addition, if a company obtained the certificate in 2008 (the year of data collection), I still coded it as 1 even though the organization did not possess the certificate for one full year.

firm's relationships with institutions (Shinkle and Kriauciunas 2010). Due to longevity of ties, older organizations are perceived to be more reliable (Freeman *et al.* 1983), and with higher legitimacy (Shinkle and Kriauciunas 2010).

In general, the measurement of organizational age is very straightforward – number of years (Baum and Oliver 1992; Deephouse 1996; Ruef and Scott 1998) or months (Delmar and Shane 2004) since the organization has been founded (Delmar and Shane 2004 stated "initiated") or legally incorporated.

Herein, I look at organizational age as the number of years since founding (Baum and Oliver 1992) or since the entity was legally incorporated. I disregard the time when the founders may have worked without having a registered company because when presenting the company (to external audiences), the founding team can only mention the age of the organization since its legal incorporation. This can be explained by the fact that legally incorporated organization demonstrates stronger commitment by the founders to build and maintain an ongoing organization (Singh, Tucker and House 1986: 176).

According to the Commercial Register Law (voted in 2006), all the Bulgarian companies as well as the subsidiaries of foreign companies operating in Bulgaria have to register again for a three-year period starting January 2008 (Commercial Register Law). The Commercial Register is a centralized electronic database that contains information on the actual status of all legally-incorporated entities in Bulgaria. Initially, this information was available only in the regional courts. In order not to confuse our respondents, in the questionnaire I specifically mentioned that I look for the year of the initial registration (incorporation) of the company and not the year of the company new registration (in compliance with the Commercial Register Law). Hence, for the purpose of this study, organizational age is measured as:

AGE = number of years since the initial legal incorporation of the organization

C) Organizational Trustworthiness

Three items were considered to measure organizational trustworthiness as one of the dimensions of relational legitimacy – client reputation, strategic alliances and number

of references. I disregarded *strategic alliances* even though it received a substantive agreement coefficient $p_{sa} = 1$ and substantive validity coefficient $c_{sv} = 1$ since most of the alliances between small organizations in transition environments are opportunistic and not formalized. Hence, it is difficult to observe them.

In addition, the other item considered *number of references* received very low $p_{sa} = 0,50$ and $c_{sv} = 0,00$ and it was excluded from the measurement model of relational legitimacy. The interviewees perceived references from past clients as being important but they could hardly see a direct relationship between the total number of references and organizational trustworthiness.

Hence, to measure the trustworthiness, I looked at organizational reputation based on past performance. Since the content of firm's reputation is information (Dollinger, Golden and Saxton 1997), it can influence stakeholders' economic choices regarding a particular organization (Rindova *et al.* 2005), especially in incomplete information settings (Dollinger, Golden and Saxton 1997).

Even though organizational reputation is a multi-dimensional construct, very often it is measured in a unidimensional manner (Dollinger, Golden and Saxton 1997). Herein, one indicator is also used to capture firm's reputation – client reputation. It carries the reputational spill-over effect based on the clientele of an organization.

Client reputation (CLREP) is the informational (and emotional) content generated based on the company's past projects completed with domestic and/or international clients.

The client reputation of an organization was measured as a function of the level of operation of its clients. Four levels of operation were identified – local, local with export activities, national and international. *Local level* of operation means that the focal company operates only in the city where its headquarters (office) are located, *national level* means that the market of the company is defined on a national level, and *international* – that the company has expanded its operations internationally. In addition, *local with export activities* means that market is locally defined but the clients of the company have international activities. There is no clear cut between the

three levels of operation and usually companies have clients on at least two levels. Hence, I allocated different weights to the three above-mentioned layers of the environment – local (0.1), local with export activities (0.2), national (0.3) and international, such as a foreign subsidiary (0.4). The weights were allocated assuming that the reputation of a company will go up if its clients move from local to international level. Then, the number of companies among the 5 big clients was multiplied by the particular weight depending on the environmental level on which they function. In example, if among its 5 biggest clients a company had 1 local, 1 local with export activities, 2 national and one international, the equation looks as follows:

CLREP = (0.1*1) + (0.2*1) + (0.3*2) + (0.4*1) = 1.3

D) Organizational Visibility

As it was mentioned earlier, in unstable environments, organizational visibility is an important attribute that an organization has to build in order to communicate not only its presence but also that "it is there to stay." Similar to organizational legitimacy, organizational visibility is a multidimensional construct. Initially, two organizational attributes were identified in order to capture this dimension of relational legitimacy – physical footprint (number of offices and location of headquarters) and virtual footprint (website).

Physical capital resources are tangible or material resources, namely raw materials, machines, equipment, buildings, production capacity, and geographic location (Barney 1991). Grant (1991) perceived them as the input into the production process. Herein, I look at the visible part of the physical capital resources, the one that can be noticed and evaluated by the audiences. Hence, I call the physical resources *physical footprint*. The physical footprint of a small IT organization operating in transition environments includes the number of offices, or in other words all these physical elements (signals) that enhance the awareness of the existence of the firm and its products/services. This way, the company can more easily become part of the clients' consideration set (Pollock and Gulati 2007). The physical aspect of organizational visibility has a very strong legitimating effect since it represents a place where the clients can have a direct contact with the organization.

In addition to the physical footprint, a small organization in transition environments may benefit from the *virtual footprint*. By virtual footprint, I mean creating and maintaining a company's website. This is an observable and costly signal (especially for a small organization), which enhances organizational visibility vis-à-vis its evaluating audiences.

Physical and virtual footprints are in fact the physical and virtual assets of a small IT firm. For the purpose of this study, I regard small organizations that have originated in unstable environments and operate in fragmented sectors. This means that each and every organization controls a small market share and it is visible to a limited number of evaluating constituencies. Hence, the strategic decision regarding the number of offices (NOFFICE) and the location (LOC) of the company's headquarters (in terms of the city) is very important since it impacts the number of constituencies exposed to the company's products/services. I decided to code only the location of the company's headquarters because it has a very huge impact on the overall definition of the environmental layer on which a company functions. For example, if a company decides to choose to compete on national level, it is very likely that its headquarters will be based in the capital city.

It is important to note that the location strategy of each company is different. Some companies have a central office in the capital city and serve all their clients from there. Other firms maintain a central office in the capital city and a number of regional offices in order to be closer to their clients. And a third group decides to locate their office(s) only outside the capital.

It is assumed that if the company's headquarters is located in the capital city of Sofia, its visibility will be higher in comparison to the other two options – big city (with more than 100,000 inhabitants) or small city (less than 100,000 inhabitants). The higher visibility is due not only to the size of the capital city (more than 2 million inhabitants) and the concentration of business activity there but also due the agglomeration effect based on the concentration of the IT companies themselves in Sofia. Thus, if a company's headquarters is based in Sofia, I coded it as 3 (SOF=3), in a big city as 2 (BIG=2), and in a small city as 1 (SMALL=1). Then, I multiplied the

total number of offices to the weight allocated to each location. The higher the number received, the higher the number of potential constituencies the company is exposed to, thus the higher its organizational visibility. For example if a company has only one office in Sofia, it will receive a point of 3 (NOFFICE*LOC = 1*3 = 3), where 1 represents the number of offices (NOFFICE = 1) and 3 the location of the headquarters (SOF=3).

NOFFICE*LOC[54] = Total Number of Offices * Location of HQ (SOF=3, BIG = 2, SMALL =1)

The virtual footprint is related to whether a company maintains a website (WEBSITE). This variable is dummy (No=0, Yes=1). Surprisingly, not all companies in the Bulgarian IT sector maintain their own websites. Usually, these are companies that function on the local layer of the environment.

WEBSITE = 1(if yes) and 0 (if no)

In the previous two sections, I looked at the development of the formative constructs of functional and relational legitimacy – the two independent latent variables in this study. In the next section, I look at the development of the formative measurement construct of the dependent variable organizational legitimacy.

6.4. Designing a Reflective Measure of Organizational Legitimacy

6.4.1. Organizational Legitimacy as a Continuous Dependent Variable

Building organizational legitimacy is a continuous process during which an organization accumulates the required characteristics that fit the expectations of the evaluating audiences. In this case, I look at this process of characteristics accumulation and I compare companies in regard to their possession or not of certain legitimacy-enhancing features. Hence, I compare organizations at one point in time

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[54] An underlying assumption when I measure visibility based on the location of the company's headquarters is that the location of the office in the city does not matter to enhance firm's visibility. I did not code whether the firm office is in the center of the city (which may have a positive effect on firm's visibility) or in the suburban area.

based on their legitimacy stock. It is assumed that organizational legitimacy is a continuous variable meaning that if compared organizations will be placed at a different level of the continuum. Some organizations will be perceived as more legitimate than others (Shepherd and Zacharakis 2003).

6.4.2. Organizational Legitimacy as a Reflective Latent Construct

The concept of organizational legitimacy indeed reflects two different aspects. From one side, the focal organization is engaged in building its legitimacy through its signaling efforts. From another side, interested stakeholders grant legitimacy based on their interpretation of the signals (signaling theory of legitimacy). The organizations claiming legitimacy base their efforts on expected common understanding and interpretation of signals. Hence, signals are the building elements between the two aspects of this multi-dimensional construct. These two aspects of legitimacy claiming and legitimacy granting are reflected in the concept of organizational legitimacy and its measurements.

On the side of the focal organizations (which in this case are SMEs evolving in transition environments and trying to obtain long-term contracts), I identified the legitimacy-claiming efforts based on signaling functional and relational legitimacy. On the evaluating audiences' side, I look at the relevant stakeholder groups, in this case being the clients (the outsourcers), employees and distributors.

As Ruef and Scott (1998: 882) mentioned "all constituencies do not have equal weight and their assessment do not have equal influence." In transition environments where the old institutional framework is not valid anymore and the new one has not been developed yet, the support of the clients is a clear sign that an organization is perceived to be legitimate. If an entity makes the decision to purchase the products/services of another entity, it means the latter meets the requirements of the former in the best possible way (Shepherd and Zacharakis 2003).

Besides the clients, I also consider the employees and the distributors as important legitimacy-granting constituencies due to their direct involvement and high bargaining power towards the organizations under scrutiny. The underlying assumption is that the employees and the distributors make their decision to be associated with a particular

organization based on the same signals of functional and relational legitimacy. In terms of the employees, this can be explained by the fact that the market for highly-qualified labor in transition environments experiences constant shortage. Hence, the employees have a large pool of potential employers to choose from (and thus, high bargaining power). Besides the pay, they take into consideration other criteria, such as the resources and competencies of an organization and whether it is a reliable partner since they are also concerned with the long-term potential of a job to provide them with opportunities for future development.

The distributors of IT products/services are also directly involved and with high bargaining power due to the high fragmentation of the sector. Therefore, they can choose from a large set of organizations offering products/services in the IT sector. Their evaluation will be based on the above-identified signals of functional and relational legitimacy based on the nature of the product/service sold. The latter assumes long-term arrangement between the buyer and the provider, hence the distributors evaluate not only the product/services of a particular organization but also their potential to assist clients in the long-run. In the current study, I had to drop this variable due to lack of variance – only 10 out of 77 companies reported using distributors.

Based on the direction of the causality from the latent construct to the items (manifest variables), the dependent variable organizational legitimacy is measured through a reflective construct that shows the stakeholder support. Or in other words, the higher the legitimacy of an organization based on the stock of signals accumulated over the years, the higher the support by stakeholders. The reflective latent construct of organizational legitimacy is comprised of three manifest variables – number of employees (EMPLS) and number of clients (NCLNTS). Number of distributors (NDISTR) was excluded from the analysis.

EMPLS = total number of employees

NCLNTS = number of current clients

In addition, I brought the analysis a step further and tested the relationship organizational legitimacy-profit-making ability of an organization. The latter is also a latent variable construct.

6.5. Designing a Reflective Measure of Profit-Making Ability

Organizational legitimacy is viewed as a valuable resource, which organizations use in order to gain access to other resources required for their activities (Pfeffer and Salancik 1978). This way, organizations ensure their continuous adaptation and survival (Pfeffer and Salancik 1978). Some authors go a step further and claim that the additionally attracted resources based on the enhanced legitimacy influence positively the profitability of an organization (Mazza 1999: 42). Therefore, the ultimate sign of legitimate organization is its profit making ability (Mazza 1999: 42).

Based on this reasoning, I extended the analysis and tested the relationship between organizational legitimacy and the profit-making ability of an organization. In this case, the latter was measured by two reflective measures – average fee/hour (AVFEE) and growth rate of the sales revenue for the year in which the data was collected in comparison to the previous year (GRWTH).

AVFEE = average fee/hour for services rendered

GRWTH = growth rate in sales revenue (in %) in 2008 in comparison to 2007

The two measures are reflective because the higher the profit-making ability of a firm (based on the accumulated legitimacy stock of signals), the higher the average fee/hour it can allow itself to charge its customers. The same statement can be made regarding the growth rate – the higher the legitimacy of an organization, the higher the growth rate of its sales over a particular year.

To conclude, this chapter examines the specificities of SEM as a modeling technique. A particular attention is paid to the formative latent constructs since the two independent variables used in this research, namely functional and relational legitimacy, are measured with formative indicators. The dependent latent variables of

organizational legitimacy and profit-making ability of an organization are indeed reflective constructs.

The chapter also looks at the process of indicator specification for the two formative latent constructs of functional and relational legitimacy. One indicator was specified to measure each of their dimensions since their measurement models are formative. In addition, the measurement models of organizational legitimacy and profit-making ability of an organization were also identified.

Once the measurements are specified, as a next step (Chapter 7), I present the processes of data collection. As it was already mentioned, for the purpose of this research data was collected from the Bulgarian IT sector. After the data was carefully examined and cleaned, the PLS statistical analysis was performed to test the herein proposed hypotheses. Based on the statistical analysis, the measurement and structural models were assessed, and the results discussed.

PART I: THEORY DEVELOPMENT AND POSITIONING OF THE RESEARCH

| **CHAPTER 1:** Organizational Legitimacy | **CHAPTER 2:** Legitimacy Issues in Transition Environments | **CHAPTER 3:** Signaling Theory of Legitimacy |

PART II: THEORETICAL AND EMPIRICAL SETTING

CHAPTER 4: Outsourcing

CHAPTER 5: The Bulgarian IT Sector

PART III: RESEARCH METHOD AND RESULTS

CHAPTER 6: Research Method

CHAPTER 7: Data Collection, Data Analysis and Results

PART IV: DISCUSSION AND CONTRIBUTIONS

CHAPTER 8: Discussion, Contributions, Limitations and Avenues for Future Research

CHAPTER 7: DATA COLLECTION, DATA ANALYSIS AND RESULTS

For this research, data was collected from the Bulgarian IT sector. Out of 311 companies contacted (225 via e-mail and 86 in person), representatives of 95 companies agreed to fill out the questionnaire. This corresponds to a response rate of 31%. After the consequent data examination and data cleaning, the final number of observations came to a total of 77 companies.

In this chapter, I check for nomological and external validity of the two formative latent constructs, which indeed are stages 3) and 4) of the process of building formative latent constructs (Diamantopoulos and Winklhofer 2001). The first two stages 1) content specification and 2) indicator specification were already discussed in Chapter 6. After checking for validity of the constructs, I proceed with the statistical analysis. More precisely, partial least squares (PLS) was used to test the hypotheses developed between the manifest variables and the latent constructs (the measurement model) and between the latent constructs (the structural models).

The chapter is organized as follows. **First**, the process of data collection is explained followed by the data cleaning procedures used to obtain a non-biased dataset. The observations that have been excluded from the initial database were the ones that did not meet the established criteria (B2B enterprises, foreign subsidiaries, previously state-owned enterprises, etc.), observations with missing values on the manifest variables which are part of the dependant latent construct as well as extreme values (outliers) for the dependent manifest variables. **Second**, the data analysis starts with checking for nomological and external validity of the two formative latent constructs part of the research model. **Third**, the statistical analysis is performed by using PLS as the most appropriate SEM technique for the purpose of this study.

1. Data Collection and Data Examination

The data for this research was collected through face-to-face interviews and via e-mail. The respondents were asked to answer 30 questions, part of a structured questionnaire (see Appendix 7A and 7B). Their comments on the questions asked, the answers provided as well as general comments on the state of the IT sector in Bulgaria were carefully recorded. The e-mails were written and the interviews were conducted in Bulgarian language. The questionnaire was translated from English to Bulgarian by the main researcher. Then, it was back-translated into English (by a professor in Bulgarian and English literature) in order to assure that the meaning of all questions is kept intact (Filatotchev *et al.* 2000; Shinkle and Kriauciunas 2010). The original English version was compared to the double-translated version (Shinkle and Kriauciunas 2010) and it was discovered that the general sense of the questions did not change.

1.1. Sample

I used the list of companies included in the IDG company catalogue (www.idg.bg). IDG is a Bulgarian IT portal for news, services and prices. Its news bulletin is highly valued among the Bulgarian IT experts. In addition, the IDG company catalogue is the most representative catalogue of the ICT (Information and Communication Technology) companies in Bulgaria.

In the IDG Catalogue, the companies are divided in 4 categories – Hardware, Software, Networks and Communication, and Services. Only the category Software was considered with its 526 company entries falling into 13 groups (see Table 15). I chose only one category because of the existing overlap among the company entries, meaning that a company can be present in more than one category.

IDG COMPANIES IN CATEGORY 'SOFTWARE'	#
Distribution Software	78
Standard Software Development	49
Customized Software	60
GIS Applications & distribution	13
CAD/CAM/CAE	23
Multimedia	38
Data Storage Systems	26
eBiz Products/Services	53
ERP	73

Documents processing	31
Anti-virus software	40
Information security	34
GPS	8
TOTAL	**526**

Table 15: IDG Catalogue - IT Companies in the Software Category

It is important to note that one company can belong to one or more than one sub-group in the Software Category. Thus, having in mind the overlap, the total number of companies was reduced to 461. Moreover, additional 150 companies were excluded due to various reasons as indicated in Table 16.

TYPE OF COMPANY	# of companies excluded
B2C	11
Foreign Subsidiary	82
Previously State-Owned	3
Large Companies	2
Institutes/Centers	9
Online Portals	1
Contact Info - Not Found	14
Main activity - not IT	27
New Company (<1 year old)	1
TOTAL	**150**

Table 16: Reasons for Exclusion of Companies

Hence, from the initial list of companies, I was left with only 311 firms. I proceeded by contacting 225 of them by e-mail. Due to the low expected response rate (3% to 4% as it was reported by one Bulgarian IT association), the researcher also attempted to contact some of the companies personally by conducting face-to-face interviews.

Information on the companies contacted by e-mail and in person as well as the respective response rates are presented in the Table 17.

DATA COLLECTION	# of Observations	# Responses	Response Rate
TOTAL companies considered	461		
Total companies did not meet criteria	150		

Total companies that met the criteria	311		
Total companies contacted via e-mail	225	21	9%
TOTAL in person	86	75	87%
TOTAL SET	**311**	**95**	**31%**

Table 17: Data Collection and Response Rates

Table 17 shows that the response rate was 9% when an e-mail with the questionnaire attached was sent to potential respondents. One should keep in mind that the e-mail was sent only to one company at a time. It was also personalized and sent to the director and/or owner of the company if his/her name and contact information were indicated on the company's website. The message was written in Bulgarian language and the name of the company was mentioned in the body of the e-mail (see Appendix 1A and 1B). In addition, a reminder e-mail was sent one month later. Overall, this resulted in a response rate of 9%, which is higher than previously reported response rates in Bulgaria for online surveys – 3%-4%.

As expected, the response rate of the companies that were personally contacted was much higher – 87% of the companies approached agreed to fill out the questionnaire. The companies were contacted directly in their offices or at the International Plovdiv Fair held in October 2008 (Plovdiv) and at the BAIT Expo held in November 2008 (Sofia).

In total, 95 questionnaires were filled out, which corresponds to an overall response rate of 31% (see Table 17).

One of the concerns that can be raised is the nonresponse bias – the companies that filled out the questionnaire may be different from the ones that refused to do so (Armstrong and Overton 1977). There are several methods suggested to overcome the nonresponse bias – comparison with known values for the population, subjective estimates and/or extrapolation method (based on the assumption that subjects that respond less readily are more like the nonrespondents) (Armstrong and Overton 1977). Keeping in mind the data collected and that the unit of analysis is the organization, none of these remedies can be applied here.

One remedy though that can help shed some light on the issue whether there is a difference between the companies that responded and the ones that did not is to divide and compare the dataset based on the way the data was collected – via personal interviews and via e-mail. It seems that the sub-sample of companies that responded personally is more representative of the population of companies due to its higher response rate - 87%. The t-tests (Appendix 8) show that there is no difference along the various items besides one – ISO certificates. It seems that companies that were contacted via e-mail on average report more ISO certificates than the companies that were contacted personally. This can be explained by the fact that if they are part of a catalogue and maintain a website, they most likely function on the national/international layer where the ISO signal might be more meaningful. Based on the results, it can be concluded that the two sub-samples of the dataset do not differ in a significant way.

1.2. Data Examination

1.2.1. Data Cleaning

After the data collection process was concluded, the data was cleaned. As a result, seven of the completed questionnaires were excluded from the dataset. This reduced the overall number of observations to 88. In the table below, an explanation is provided of why those observations were excluded:

N	Actual number	Reason for Exclusion
1	#7	B2C provider of IT services
2	#19	Subsidiary of a Russian company
3	#23	Wholesale provider of Internet
4	#48	Subsidiary of a US company
5	#52	Insufficient information provided (8 out of 30 questions filled out)
6	#58	Subsidiary of a US company
7	#63	Main business activity – clothing

Table 18: Data Cleaning – Reasons for Exclusion of Companies

After checking for missing values, more companies were excluded from the final database. In the section below, I present the missing data issues and the remedies undertaken in order to minimize its effect on the statistical analysis.

1.2.2. Missing Data

As Hair *et al.* (1998: 46) pointed out "missing data are a fact of life in multivariate analysis." For the purpose of this research, I collected primary data through surveys and as expected, I did encounter the missing data problem. Since missing data can bias the statistical analysis and affects the generalizability of the results (Studenmund 2001), some actions were undertaken in order to address the issues raised by it.

Part of the data was completed by looking at the documents provided by the IT companies registered with the Commercial Register. All Bulgarian companies are supposed to register in the Commercial Register by 2011 according to the Commercial Law. Unfortunately, at the time of the data collection, not all IT companies were part of the Register. Some data on sales growth, number of total founding managers and company age for several companies was compiled from this Register.

In addition, some data was collected from the websites of the companies under scrutiny. Since I address the issues of signaling, valuable signals, such as number of offices and number of distributors, are expected to be presented on the companies' website.

Even if some of the data was additionally collected, there were still some missing values. According to Cohen *et al.* (2003), the researcher has to address the missing data problem by looking at the reasons since the course of action depends on the latter. Before checking for the randomness of the missing data, I looked at whether the occupation of the respondent had anything to do with the level of missing data. Thus, the chi-square was calculated by comparing the three groups of respondents and the level of missing data per each (Howell 2004). The chi-square value showed that there was no significant difference between the number of missing values provided by the

three groups of respondents – (1) founder/owner, (2) manager or (3) other (software engineer, secretary) in terms of the data provided (see Appendix 9A).

In the dataset, there were 18 variables (some of which were composite measures) and 88 observations. In total, 3.29% of the data was missing. The missing values were mainly distributed over three variables – (1) average fee/hour (AVFEE) - a measurement of the profit-making potential of an organization (2) growth rate (GRWTH) – a measurement of the profit-making potential of an organization, and (3) number of clients (NCLNTS) – a measurement of organizational legitimacy.

Even though there is no reason to think that the missing data is nonrandom, I used one of the methods described by Hair *et al.* (1998: 50) to check for its randomness. Except one variable (WEBSITE, coded as dummy 1- the company has a website and 0 – no website), the rest of the variables were metric. Thus, as suggested by Hair *et al.* (1998), there were two groups formed – the group with missing values versus the group with valid data entries. Then, I compared the two groups across all the other variables by performing two-sampled t-tests assuming unequal variances (see Appendix 9B, 9C and 9D). The t-test assuming unequal variances is a more conservative t-test in comparison to the one with equal variances (Howell 2004).

The t-tests[55] between the group of companies that provided the information on their number of clients (NCLNTS) and the group of companies that did not provide information show that there were no statistically significant differences across the different variables besides one variable – size of the company (see Appendix 9B). The latter means, on average, larger organizations were more willing to provide information on their number of clients than smaller organizations.

The t-tests between the group of companies that provided information on the average fee/hour (AVFEE) and the one that did not show that there were no statistically significant differences across the different variables besides one variable – number of quality awards. On average the group that provided information on the average fee/hour had more quality awards than the group that did not (see Appendix 9C).

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[55] All the t-tests were two-tailed with significance level of 5%.

Four t-tests turned to be statistically significant when I compared the group of companies with missing values of the growth rate (GRWTH) and the group of companies with valid data entries. The t-tests for client reputation, award, partnerships, and number of employees showed significant differences. Organizations that revealed information on their growth rate were the ones that showed higher client reputation, number of quality awards, partnerships and employees. It was assumed that firms with better positioning were not afraid to provide information on their growth rate (see Appendix 9D).

In addition, in terms of the observations, there were two cases where 21% (4 variables) of the data was missing. First, I deleted the offending cases where information on the manifest variables part of the dependent latent construct organizational legitimacy (number of clients, number of employees and number of distributors) was not provided by the respondent (Hair *et al.* 1998: 52). The total number was 10 observations that were deleted from the database. Fortunately, with this operation the two cases with 21% of the data missing (# 19 and # 73) were also dropped from the dataset. Thus, the overall number of observation was reduced to 78 companies and the overall missing data went down from 3.29% to 2.29% of the data.

Second, by looking at the missing data again, it was obvious that most of it was concentrated over 2 variables – average fee/hour (AVFEE) and sales growth rate (GRWTH) with 22% (19 entries) and 13% (11 entries), respectively[56]. In this case, some estimation of the missing values could have been done. Hence, the entries with missing values were not deleted. The refusal of the respondents to provide values for these two variables is due to the sensitive character of the information demanded. Some of the competitive advantage of the companies in the Bulgarian IT sector is based on their pricing strategy, thus providing information on their average fee/hour is perceived to be confidential. Similar explanation can be provided regarding the growth rate since it is related to the company's past performance.

The missing values of AVFEE and GRWTH were replaced with estimated values based on the information available in the sample (Hair *et al.* 1998). Among all the

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[56] In terms of the observations, the missing values were spread over the cases and there was no case with more than 10% missing values. Thus, I did not consider further deleting cases.

replacement methods discussed in the literature (Cohen *et al.* 2003; Hair *et al.* 1998), the mean substitution method turned to be the most appropriate one since information on another nonsampled observation (case substitution) and constant value derived from external sources (cold deck imputation) was not collected. Thus, I replaced the missing values with the mean value of the particular variable (Hair *et al.* 1998).

A) Average Fee/Hour

Almost $1/4^{th}$ of the respondents refused to provide this information since they considered it confidential. Thus, I substituted the missing values with the corresponding such depending on the level of operation of the focal company (see Table 19). The layer on which a company operates affects the average fee/hour – i.e. companies engaged in international outsourcing charge more than companies engaged mainly with local and/or national clients. Hence, if a company operates mainly on a local level (> 50% of the sales comes from the respective layer), I calculated the average fee/hour for the group of all companies operated on this layer of the environment and I substituted the latter with it.

B) Growth Rate

In terms of the missing values of the growth rate of the company, I calculated the average growth rate for companies per level of operation (see Table 19) and substituted the missing values with it.

IMPUTATION METHOD: MEAN SUBSTITUTION		
	Mean Values	
Level of Operation	Av Fee/Hour (in lv)	Growth Rate
Local	21	41%
National	57	77%
International	49	58%

Table 19: Imputation Method - Mean Substitution

In addition to the missing data, I also checked the data for extreme values or outliers, which is presented in the section below.

1.2.3. Outliers

For the purpose of this study, a univariate perspective for identifying outliers was adopted. It looks at the distribution of the variables (Hair *et al.* 1998). The outliers are perceived to be those cases that are at the outer ranges (Hair *et al.* 1998). All the values in the database were standardized (Hair *et al.* 1998) by calculating the z-scores for the 13 metric variables[57] (Howell 2004: 108) (see Appendix 2). For small samples (80 or less observations), the guidelines suggest that one perceives as outliers cases whose z-scores exceed a level of ±2.5[58] (Hair *et al.* 1998). Following the univariate procedure, I identified a total of 21 outliers keeping in mind that there was an overlap between some cases (see Table 20).

	Outliers Values								
Variable	2.5-3 s.d.	3-3.5 s.d.	3.5-4 s.d.	4-4.5 s.d.	4.5-5 s.d.	>5 s.d.	Total		Case(s)
AWARD	1	0	1	0	0	1	3		61,63,72
ISO	3	1	1	0	0	0	5		32,63,65,66,81
PART	0	1	1	0	0	0	2		57,86
ASSOC	0	2	0	1	0	0	3		55,66,86
WEST	0	0	0	0	0	0	0		
CLREP	0	0	0	0	0	0	0		
NCLNTS	0	0	0	0	0	1	1		17
AVFEE	0	0	0	0	0	0	0		
GRWTH	5	0	1	0	0	0	6		18,20,45,68,75,77
AGE	0	0	0	0	0	0	0		
EMPLS	0	0	3	0	0	0	3		31,37,66
NOFFICE*LOC	1	0	1	0	0	1	3		24,31,37
NDISTR	0	0	1	0	0	1	2		17,51
Total	14	4	9	1	0	4	28		

Table 20: Univariate Procedure for Outlier Identification

Table 20 shows that almost all variables (except WEST, CLREP, AVFEE, and AGE) demonstrate some extreme values. I investigated the 21 outliers by looking at the completed questionnaires for data entry mistakes. All of them corresponded to the values indicated by the respondents. Since no observations were extreme on a sufficient number of variables, it was assumed that there is no reason to think that these values cannot correspond to population values (Hair *et al.* 1998).

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[57] Total of 16 variables are metric. Two are categorical – whether the company has its own product (OWNPR) and whether it has a website (WEBSITE).
[58] I obtained similar results or extreme values by looking at the box-and-whiskers plots.

Nevertheless, particular attention was paid to the observations of 5 s.d. or higher, which came to total of 4 observations. Regarding the number of clients (NCLNTS), which is a manifest variable part of the dependent formative latent construct of organizational legitimacy, the extreme value belongs to company # 17. The data entry is correct and clearly stated on the advertising materials of the company. Since this variable is part of the dependent latent construct of organizational legitimacy, I excluded it from the final dataset

It is important to note that the profile of the excluded company is not typical for the Bulgarian IT industry. There was another company with a similar profile whose representative was also interviewed but who did not provide information regarding the company's clients. This company was excluded earlier in the data examination process. These companies follow a rather different strategy since they support large structures and have very diverse modules of business process software and ERP systems. To the extent of the researchers' knowledge, such diversity in terms of product offering is not typical for most SMEs in the Bulgarian IT sector.

Regarding the number of distributors (NDISTR), the extreme value belongs to company # 51. Some SMEs in the Bulgarian IT sector rely on a network of distributors to build their market presence. Hence, this profile of companies exists at the market.

The outliers regarding number of awards (AWARD) and number of offices and their location (NOFFICE*LOC) were kept because they are valid data entries and they are representative of a certain profile of Bulgarian IT companies.

Hence, based on the univariate procedure for outlier identification, companies # 17 was excluded from the database. As a result, the final number of observations used for the purpose of this study is 77.

The descriptive statistics of the manifest variables used in this study are presented in Table 21. The indicators are presented in alphabetical order.

Indicator	N	Mean	Min	Max	Std.Dev.
AGE	77	9,5455	0	19	5,2504
ASSOC	77	0,6104	0	5	1,0151
AVFEE	77	41,5974	3	400	46,7430
AWARD	77	0,5455	0	10	1,5857
CLREP	77	5,0260	1	10	2,8699
EMPLS	77	31,3117	2	250	54,7317
GRWTH	77	0,5267	0	2,5	0,5269
ISO	77	0,8571	0	9	2,1319
NCLNTS	77	367,3377	4	5200	1005,4306
NDISTR	77	6,4286	0	275	32,8154
NOFFICE*LOC	77	4,5065	1	36	6,0516
OWNPR	77	0,6104	0	1	0,4909
PART	77	42,5974	0	260	58,2057
WEBSITE	77	0,7792	0	1	0,4175
WEST	77	48,4459	0	200	66,4428

Table 21: Descriptive Statistics of Manifest Variables.

2. Data Analysis

The formative latent constructs require a check for multicollinearity between the items which comprise each construct (Henseler *et al.* 2009). In addition, the formative latent constructs have to be tested for external validity (Henseler *et al.* 2009). Indeed, checking for multicollinearity and external construct validity represent the third and fourth stage of the four-step procedure of building formative latent constructs[59] (Diamantopoulos and Winklhofer 2001). In the following section, I look at the two stages in their respective order.

2.1. Formative Latent Constructs – Stages III and IV

2.1.1. Multicollinearity

As it was mentioned earlier, collinearity is an expression of the relationship between two (collinearity) or more (multicollinearity) independent variables (Cohen *et al.* 2003). When multicollinearity exists among the indicators of a formative latent

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[59] The first stage in the formative latent construction process is Content Specification which includes the definition of the construct itself (Helm 2005). The second stage is Indicator Specification when the researcher is required to identify a census of indicators in order to capture all dimensions of the formative latent construct (Diamantopoulos and Winklhofer 2001). The Content Specification stage was completed in chapter 3, Part I. The Indicator Specification stage was completed in chapter 2, Part II.

construct, it becomes difficult to assess the individual contributions of each indicator (Fornell *et al.* 1991: 317). In formative latent constructs, any unnecessary redundancy has to be avoided (Rossiter 2002), implying that some of the indicators have to be excluded from the construct (Diamantopoulos and Siguaw 2006).

One way to check for multicollinearity among indicators is to use the variance inflation factor (VIF) (Cohen *et al.* 2003: 423). In order to calculate VIF for the items comprising the functional and relational legitimacy constructs, I used the software package STATISTICA (StatSoft, Inc.). The results are presented in the table below:

Collinearity Statistics for Terms in the Equation		
	Tolerance	VIF
Functional Legitimacy Indicators		
ASSOC	0,6480	1,5431
OWNPR	0,8906	1,1228
WEST	0,9554	1,0467
PART	0,6974	1,4339
AWARDS	0,8745	1,1436
Relational Legitimacy Indicators		
ISO	0,5949	1,6809
AGE	0,8461	1,1819
CLREP	0,5803	1,7232
NOFFICE*LOC	0,7860	1,2723
WEBSITE	0,6621	1,5104

Table 22: Collinearity Statistics for Terms in the Equation

From Table 22, it can be concluded that multicollinearity between the items comprising the two formative latent constructs – functional and relational legitimacy – is below the common cut-off level of 10 (Cohen *et al.* 2003; Hair *et al.* 1998). This means that multi-collinearity should not pose a problem for the statistical analysis in this research. As a result, all the items were kept in the model.

2.1.2. External Construct Validity

Checking for external validity of the two constructs is the forth and the last stage of the formative index construction process (Diamantopoulos and Winklhofer 2001). As it was mentioned earlier, a way to check for the external validity of an entire construct is when it is induced in a wider nomological context and linked to another reflective

construct with which it is expected to be linked (Diamantopoulos and Winklhofer 2001). If the construct has the theoretically hypothesized relationship with the other construct, the nomological validity of the measurement model is confirmed (Helm 2005).

Following Diamantopoulos and Winklhofer (2001), the two formative constructs – the independent latent variables functional and relational legitimacy – were inserted in a larger nomological context by separately linking them to the latent variable organizational legitimacy measured by two manifest variables – number of employees (EMPLS) and number of clients (NCLNTS) (Appendices 10A and 10B).

It is important to note that organizational legitimacy represents a reflective construct meaning that the direction of causality goes from the latent construct to the manifest variables (Bollen and Lennox 1991). Or in other words, the indicators are the dependent variables and the latent construct is the explanatory variable (Diamantopoulos, Riefler and Roth 2008). In this case, it is theoretically justified to expect that organizations with higher functional and relational legitimacy will demonstrate higher organizational legitimacy.

Indicator	Description	Variable	Weight	t-value	p-value
FUNCTIONAL LEGITIMACY					
X1	**Association Membership**	ASSOC	0,4270	**2,6560**	**0,0080**
X2	**Organization Innovativeness**	OWNPR	0,3340	**3,3336**	**0,0009**
X3	**Manager's Western Education**	WEST	0,1660	**1,6022**	**0,1094**
X4	**Prestigious Industry Affiliates**	PART	0,5000	**2,9386**	**0,0034**
X5	**Awards**	AWARD	0,1340	**1,0179**	**0,3090**
ORGANIZATIONAL LEGITIMACY					
	Number of employees	EMPLS	0,9730	**42,1539**	**0,0000**
	Number of clients	NCLNTS	0,4880	**3,2027**	**0,0014**
Path Coefficients	**Description**	Variable	Weight	t-value	p-value
	Functional Legitimacy	FL	0,7230	**15,1805**	**0,0000**

Table 23: PLS Output on Testing for Nomological Validity of Functional Legitimacy

Indicator	Description	Variable	Weight	t-value	p-value
RELATIONAL LEGITIMACY					
X6	**Certified Standards**	ISO	**0,2260**	**2,7100**	**0,0068**
X7	**Age**	AGE	**0,4140**	**4,8385**	**0,0000**
X8	**Client Reputation**	CLREP	**0,4910**	**6,2890**	**0,0000**
X9	**Physical Footprint**	NOFFICE*LOC	**0,3080**	**4,0685**	**0,0001**
X10	**Virtual Footprint**	WEBSITE	**0,0320**	**0,4756**	**0,6345**
ORGANIZATIONAL LEGITIMACY					
	Number of Employees	EMPLS	**0,8630**	**28,9443**	**0,0000**
	Number of Clients	NCLNTS	**0,7230**	**8,6205**	**0,0000**
Path Coefficients	**Description**	Variable	**Weight**	**t-value**	**p-value**
	Relational Legitimacy	RL	**0,8170**	**23,3938**	**0,0000**

Table 24: PLS Output on Testing for Nomological Validity of Relational Legitimacy

The two path coefficients (Functional Legitimacy → Organizational Legitimacy and Relational Legitimacy → Organizational Legitimacy) are significant at p = 0.01. The t-value of the path coefficient of functional legitimacy when linked to organizational legitimacy reflective construct separately is **t=15,1805** (see Table 23). The t-value of the relational legitimacy when linked to organizational legitimacy reflective construct separately is **t=23,3938** (see Table 24). This means that the two formative latent constructs demonstrate the theoretically hypothesized relationship proving their nomological validity.

3. Results

The input EXCEL matrix is presented in Appendix 11.

As it was mentioned earlier, the SEM technique employed for the purpose of this study is PLS. The software package used is smartPLS 2.0 (M3) (Ringle, Wende and Will 2005). In order to get the indicator weights and path coefficients, I used the computational option given under the PLS algorithm (with maximum iterations of 300). In order to get the t-values, I used the bootstrapping option (based on 1,000 samples) in smartPLS software package. P-values were calculated based on the t-values with EXCEL.

The results after running the PLS algorithm are presented in Fig.12.
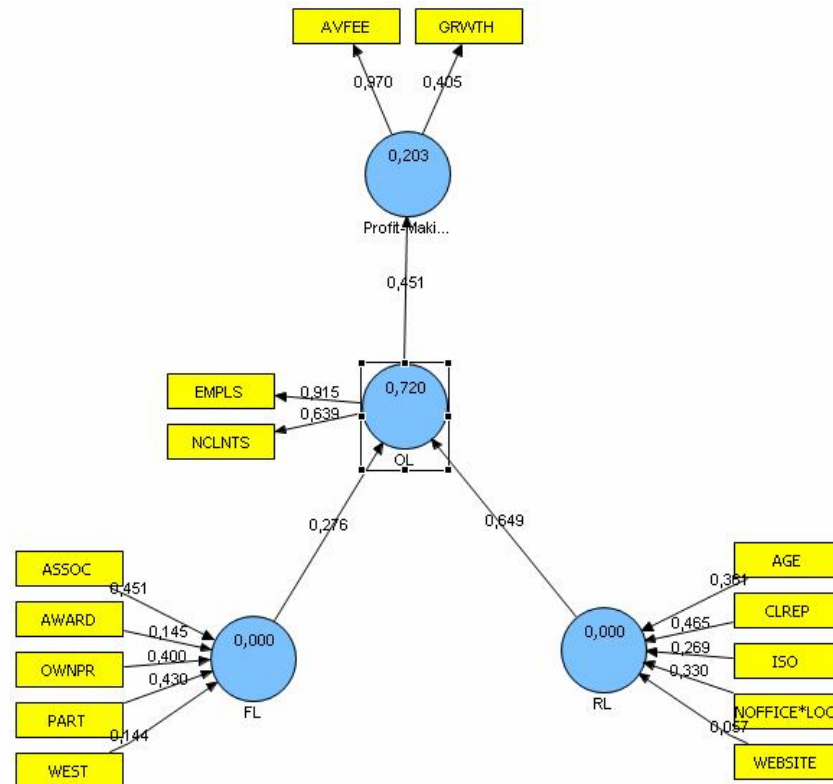
Fig. 12: PLS Algorithm Output

After running the bootstrapping calculation option of smartPLS, I was able to obtain the t-values of the indicator (outer) weights presented in Table 25. Based on the t-values, p-values were calculated in EXCEL using the function TDIST (t-value, d.f., 2-tailed). The results of the data analysis are presented in the table below. The indicators whose weights are significant at p=0.10 are highlighted.

Indicator	Desc Ription	Variable	Weight	t-value	p-value
FUNCTIONAL LEGITIMACY					
X1	**Association Membership**	ASSOC	**0,4510**	**2,8704**	**0,0042**
X2	**Organization Innovativeness**	OWNPR	**0,4000**	**3,7231**	**0,0002**
X3	**Manager's Western Education**	WEST	0,1440	1,2584	0,2085
X4	**Prestigious Industry Affiliates**	PART	**0,4300**	**2,5518**	**0,0109**

X5	**Awards**	AWARD	0,1450	0,9782	0,3282
RELATIONAL LEGITIMACY					
X6	**Certified Standards**	ISO	**0,2690**	**3,0839**	**0,0021**
X7	**Age**	AGE	**0,3610**	**4,3870**	**0,0000**
X8	**Client Reputation**	CLREP	**0,4650**	**5,9374**	**0,0000**
X9	**Physical Footprint**	NOFFICE*LOC	**0,3300**	**4,8010**	**0,0000**
X10	**Virtual Footprint**	WEBSITE	0,0570	0,8676	0,3858
ORGANIZATIONAL LEGITIMACY					
X11	**Number of Employees**	EMPLS	**0,9150**	**36,2905**	**0,0000**
X12	**Number of Clients**	NCLNTS	**0,6390**	**5,7908**	**0,0000**
PROFIT-MAKING POTENTIAL					
X13	**Average Fee/Hour**	AVFEE	**0,9700**	**26,8932**	**0,0000**
X14	**Growth Rate**	GRWTH	**0,4050**	**2,0763**	**0,0381**
Path Coefficients	**Description**	Variable	**Weight**	**t-value**	**p-value**
	FL – OL	FL	**0,2760**	**3,4178**	**0,0007**
	RL – OL	RL	**0,6490**	**8,0293**	**0,0000**
	OL - PROFIT-MAKING	OL	**0,4510**	**6,1704**	**0,0000**

Table 25: PLS Output on Outer Weights and Path Coefficients

The statistical analysis above shows that not all hypotheses have been supported. In Table 26, I present the results of the hypotheses testing.

H1 :	*The higher the functional legitimacy of an organization, the higher its organizational legitimacy.*	V
H2 :	*The higher the relational legitimacy of an organization, the higher its organizational legitimacy.*	V
H3:	*H 3: The higher the organizational legitimacy, the higher the profit-making potential of an organization.*	V
H4 :	*Organizational characteristics signaling superior informational competencies will affect positively the functional legitimacy of SMEs evolving in transition environments.*	V
H5:	*Organizational characteristics signaling superior managerial competencies of founding team members will affect positively the functional legitimacy SMEs evolving in transition environments.*	NV
H6:	*Organizational characteristics signaling superior organizational competencies will affect positively the functional legitimacy of SMEs evolving in transition environments.*	V
H7:	*Organizational characteristics signaling firm's innovativeness will affect positively the functional legitimacy of SMEs evolving in transition environments.*	V
H8:	*Organizational characteristics signaling symbolic reputational competencies will enhance the functional legitimacy of SMEs evolving in transition environments.*	NV

H9:	*Organizational characteristics signaling organizational trustworthiness will enhance the relational legitimacy of SMEs in transition environments.*	V
H10:	*Organizational characteristics signaling organizational accountability will enhance the relational legitimacy of SMEs evolving in transition environments.*	V
H11:	*Organizational characteristics signaling organizational stability will enhance the relational legitimacy of SMEs evolving in transition environments.*	V
H12a:	*Organizational characteristics signaling organizational visibility (physical footprint) will enhance the relational legitimacy of SMEs evolving in transition environments.*	V
H12b:	*Organizational characteristics signaling organizational visibility (virtual footprint) will enhance the relational legitimacy of SMEs evolving in transition environments.*	NV

Table 26: Results of Hypotheses Testing

The assessment of the measurement and structural models are presented in detail in the following section.

3.1. Assessing the Measurement Models

The assessment of the measurement model is based on the tests performed as part of the formative latent variable construction process. These tests include multicollinearity, external and nomological validity performed as part of stages 3) and 4) in the 4-step procedure of formative latent variable construction (Diamantopoulos and Winklhofer 2001).

In addition, the sign and the weights of the indicators are also used to evaluate the formative latent measurement models (Helm 2005). The weights provide information on what the make-up and relative importance of the indicator is in the formation of the formative construct (Chin 1998; Helm 2005). Based on the results presented in Table 25, the assessment of the measurement models is discussed below.

3.1.1. Functional Legitimacy Formative Latent Construct

Table 25 shows that all indicators of the functional legitimacy formative construct besides product/service awards (AWARD) and Western education/experience of

founding team members (WEST) are positive and significant at p = 0.05. This implies that hypotheses H4, H6, H7 are supported at p = 0.05.

The indicator product/service awards AWARD has **t=0,9782** and corresponding **p=0,3282 (> 0,10),** which shows that hypothesis H8 is not supported. This means that the number of product/service awards still enhances the functional legitimacy of an organization (due to the positive sign of the indicator) but the effect is not statistically significant.

The indicator Western and/or Western-like education/experience of founding team members (WEST) has **t=1,2584** and a corresponding **p=0,2085 (>0,10)**, showing that hypothesis H5 is not supported. This means that Western education/experience of founding team members still affects in a positive way the functional legitimacy of an organization but the effect is not statistically significant.

3.1.2. Relational Legitimacy Formative Latent Construct

Table 25 shows that four indicators (ISO, AGE, CLREP and NOFFICE*LOC) comprising the relational legitimacy formative construct are statistically significant not only at p=0,10 but also at p=0,05. This means that hypotheses H9, H10 and H11 and H12a are supported.

The indicator showing whether a company has a website or not (WEBSITE) has **t=0,8676** and corresponding **p=0,3858 (> 0,10).** This means that hypothesis H12b is not supported. The indicator WEBSITE indeed measures a sub-dimension of the manifest variable organizational visibility, for which there is another measure NOFFICE*LOC. WEBSITE measures the virtual footprint dimension of organizational visibility while NOFFICE*LOC measures the physical footprint.

3.1.3. Organizational Legitimacy Reflective Latent Construct

In the reflective measurement model of organizational legitimacy, the indicators number of clients (NCLNTS) and number of employees (EMPLS) are positive and statistically significant at p=0,5.

3.1.4. Profit-Making Ability Reflective Latent Construct

In the reflective measurement model of profit-making potential, the indicators average fee/hour (AVFEE) and growth rate of sales revenue (GRWTH) are positive and statistically significant at p=0,05.

There is no clear answer in the literature on how to handle indicators which are not statistically significant (Diamantopoulos and Winklhofer 2001). Henseler *et al.* (2009: 302) state that "formative indicators should never be discarded simply on the basis of statistical outcomes." The reason is that if insignificant indicators are excluded, the content of the latent construct may be altered (Jarvis *et al.* 2003). Hence, the researcher should keep both significant and insignificant formative indicators as long as they can find theoretical justification for this (Henseler *et al.* 2009). In addition, the PLS structural model estimates almost do not change when the insignificant highly collinear indicators are excluded (Henseler *et al.* 2009). This specificity of PLS as a SEM technique provides additional support for the decision to keep the insignificant formative indicators in the measurement model (Henseler *et al.* 2009).

3.2. Assessing the Structural Model

According to Henseler *et al.* (2009), the structural model can be evaluated based on the following criteria – the coefficient of determination (R^2), the individual path coefficients in terms of their sign, magnitude and significance as well as the effect size (f^2) which shows whether a predictor latent variable has a weak, medium or large effect on structural level.

In this case, the coefficient of determination **R^2 = 0,720** for organizational legitimacy, which means that 72% in the variation of this latent variable can be explained by the signals of functional and relational legitimacy used by an organization. According to Chin (1998), this level of R^2 is substantive since it is higher than the threshold level of 0,67.

In addition, the two path coefficients of the functional and relational legitimacy formative latent constructs are positive and significant at p=0,05. The path coefficient of the functional legitimacy construct has an inner weight of **0.276 (t=3,4178, p=0,0007).** The path coefficient of the relational legitimacy construct has an inner

weight of **0,649 (t=8,0293, t=0,0000)**. Hence, hypotheses H1 and H2 are supported at p=0.05 showing that signaling functional and relational legitimacy enhances the organizational legitimacy of small organizations in transition environments.

The effect size (f^2) of each of the independent variables (functional and relational legitimacy) on the dependent variable organizational legitimacy can be calculated (Cohen 1988). The effect size of the independent latent construct functional legitimacy is $f^2 = 0,23$, while the effect size of the second independent latent construct relational legitimacy is much larger $f^2 = 0,72$. Hence, the signals of relational legitimacy have much larger impact on the stakeholders' decision to grant legitimacy to a particular organization.

As it was mentioned earlier, I went a step further and tested the relationship organizational legitimacy-profit-making ability of an organization. The coefficient of determination for the profit-making ability is $R^2 = 0,203$. Even though this level of R^2 is weak (Chin 1998), it shows that 20,3% of the variation in this latent variable can be explained by organizational legitimacy measured as the support by two important stakeholder groups – employees and clients.

To conclude, the results of the statistical analysis show that the functional legitimacy of a small organization in transition environment mainly depends on the company's innovativeness, its access to industry information as well as the prestigious certified partnerships granted by global industry leaders. In highly dynamic sectors, being able to innovate sends an important signal that the company will exert an effort in potential partnerships. Having an access to the newest information is appreciated by the evaluating audiences since it ensures the adequate actions of the organization under scrutiny. The effect is augmented for organizations evolving in transition environments characterized by very high rate of change and instability. The legitimacy imported from the established global players based on certified partnerships is also highly appreciated by the stakeholders. The latter perceive the prestigious affiliates as being able to make better decisions on who to associate with.

The relational legitimacy of small organizations in transition environment is mainly based on client reputation, the physical footprint of the company and its age. Client

reputation emphasizes the trustworthiness of an organization as a partner and hence, it is highly valued by the legitimacy-granting constituencies. Physical footprint represents the access points between the relevant stakeholders and the organization and it is an attribute that evaluating audiences in transition environments place high relative importance on. The reason is that being able to contact an entity increases the perception of reliability of the focal organization. In addition, organizational age, which conveys stability, is also highly valued by the constituencies due to the high volatility of the environment in transition. In addition, evaluating audiences appreciate organizations that are accountable for their internal processes the external representation of which can be different management standards (ISO, etc.).

Overall, the results show that signaling functional and relational legitimacy is important for small organizations in transition environments in order to get the support of the evaluating audiences. Furthermore, the relational legitimacy signals have more impact on the stakeholders' decision to support a particular organization than the signals of functional legitimacy. Due to the overall instability in the environment and the excessive opportunistic behavior exercised by the actors, demonstrating that a company is "there to stay" is crucial for its long-term success and survival.

In the last chapter, I discuss the results of the statistical analysis. Based on them, I emphasize the theoretical and methodological contributions of this research as well as its practical implications for the managers of small organizations in transition environments and the public policy. The study's limitations and avenues for future research are also examined.

PART IV: DISCUSSION AND CONTRIBUTIONS

PART I: THEORY DEVELOPMENT AND POSITIONING OF THE RESEARCH

CHAPTER 1: Organizational Legitimacy	**CHAPTER 2:** Legitimacy Issues in Transition Environments	**CHAPTER 3:** Signaling Theory of Legitimacy

PART II: THEORETICAL AND EMPIRICAL SETTING

CHAPTER 4: Outsourcing

CHAPTER 5: The Bulgarian IT Sector

PART III: RESEARCH METHOD AND RESULTS

CHAPTER 6: Research Method	**CHAPTER 7:** Data Collection, Data Analysis and Results

PART IV: DISCUSSION AND CONTRIBUTIONS

CHAPTER 8: Discussion, Contributions, Limitations and Avenues for Future Research

CHAPTER 8: DISCUSSION, CONTRIBUTIONS, LIMITATIONS AND AVENUES FOR FUTURE RESEARCH

Small organizations in transition environments face liability of origin. In order to overcome it, they can signal two types of legitimacy – functional and relational legitimacy. The goal of the current study is to address two main research questions:

1. What are the dimensions (and corresponding items/signals) of functional and relational legitimacy (for small organizations in transition environments)?

2. Does using signals of specific types of legitimacy (depending on the liability faced) enhance organizational legitimacy?

As it was mentioned in the previous chapter, the dimensions of functional and relational legitimacy were identified and relevant measurements of each dimension were proposed. All the items besides three (quality awards, Western education/experience of founding team members, and website) contributed to their respective latent constructs.

In addition, the results of the study show that the identified dimensions (signals) of functional and relational legitimacy enhance the organizational legitimacy of small organizations in transition environments. This supports the signaling theory of legitimacy, which states that when faced with liabilities, organizations can rely on valid signals in order to communicate their adherence to the stakeholders' expectations. As a result, they expect to receive stakeholders' support. In the particular case of small organizations in transition environments, which face liability of origin, signaling their task-related competencies and reliability as partners helps them achieve more support from interested constituencies.

The chapter is organized as follows: **First**, I provide a discussion on the results of the statistical analysis. **Second**, I present the theoretical and methodological contributions of the study. **Third**, I look at the practical implications for managers of SMEs in

transition environments and public policy. **Forth**, the limitations of the research are discussed followed by the avenues for future research.

1. Discussion of Results

The discussion of the results looks at the measurement models and their respective indicators. Afterwards, the structural model is discussed in terms of the path coefficients of the two independent latent constructs (functional and relational legitimacy) as well as organizational legitimacy – profit-making ability of an organization.

1.1. Functional Legitimacy Formative Latent Construct

In terms of the functional legitimacy construct, it is clear that all of the above-identified indicators besides quality awards (AWARDS) and Western education/ experience of founding team members (WEST) are significant and contribute to the formation of the latent construct. The indicator with the highest weight is own product (OWNPR). This shows that the evaluating audiences place very high importance on the innovative capacity of an organization demonstrated by its ability to develop and market its own product and related services. An organization that offers its own product is expected to be able to provide adequate maintenance services once the product is installed within a company. It is also expected to provide innovative solutions when problems are faced. In addition, based on the responses of several interviewees in the indicator generation stage, a company that offers its own products also demonstrates higher level of involvement (i.e. in marketing the product/service, etc.).

The relative weight of association membership (ASSOC) and prestigious affiliates (PART) is also high showing that clients place high importance on the access to relevant industry information and the competencies granted by prestigious global players. The importance of PART does not depend on the level of operation of the company – local, national or international. All the evaluating audiences have knowledge about the big global players and even if they do not understand the technical aspect of the certificates granted to the employees of the company, the mere

name attached to the certified partnership is a meaningful signal of the possession of certain resources.

In addition, the evaluating audiences place high importance on the prestigious affiliates because they are outside the transition environment. Hence, they are not expected to exhibit opportunistic behavior. Therefore, the certified partnerships the prestigious industry players grant are considered to be valid (and not noisy) signals of the possession of certain task-related resources.

In terms of the manifest variable association memberships ASSOC, it is important to note that it was included in the construct only because it was the only indicator to represent the informational dimension of the functional legitimacy formative latent construct. Half of the industry experts thought that association membership is not important in building the functional legitimacy of an organization. ASSOC is a proxy of an organization being associated with the most important players within an industry, having an access to the newest information and being able to incorporate it in the decision making or product/service creation and offering.

The two indicators, part of the functional legitimacy formative latent construct which are not statistically significant at $p=0,10$ are the number of quality awards (AWARD) and Western education/experience of founding team members (WEST). In fact, only 15 companies (out of 77) reported at least one quality award. The lack of enough observations on this item can explain the fact that it is not statistically significant component of the functional legitimacy formative construct.

One explanation of the low number of quality awards reported is that SMEs simply do not apply for them. The reason is the high level of corruptive practices in granting a product/service award to a company not only in the IT sector but in any sector in a transition economy. The issue was raised several times by the respondents while completing the questionnaire. Some authors state that stakeholders prefer organizations that have been publically evaluated even if the criteria based on which they were evaluated are not completely comprehensive (Wade *et al.* 2006). Nevertheless, the meaning of an award as a valid signal is lost if the evaluating

audiences know that it was not granted based on merit. Hence, the item AWARD is a noisy signal lacking the expected informational value associated with it.

The other indicator part of the functional legitimacy latent construct which is not statistically significant is the Western education/experience of the founding team members (WEST). This indicator is a proxy of the management style. The underlying assumption is that a founding team member with Western or Western-like education will be able to transfer the knowledge and skills acquired at his/her previous employment to the organization which (s)he has established. One explanation why this indicator is that managers without Western and/or Western-like education can behave in a similar way based on vicarious learning or their personality traits.

1.2. Relational Legitimacy Formative Latent Construct

In the relational legitimacy formative latent construct, the indicator with the highest relative weight is the client reputation (CLREP). The current and/or previous clients (and successful outsourcing projects) represent an important signal regarding the worthiness of an organization as a partner. It enhances the trustworthiness dimension of the relational legitimacy construct since it demonstrates that in the past the focal organization has maintained successful relationships with business clients.

The indicator physical footprint (measured by the number of offices and location of headquarters NOFFICE*LOC) also has a high outer weight because the offices provide an opportunity for the clients to contact their providers and ensure them that the company is "there to stay." In many occasions, clients are tricked by fictitious entities supposedly providing certain product/services which rarely have an office. Hence, having an office and this way providing an access point for the clientele is very important for organizations in transition environments where the level of uncertainty is very high.

Clients also place high importance on organizational age (AGE) and certificates (ISO). The two indicators are statistically significant at p=0.01. This is not surprising keeping in mind that age demonstrates that an organization was able to handle the instability in the environment over the period of its existence. Management

certificates, such as ISO, show that the organization is willing to be accountable for its internal processes and procedures.

The only indicator, part of the relational legitimacy construct, which is not statistically significant is the virtual imprint (WEBSITE). It is not significant even at p=0.10. One explanation why this variable was not statistically significant lies in the way it is measured (dummy = 1 if the organization has a website and =0 if the organization does not have a website). A more elaborated measure may have given different results. In example, if the IT firms' websites were evaluated based on the signals they contain, these may have been a significant variable. Even though it is unthinkable that an IT organization will not have a website, it is indeed a fact for some IT firms in Bulgaria. As a general rule, these firms operate on the local environmental layer. In the small worlds of local communities, third-party referrals by a trusted source are much more important than any signal employed by the focal organization.

1.3. Organizational Legitimacy Reflective Latent Construct

In the reflective measurement model of organizational legitimacy, the manifest variables number of employees (EMPLS) and number of clients (NCLNTS) are statistically significant. The third item considered – number of distributors (NDISTR) – was excluded from the analysis due to lack of variance – only 10 out of 77 companies reported having distributors. In fact, I control for the number of employees since they are part of the constituencies with high bargaining power towards the organizations subject of this study. In addition, the number of employees is also a measure of organizational size for technological firms. The relationship size-organizational legitimacy has already been established in the literature (Shane and Foo 1999).

In this case, the number of employees (EMPLS) demonstrates a very high outer weight. One explanation lies in the fact that the IT sector in Bulgaria is highly fragmented and experiencing labor shortage. Hence, organizations that can grow and secure more employees are organizations that have good long-term prospects and are not hesitant to invest in signals.

The item client support (NCLNTS) is statistically significant at p=0,05, which implies that the legitimacy-building efforts of IT firms (in terms of communicating their internal characteristics via observable signals) will grant them the support of clients. It is assumed that the decision of clients to outsource to a particular organization has a very strong legitimating effect since in transition environments there may be many noisy signals.

1.4. Profit-Making Ability Reflective Latent Construct

The reflective latent construct profit-making potential was measured by average fee/hour (AVFEE) and the growth rate (GRWTH). The two indicators are statistically significant at p=0,05.

1.5. Structural Model

In addition, the inner path coefficients of functional and relational legitimacy are positive and statistically significant at p=0,05 (even at p=0,01). This means that signaling functional and relational legitimacy is important for small organizations in transition environments to gain stakeholders' support. Moreover, relational legitimacy shows higher effect size than functional legitimacy. This means that stakeholders place more importance on signals of relational legitimacy rather than functional legitimacy. The explanation lies in the specificities of the transition environment. Many economic actors demonstrate shortsightedness and engage in excessive opportunistic behavior. Therefore, demonstrating the reliability of an organization as a partner is very important and it ensures its long-term success and survival.

In addition, the relationship organizational legitimacy-profit-making ability of the organizations was assessed. According to some authors (Mazza 1999), the ultimate sign of a legitimate organization is its profit-making ability. The inner path coefficient is significant at p=0,05 (even at p=0,01).

Based on the discussion of the results, in the next section I present the contributions of the study. Following the contributions, I discuss the implications, limitations, and avenues for future research.

2. Contributions

The contributions of this study will be regarded in three main areas: theoretical, methodological and practical. I firstly discuss the theoretical contributions, followed by the methodological contributions and at the end the practical contributions will be presented.

2.1. Theoretical Contributions

The main theoretical contribution of the current research lies in the proposed signaling theory of legitimacy. In addition, the study contributes to several other fields, such as the institution-based view of strategy, the literature on transition economies (herein, I use the broader term transition environments), outsourcing, and SMEs. Below, the above-mentioned contributions are discussed in detail.

2.1.1. Signaling Theory of Legitimacy

Based on the signaling theory in economics (Spence 1973, 1974) and the strategic perspective on organizational legitimacy (Ashforth and Gibbs 1990; Dowling and Pfeffer 1975; Pfeffer and Salancik [1978] 2003), herein I propose and test the *signaling theory of legitimacy.* I built the theory on the assumption that any organization that faces a liability (newness, smallness, market newness and origin) can employ valid signals of legitimacy in order to demonstrate its adherence to the stakeholders' requirements and expectations. Based on the use of portfolio of signals, which indeed represents its legitimacy stock, an organization can claim and eventually be granted legitimacy. This way, it can enhance its chances to succeed and survive in the long run.

The processes of legitimacy claiming and legitimacy granting are different. They comprise the communication process between organizations based on shared meaning. The development of shared meaning is a process that corresponds to the process of institutionalization or the creation of institutions (formal and informal) within an environment. Indeed, the signals are institutions and as such, they help the legitimacy-claiming and the legitimacy-granting entities interpret the signals in the same or at least in a similar way (see Fig. 13). Without institutions, the

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communication process between organizations is impeded. Therefore, claiming and granting legitimacy becomes very difficult, if not impossible.
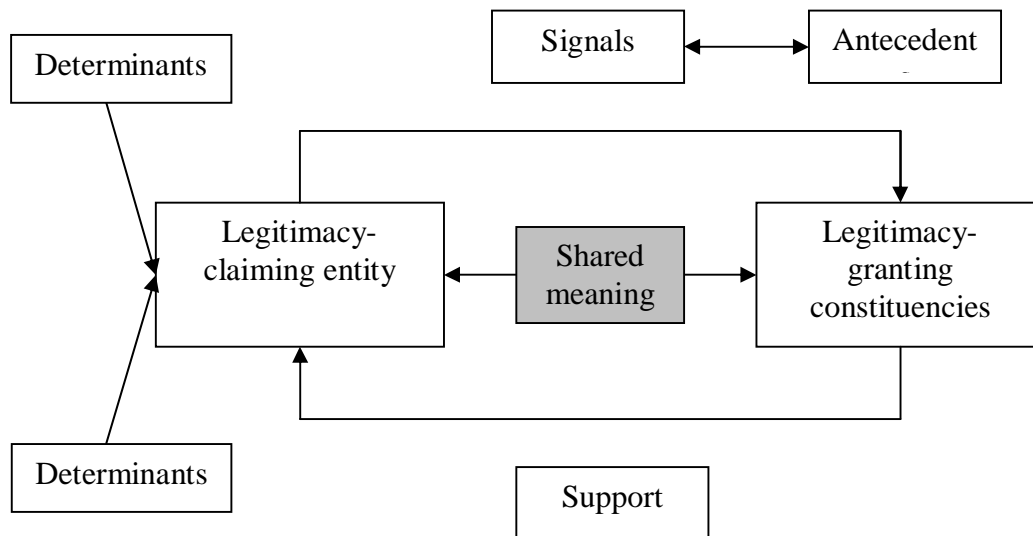
Fig. 13: Signaling Theory of Legitimacy

Based on the above-said, the signaling theory of legitimacy enhances the signaling theory in economics (Spence 1973, 1974). Indeed, the signaling theory in economics (Spence 1973, 1974) assumes stable environment where the sending and the receiving actors have the same or at least similar understanding of the informational content of the signals used. Hence, there are only two requirements for a signal to be valid – 1) observable, and 2) costly to imitate (Spence 1973). Herein, I add a third requirement: the signal has to carry the same or similar informational content (based on the institutions developed) for the sending and the receiving party. In uncertain environments characterized by intensive change processes, the latter is becoming an integral part of the communication process between economic actors.

The signaling theory of legitimacy is important to explain the difficulties organization face when they move from one layer of the environment to another one. In general, organizations evolving on the same environmental layer (international/global, national and local) develop over time the same interpretation of signals based on the interactions with one another. A challenge to the similar interpretation of signals

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occurs when an organization moves from one layer of the environment to another one (i.e. an organization that tries to internationalize its activities – moving from the national to the international/global layer).

In addition, the signaling theory of legitimacy can be used to explain the difficulties organizations face when they operate in highly dynamic and unstable environments as well as environments going through institutional transitions. Such environments experience low level of institutionalization meaning that signals may not be understood the same way by all actors. Also, in such environments, there are many noisy signals. A *noisy signal* is a signal whose informational value is deterred. The noisy signals can occur as a result of the highly opportunistic behavior of the economic actors – i.e. a diploma or an award that was granted based not on merit but on the existing corruptive practices.

In general, signaling theory of legitimacy tries to increase our understanding of how the communication process between the organization and its evaluators can be improved. Even though the role of corporate communications based on mission statements, press releases and other is not underestimated, I do not place the focus on the meaning of words (rhetoric). I rather concentrate on communicating meaning through signals, which is indeed the basis of the signaling theory of legitimacy. The weight evaluating audiences place on the signals is higher than on corporate communications since the former are proxies for certain internal organizational characteristics or processes. Plus, while the corporate communication is fully controlled by the organization, one part of the signals is partially-controlled. The informational content of the partially-controlled signals is more reliable for the evaluating audiences.

In relation to the development of the signaling theory of legitimacy, an enhanced understanding on several related concepts emerges - organizational liabilities, determinants vs. antecedents of legitimacy, and organizational reputation. Below, I present these concepts with their extended meaning.

A) Organizational Liabilities

In general, organizations are prone to signal adherence to the evaluating audiences' expectations when they face liabilities. The liabilities determine not only the need to signal legitimacy but also the type of legitimacy sought. Hence, I attempt to extend the general understanding of the concept of organizational liabilities as well as to explore the relationship between the latter and the legitimacy types sought.

For the purpose of this study, the term *organizational liability* is defined as the perceived misfit with the stakeholders' expectations. The organizational liabilities were grouped into two main categories – *internally-defined liabilities* (based on certain organizational characteristics) and *externally-defined liabilities* (based on environmental specificities). The internally-defined liabilities include *newness* (Stinchcombe 1965) and *smallness* (Freeman, Carroll and Hannan 1983) related to the age and the size of the organization, respectively.

The externally-defined liabilities include market newness (Certo 2003 introduced the term) and origin (Bartlett and Ghoshal 2000). *Liability of market newness* is associated with the perceived misfit with the stakeholders' expectations when an organization moves from one layer of the environment to another one (i.e., from local to national layer), or when an organization enters a new market (i.e., diversification). *Liability of foreignness* (Zaheer 1995) is a type of liability of market newness since it is associated with the discount that the evaluating audiences can place on an organization when moving from the national to the international layer (internationalization).

The second type of externally-defined liability is the *liability of origin* – a term coined by Bartlett and Ghoshal (2000). Liability of origin is related to the discount that the evaluating audiences (both domestic and foreign) can place on an organization due to its context of origin. Environments experiencing profound change and shift from one institutional framework to another one (such as transition environments) represent specific settings where organizations import instability from the environment. Organizations evolving in such environments experience liability of origin.

The concept of organizational liability can be further explored and its content enriched. Furthermore, researchers can study the relationship between the liabilities faced by organizations and the types of legitimacy they attempt to acquire. As an example, herein, I try to develop a relationship between the liability experienced by the organizations under scrutiny (SMEs evolving in transition environments) and the type of legitimacy sought – functional and relational legitimacy. To the extent of researcher's knowledge, this relationship has not been explored yet.

In addition, based on the signaling theory of legitimacy, I distinguish between legitimacy as a process and legitimacy as a condition which can be achieved at one particular point in time. As a process, organizational legitimation has its determinants (Dowling and Pfeffer 1975). And as a condition, organizational legitimacy has its antecedents.

B) Determinants vs. Antecedents of Organizational Legitimacy
The *determinants of organizational legitimacy* are those internal or external (to the organization) conditions that trigger the process of legitimation (see Fig. 13). The *antecedents of organizational legitimacy* are those characteristics of the organization that precede the legitimacy as a condition[60] which can be achieved by an organization at a particular point in time (see Fig. 13). Antecedents are also called "sources" or signals of legitimacy.

The determinants of organizational legitimation can be changing societal norms and values (institutional change), competitive dynamics between the focal organization and other actors functioning in the same field (selection pressures), organization's methods of operation and organization's output (Dowling and Pfeffer 1975). The determinants of legitimacy create liabilities for the focal organization and hence trigger the process of legitimation.

The antecedents of organizational legitimacy (also called sources or signals) as a condition are organizational characteristics based on which an organization can be

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[60] Herein, I think that instead of the term "property" (Dowling and Pfeffer 1975) regarding legitimacy as a characteristic of the organization, it is more appropriate to use the term "condition" as it implies certain dynamic aspects of the status of being legitimate.

evaluated by the external audiences. Legitimacy as a condition is not independent from the process of legitimation. It is in fact, a result of the legitimation process. The determinants of the process of legitimation in fact trigger the process of signal accumulation that can demonstrate the adherence of an organization to the requirements of the evaluating audiences. Consequently, the signals become antecedents of the legitimacy condition.

The signaling theory of legitimacy considers organizational legitimacy as a continuous variable – companies can be compared at any given point in time based on their legitimacy stock. In the extant literature, legitimacy is usually considered a dichotomous variable in comparison to reputation, which is continuous. Hence, the herein proposed theory sheds also some light on the distinction between legitimacy and reputation.

C) Organizational Legitimacy vs. Organizational Reputation

Reputation and legitimacy are not identical concepts (Dacin, Oliver and Roy 2007)[61]. They are overlapping concepts since they represent an assessment by external stakeholders (Deephouse and Carter 2005)[62] or key resource providers (employees, customers, investors, and communities (Fombrun 2001). The two concepts are multidimensional and comprised of a set of organizational characteristics (Deephouse and Carter 2005). While legitimacy reflects the degree to which a firm's products and practices adhere the societal norms, values and beliefs (Rindova *et al.* 2007), reputation is a social comparison between organizations along a set of organizational characteristics (Deephouse and Carter 2005). It contains expectations about the future performance of an organization inferred from its past actions (Weigelt and Camerer 1988).

Even though reputation is perceived to be a result of the process of legitimation (Rao 1994; Zuckerman 1999), for the purpose of this study, reputation is a building block of legitimacy. The reason why organizations first build their reputation before they acquire legitimacy is the lack of established standards and norms (or institutions) in

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[61] According to Dacin, Oliver and Roy, legitimacy is a broader concept.
[62] It is important to note that when formulating their propositions, Deephouse and Carter (2005) assumed that the industry itself is not a subject to legitimacy challenges.

transition environments. In these conditions, it is easier to build reputation based on past performance (previous clients) before building legitimacy. Since reputation influences the perception of trustworthiness of an organization (Dollinger, Golden and Saxton 1997), it enhances its legitimacy since trustworthiness is one of the identified dimensions.

The signaling theory of legitimacy was tested on small organizations evolving in transition environments and trying to obtain long-term outsourcing contracts. Based on the specificities of the environment in which they operate, these organizations face liability of origin. As it was mentioned earlier, the liability experienced by the organizations will make them seek a particular type of legitimacy. The legitimacy typology, proposed herein meets in a better way the needs of the organizations under scrutiny than the existing typologies (i.e. regulatory, normative, and cognitive as of Scott 2001). This typology is one of the main contributions of the study. It consists of functional and relational legitimacy. The two types of legitimacy are not only defined but their relevant dimensions and corresponding items (signals) are also identified.

2.1.2. New Legitimacy Typology - Functional and Relational Legitimacy

The new legitimacy typology in fact corresponds to the main risks perceived by the outsourcers when choosing an outsourcee – the risk of the outsourcee's deficient capabilities (addressed by the concept of *functional legitimacy*) and the risk of overdependence on the outsourcee (addressed by the concept of *relational legitimacy*) (Quélin and Duhamel 2003). Functional legitimacy is related to whether an organization meets the requirements in terms of resources and capabilities and addresses the outsourcer's concern regarding deficient capabilities. And relational legitimacy reflects whether an organization is a reliable partner and addresses the outsourcer's concern regarding the dependence on the outsourcing service provider. Functional and relational legitimacy are perceived as building blocks of the organizational legitimacy concept.

In addition, the two types of legitimacy are perceived to be independent from one another – an organization may have all the resources and capabilities necessary to perform a task (functional legitimacy) but this does not imply that an organization is reliable as partner (relational legitimacy) and vice versa.

Organizational legitimacy is a multi-dimensional construct (Deephouse and Carter 2005). The functional and relational legitimacy are also multi-faceted concepts. Based on a qualitative study comprised of literature review, analysis of the writings of organizations (brochures and websites) and interviews with industry experts and academics, the dimensions of functional and relational legitimacy were identified and relevant items (signals) to measure them were chosen.

Functional legitimacy is comprised of the following dimensions: informational, managerial, organizational, innovative and symbolic reputational competencies of an organization. The relational legitimacy is comprised of the following dimensions: trustworthiness, accountability, stability, and visibility.

The signaling theory of legitimacy extends the strategic perspective on legitimacy (Ashforth and Gibbs 1990) as well as the institution-based view on strategy (Peng *et al.* 2008).

2.1.3. Strategic Management and Institution-Based View on Strategy

Valid signals of legitimacy are organizational characteristics that are observable, costly to imitate and for which there is a shared meaning between the sending and the receiving party. It is in the discretion of the focal organization to build and manage its portfolio of signals. This way, the organization has an active role in choosing among many alternative signals. The challenge is to pick the most appropriate signals, which implies very good knowledge of the evaluating audiences' expectations and requirements.

In addition, the study adds to the institution-based view on strategy since the latter looks at the importance of the relationship between institutions and organizations (Peng *et al.* 2008). As it was already mentioned, the transition environment is immensely different from that of the developed economies. This affects the relationship between the latter and the organization. Organizational legitimacy exists on the borderline between the environment and the organization and it reflects the dynamism of the relationship between the two. The mere understanding of the legitimacy concept when applied to transitional contexts changes - herein, I perceive it

as being a continuous variable and compare organizations in terms of their legitimacy stocks while in institutionally-developed environments, legitimacy is considered dichotomous – organizations are either legitimate or not.

In addition, the study contributes to the literature on outsourcing and transition environments, including the research on small organizations evolving in transition environments. In the next sections, these contributions are presented.

2.1.4. Outsourcing

Even though the current study looks at the outsourcee's point of view, it sheds some light on the process of outsourcing partner selection. Besides de Fontenay and Gans (2008), who looked at the dichotomous choice between outsourcing to an established company or an independent company, to the extent of researchers' knowledge, there are still no empirical studies done on partner selection in outsourcing arrangements. The results of the study show that organizations that signal their functional and relational legitimacy receive higher support from relevant stakeholder groups. The importance of relational legitimacy for organizations evolving in transition environments is higher in comparison to the functional legitimacy meaning that evaluating audiences place more importance on the reliability of the partner rather than on its task-related competencies.

Future studies in the outsourcing literature can focus on the partner selection in outsourcing arrangements. They can look at the stages of the evaluation process (Power, Desouza and Bonifazi 2007) and see how the decision on a service provider is made at every stage of the process. More specifically, the studies can look at the evaluation criteria and measure their relative weight. This way, the other side of the communication process between the sending party (outsourcee) and the receiving party (the outsourcer) can be examined.

2.1.5. Transition Economies. SMEs in Transition Economies

The research contributes to the literature on transition environments, including transition economies. In particular, this study looks at the second stage of the transition process characterized by some level of maturation of the market-based

institutions (Peng 2003) and tries to identify some challenges organizations face during the late phase of transition.

The study also contributes to the literature on small organizations in transition economies. Some authors mentioned that there is almost no research regarding the challenges faced by SMEs in emerging (including transition) environments (Peng *et al.* 2008). Typically, transition economies rely on the growth of SMEs in order to spur economic growth (Peng 2000b). Even though small organizations are very important for the economic development, little is known on what distinguishes more successful small ventures from the less successful ones, especially in the transition context (Danis, Chiaburu and Lyles 2010). Based on the signaling theory of legitimacy, this research provides an attempt to shed some light on what makes some small organizations more successful than others in the context of institutional upheaval (Newman 2000).

The study looks at the impact of legitimacy on the profit-making ability of an organization. The results show that the higher the legitimacy stock of an organization, the higher its profit-making ability. Hence, legitimacy is important to be pursued by small firms in transition environments since this can help them assure higher stakeholder support and eventually higher profit-making potential.

Besides the theoretical contributions, the study has several methodological contributions, regarded below.

2.2. Methodological Contributions

The methodological contributions of the current research consist of the way the concept of organizational legitimacy has been operationalized as well as the statistical technique used to test the research model, namely PLS. These contributions are discussed below.

2.2.1. Organizational Legitimacy – Measurement Models

In most of the extant studies, legitimacy is measured in a unidimensional manner. In some cases, two or more legitimacy types are identified and each type is measured by one measurement (i.e. Deephouse and Carter 2005). I propose first-order formative

latent constructs (under the PLS structural equation modeling technique) in order to identify and quantify all dimensions of functional and relational legitimacy – the two building blocks that construct organizational legitimacy. Hence, I tried to follow the suggestions of Deephouse and Carter (2005) that the perfect measure of legitimacy has to reflect all of its dimensions.

Moreover, the type of measurement models used (formative) gives the opportunity to match the legitimacy claims of organizations (via the functional and relational signals) and the legitimacy grants based on the support of the stakeholder groups in the concept of organizational legitimacy. This would not have been possible with the traditionally used reflective latent constructs.

In addition, most of the previous studies on organizational legitimacy, perceive it as being a dichotomous variable – an organization is either legitimate or it is not at a particular point in time (Ruef and Scott 1998). Herein, I propose to look at organizational legitimacy as being a continuous variable. This means that organizations can be compared in terms of their legitimacy – some will have more than others based on the characteristics possessed (or their legitimacy stock). I measured organizational legitimacy by looking at the support of the most important stakeholder groups – the clients and the employees.

Another methodological contribution of this study is the usage of PLS as a statistical technique to test the proposed research model.

2.2.2. Strategic Management - PLS SEM Technique

In addition, by using PLS software package, this research contributes to the studies in strategic management that employ this variance-based SEM technique. Even though PLS is a well-established SEM technique (Johansson and Yip 1994), in the field of strategic management there are still only few studies that use it (Birkinshaw *et al.* 1995; Cool *et al.* 1989; Fornell *et al.* 1990; Johansson and Yip 1994; Tsang 2002). Hence, with this research, we contribute to the growing number of articles employing PLS. One of the advantages of this SEM technique is that it accommodates small samples as well as it gives the researchers the opportunity to test formative latent constructs, not possible with the covariance-based techniques (i.e. LISREL).

In addition to the theoretical and methodological contributions, this study has several practical contributions, which are explained below.

2. 3. Practical Implications

The current research has important practical implications for the managers of small organizations evolving in transition environments as well as the public policy agents.

2.3.1. Implications for Managers of Small Organizations

As it was previously-mentioned, one of the requirements of valid signals of legitimacy is that they have to be costly to obtain in order to prevent imitation. The resource endowments of all organizations and especially the small ones evolving in transition environments are limited (Hitt *et al.* 2000). Hence, their managers have to be aware which signals are valued by the various stakeholder groups, especially their clients (one of the main evaluating audiences in transition environment) and try to acquire and consequently demonstrate them in order to be granted legitimacy.

Even though some interviewees in the process of qualitative data collection expressed their concern regarding the way relational legitimacy can be measured, they all agreed with the fact that it is very important to be communicated to relevant stakeholder groups. Based on the results of the analysis, signals of relational legitimacy demonstrated better relative weight in comparison to the signals of functional legitimacy. Hence, demonstrating reliability as a partner is more important than demonstrating the possession of resources (which also came to be statistically significant). A potential explanation of this is the proliferation of the opportunistic behavior by economic actors in transition environments. This is important to be known by the managers of small organizations since not all of them realize the importance of demonstrating their relational legitimacy, such as in example, clients' reputation based on references.

Besides clients support, we also looked at the support provided by employees. As an employer, an organization also has to demonstrate the access to task-related resources and competencies as well as its reliability. The market was on the constant growth

before the Financial Crisis. In the highly fragmented sectors with labor shortage, attracting employees becomes important for an organization in order to ensure that the projects will be completed on time.

In addition, managers of small organizations evolving in transition environments tend to undermine certain signals – i.e. association memberships. Based on the results, this signal was highly valued by the evaluating audiences showing that having an access to the newest information within a particular sector is important for interested stakeholders.

2.3.2. Implications for Public Policy Agents

Since many SMEs in transition environments are backward and occupy protected niches (Dallago and McIntyre, 2003), public policy (such as government agencies or cluster associations) can stimulate them to identify and adopt valuable signals in order to gain access to global markets. In example, Capability Maturity Model Integration (CMMI) - a specific process standard in the IT industry – is promoted by the European Software Institute, which has branches in many European countries. One of the main purposes of this institute is to disseminate information and assist small IT organizations adopt CMMI process standard.

Besides the contributions, the current study has several limitations, some of which present interesting avenues for future research.

3. Limitations and Avenues for Future Research

Even though some areas for future research were already presented in the section above, herein I try to outline several important limitations of the current study. Some of them also represent avenues for future research.

3.1. Cross-Sectional Design of Survey

One of the limitations of this research is the type of data collected – cross-sectional. Indeed, I compare companies along several dimensions in one particular point in time. Even though the research design is based on a structured questionnaire as a data-

collection instrument (Stevens *et al.* 2006), it does not provide a dynamic examination of the phenomenon under scrutiny. Studies based on cross-sectional data fail to provide "temporal benchmarks for organizational transformation" (Newman 2000: 616). Therefore, the results may be valid at a given point in time but may not hold longitudinally (Peng 2003).

In addition, the cross-sectional design of the surveys relies on the memories of the respondents (Stevens *et al.* 2006), which sometimes can lead to inaccurate answers. In this case of the legitimacy challenges faced by SMEs in transition environments, a longitudinal study can capture the process of signals accumulation over time.

3.2. Type of Outsourcing Arrangements

For the purpose of this study, I do not distinguish and control for the type of the outsourcing arrangement from the outsourcer's point of view as well as from the outsourcee's point of view. As it was mentioned earlier, from the outsourcer's point of view, the arrangements can be on-site or off-site, substitution-based or abstention-based and based on purchasing, subcontracting or strategic outsourcing. I also do not distinguish between whether the outsourcing arrangement is capability-enhancing or performance-enhancing from the point of view of the outsourcee as well as whether it is on local, national, and/or international level. Future studies can control for the type of outsourcing arrangement since the latter may affect the signals used by organizations in order to communicate their legitimacy.

3.3. Layers of the Environment

One of the limitations of this study is the fact that it does not regard the specificities of the evaluating audiences on each layer of the environment (local, national, international) (see Fig. 14). Testing the model on three sub-samples comprised of companies functioning only on the local, national, and international level was not possible due to problems with the measurement models of the latent constructs. Some indicators turned to be negative implying that they do not contribute to the latent constructs they are assigned to. Negative indicators show problems with the dataset or multicollinearity issues which can be a result of small sample size. When multicollinearity exists, indicator weight estimates are distorted and researchers have to be careful when interpreting the results (Henseler *et al.* 2009).

Nevertheless, some results based on the exploratory study show interesting findings for organizations evolving on the different layers of the environment. Some signals are not meaningful on certain environmental layers – i.e. local companies do not aim at getting quality awards since they place very little importance on it. In addition, even if they are in the IT sector, not all of them maintain a website. Based on some tests, functional legitimacy is much more important for companies evolving on the international layer than the relational legitimacy. For companies on the national layer, it is the opposite.

Hence, a future study can control for the layer of the environment on which the focal organization functions – *internal, local competitive, national* and the *global marketplace* (see Fig. 14) (Thomas, Pollock and Gorman 1999).
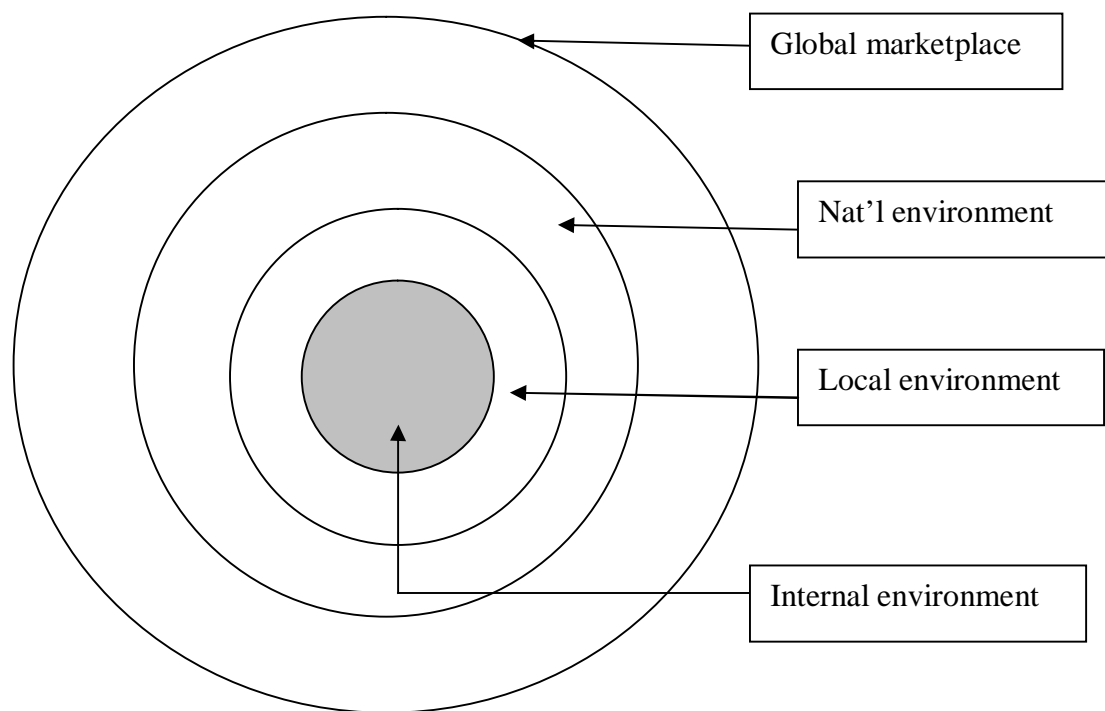
Fig. 14: Layers of the Environment (Thomas *et al.* 1999)

Controlling for the environmental layer can produce interesting results because of several reasons. First, each layer consists of different audiences and their importance may vary – i.e. on the local layer of the environment, due to the dense social networks, the local community is a relevant legitimacy-granting audience providing

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word-of-mouth information (third-party signals) regarding the organizations under scrutiny. The community is not relevant on the national and international layer of the environment, or at least not to the same extent.

Second, even within the same stakeholder group (i.e. clients) there can be different expectations regarding the qualities of a potential partner on the different environmental layers. More importantly, they can rely on different signals in order to make their decisions, or allocate different weight on the signals. In example, a large number of companies operating on the local layer of the environment do not maintain a website since their potential clients in most of the cases make their decisions based on third-party referrals. At the same time, maintaining a good quality website is very important for organizations engaged in international outsourcing.

Hence, a future study can examine the differences between the requirements and the expectations of the evaluating audiences at the different layers of the environment. The study can also look at the importance the various stakeholder groups place on different signals at each layer. This is essential not only for the managers operating on one layer of the environment but also for the managers of organizations trying to shift layers (i.e. moving from national to international layer).

The layers of the environment can be related to the one of the typologies used to classify the outsourcing arrangements – domestic, foreign and global outsourcing arrangements based on the location of the outsourcer and the outsourcee (Murray and Kotabe 1999).

3.4. Measurement of Organizational Legitimacy

Another limitation of this study is that I considered all the specificities of the outsourcing markets (uncertain, reputational and non-commodity) besides the fact that they are relational markets. This has an implication on the way the dependent variable organizational legitimacy should be measured. The clients are one of the important legitimacy-granting stakeholder groups. The variable is measured as the number of current clients. But I did not consider the number of recurrent clients, which has an even higher legitimating effect on the focal organization.

3.5. Signaling Theory of Legitimacy

Future studies can test the signaling theory of legitimacy in different contexts – i.e. compare organizations evolving in transition environments and in developed economies, or organizations that evolve in different type of transition environments (i.e. Eastern Europe vs. China). Although transition economies exhibit similar economic and institutional characteristics, there are many differences among them – the social norms, culture, level of business and political risks (Acquaah 2007; Chikan and Demeter 1995). Hence, a comparative study may yield interesting results which can enhance the theory building efforts.

It will be also interesting to test the theory for large organizations evolving in transition environments and see whether they utilize the same or different signals in comparison to small organizations. The role of organizational size is very important since by itself size has a very strong legitimating effect on a particular organization.

Moreover, for the purpose of this study, I look at small organizations in the B2B market of outsourcing services. Organizations operating in the B2C markets most likely have to demonstrate different types of legitimacy since the needs and requirements of the final consumers are different in comparison to the expectations of the outsourcers. One has to keep in mind that the final consumer in B2C settings does not have the same bargaining power. Therefore, it is interesting to examine whether in transition settings, organizations in B2C markets consider their clients as being one of the most important legitimacy-granting audiences at all.

In addition, signaling theory of legitimacy can be tested on organizations facing different types of liabilities – i.e. liability of market newness for an organization moving from one layer of the environment to another one or from one market to another one (diversification strategy). Relevant legitimacy typologies might be also developed in order to reflect in a better way the different organizational liabilities.

An example of a different typology is imported versus domestic legitimacy. Imported legitimacy will be based on signals that originate outside of the transition environment (i.e. certified partnerships with global players, reputation of foreign clients) while domestic legitimacy is based on signals that originate within the transition

environment (i.e. quality awards from domestic competitions, domestic clients). This is an alternative way to address the liability of origin faced by organizations evolving in transition environments. The dimensions of these types of legitimacy can be identified and test whether the imported legitimacy will have higher effect size in comparison to the domestic legitimacy or vice versa. A future research can also control for the layer of the environment on which the evaluating audiences are located and whether they will give a priority to domestic or imported signals.

The role of meaning construction which is the basis for the communication process between organizations can also be regarded in future studies. As it was already mentioned, the shared meaning is built on formal and informal institutions. As it was said it is constructed based on the same (or similar) interpretation of signals. The issue is whether organizations on the different layers of the environments "speak the same language" or have the same or similar interpretation of the signals used.

To conclude, the value of the current research lies in proposing and testing the signaling theory of legitimacy by looking at the particular case of small organizations evolving in transition environments. The proposed theory is a fertile research area, which presents an opportunity to enhance our understanding of the challenges organizations in unstable contexts face and some actions that can be undertaken in order to overcome them.

GENERAL CONCLUSION

The study proposes a signaling theory of legitimacy which states that when faced with a liability, an organization can use valid signals in order to demonstrate (communicate) its adherence to the requirements and expectations of relevant stakeholders' groups. Signals are the basis of the inter-organizational communication. Indeed, this communication process resembles the non-verbal way of communicating which constitutes around 90% of the communication between individuals. The analogy made here is that signals are part of the "non-verbal" communication between organizations, the "verbal" one being corporate communications (i.e. mission statements, press releases, etc.). As the larger part of the communication between individuals consists of non-verbal signaling, similarly most of the communication between organizations is related to the usage of organizational characteristics with certain informational content (or signals). Hence, depending on the evaluating audience regarded (i.e. clients, suppliers, ultimate consumer, government, etc.), an enhanced understanding of the role of signal in the inter-organizational communication can be helpful in fields, such management, marketing, advertising, etc.

Signaling is particularly important in contexts characterized by high level of uncertainty and instability meaning environments with poor level of institutionalization (i.e. transition and emerging economies). In such environments, the meaning of signals as institutions is not fully established. From one side, the need to use signals/institutions is very high (due to the existing information asymmetry between actors), on the other side – a shared meaning of their informational value is not completely formed. In addition, in such environments due to the low level of institutionalization, many noisy signals exist. This creates an immense difficulty for the actors operating in poorly-institutionalized contexts based on: 1) lack of complete understanding of the signals employed, and 2) the difficult choice on which signals to use in order to communicate the desired organizational characteristics. Additional research can look at the way signals are chosen, the way the meaning is formed as well as the role of imported (from more stable environments) vs. domestic signals.

In addition, our understanding of institutions is still very limited (Williamson 2000). By studying signals and the signaling between organizations we can indeed understand the institutions in a better way. Moreover, the development of shared meaning between the sending and the receiving party coincides with the process of institutionalization or institution formation. Hence, studies regarding signals and signaling can be helpful to enrich organization theory in general and institutional theory, in particular.

The study also demonstrates that one has to be careful when applying theories and concepts to contexts characterized by high level of uncertainty and instability. Most of the existing theories have been developed in the stable contexts of the developed economies (Peng *et al.* 2008). Hence, when applied to poorly-institutionalized contexts, they are either not valid or they need to be adjusted. In example, for the purpose of this study, the concept of organizational legitimacy is employed to examine the dynamic relationship organization-environment. It is clear that the concept has different nuances when applied to organizations evolving in transition environments. Herein, organizational legitimacy is perceived to be continuous and being able to be established on organizational level during the second phase of the transition process. In addition, I could not use the commonly-accepted legitimacy typology. Hence, a new typology of legitimacy was proposed in order to meet in a better way the needs of organizations in emerging contexts.

In general, signaling is an important way to communicate between organizations and other social structures. An enhanced view on this type of communication may shed some light on the behavior of economic actors as well as on the ways the communication can be improved. Signaling in unstable environments is an important aspect of the process of institution creation.

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APPENDICES

Appendix 1: Characteristics of Global Industries (Inkpen and Ramaswamy 2006)

	CHARACTERISTICS OF GLOBAL INDUSTRIES
1	Industry products are sold internationally.
2	Companies have the ability to serve international customers.
3	Companies use coordinated (but not necessarily the same) approaches throughout the world.
4	The same group of competitors is present in all major markets.
5	Competition takes place on a global scale.
6	Strategic positioning in one market fundamentally affects position in other markets.
7	Cross-subsidization of markets by major competitors is common.
8	Headquarters are not country-specific.
9	Headquarters management reflects the international makeup of the workforce.
10	Value-chain activities are performed at optimal locations.
11	Companies rely on inputs sourced from around the world.
12	Companies combine advantages created in the domestic arena with others that result from doing business in many nations (e.g., economies of scale and transferable brand reputation).
13	Leading companies create the same type of advantage in multiple markets (e.g., a firm with differentiation advantage in country A has the same advantage in country B, C, etc.)

Appendix 2: Global Ranking of Top Locations for Off-shoring in 2005 (The Economist Intelligence Unit)

Global ranking of top locations for offshoring		
	Rank	Score
India	1	7.76
China	2	7.34
Czech Republic	3	7.26
Singapore	4	7.25
Poland	5	7.24
Canada	6	7.23
Hong Kong	7	7.19
Hungary	8	7.17
Philippines	9	7.17
Thailand	10	7.16
Malaysia	11	7.13
Slovakia	12	7.12
Bulgaria	13	7.09
Romania	14	7.08
Chile	15	7.08
USA	20	6.91
UK	29	6.60
Source: Economist Intelligence Unit, 2005		

Appendix 3: Economist Intelligence Unit e-readiness Rankings, 2006.

	Overall score	Connectivity	Business environment	Consumer and business adoption	Legal and policy environment	Social and cultural environment	Supporting e-services
Category weight		*0.25*	*0.20*	*0.20*	*0.15*	*0.15*	*0.05*
Estonia	6.71	6.60	7.81	5.60	6.96	6.40	7.50
Slovenia	6.43	5.90	7.45	5.45	6.50	6.80	7.50
Czech Rep.	6.14	4.90	7.39	6.00	6.84	5.60	7.50
Hungary	6.14	4.80	7.34	5.85	6.86	6.00	7.50
Poland	5.76	4.30	7.28	5.05	6.46	5.80	7.50
Slovakia	5.65	4.05	7.35	4.50	6.38	6.40	7.00
Lithuania	5.45	4.65	7.28	3.85	5.99	5.40	7.00
Latvia	5.30	3.95	7.21	3.85	6.09	5.60	7.00
Bulgaria	**4.86**	**3.85**	**6.72**	**3.30**	**5.71**	**5.00**	**5.75**
Turkey	4.77	3.60	6.68	4.35	4.97	4.40	5.25
Romania	4.44	2.90	6.36	2.90	5.68	4.80	5.75
Russia	4.30	3.45	6.16	2.60	4.01	5.40	5.50
Ukraine	3.62	2.50	5.46	1.85	3.85	4.80	4.75
Kazakhstan	3.22	2.10	5.37	1.95	3.42	3.60	3.50
Azerbaijan	2.92	1.85	5.54	1.80	2.68	2.80	3.25

Appendix 4: Average Net Monthly Salary (in euro, without bonuses).

Position	Average Net Monthly Salary (in euro, w/o bonuses)
Technical Director	€ 878
IT Director/CIO	€ 713
Manager of IT Company	€ 651
Marketing/PR Specialist	€ 590
Teacher in Informatics/ Lecturer	€ 513
Chief Security Officer	€ 513
Project Manager/ Team Leader	€ 472
Trade Rep/ Business Consultant / Sales Consultant	€ 462
System Administrator/Support/Helpdesk/Technical Assistant	€ 441
Software Developer/ Software Engineer	€ 436
Network Engineer	€ 421
Communications Specialist	€ 405
Web developer / Web designer	€ 349
Hardware Expert	€ 328

Appendix 5: Five-point Likert scale measurement of administrative and product-related innovativeness (Luk *et al.* 2008)

Administrative Innovativeness

1. We are more innovative than our competitors in deciding what methods to use to achieve our targets and objectives.
2. We are more innovative than our competitors in initiating new procedures or systems.
3. We are more innovative than our competitors in developing new ways in achieving our targets and objectives.
4. We are more innovative than our competitors in initiating changes in the job contents and work methods of our staff.

Product-Related Innovativeness

1. The degree of innovation in our products and services.
2. The uniqueness of our products and services.
3. The degree of customization to individual customer requirements.

Appendix 6A: Body of e-mail in Bulagrian

Здравейте Г-жо/Г-н [въведете името на мениджъра или собственика на фирмата],

Казвам се Олга Иванова и правя проучване на български фирми, които са част от ИКТ (Информационни и Комуникациони Технологии) сектора. Всъщност, анкетата се провежда от две френски висши учебни заведенния *Université du Sud Toulon Var (USTV)* и *EDHEC Business School* и е част от моята докторска дисертация. Темата е "Източници на легитимност за малки и средни предприятия в икономики в преход" или кои фактори помагат на фирми като Вашата да получават бизнес и/или корпоративни клиенти.

До момента, анкетата са попълнили [въведете броя на фирмите] фирми от българския ИКТ сектор. Вашата фирма [въведете името не фирмата] е важна за проучването защото специализирате в и аз бих се радвала ако се съгласите да попълните прикачения въпросник. Моят научен ръководител Jean-Luc Arrègle (jean-luc.arregle@edhec.edu) и аз Ви гарантираме конфиденциалността на предоставената информация. Тя няма да бъде изнесена никъде с изключение на обобщените резултати, които ще бъдат публикувани в научни издания.

Това е едно независимо проучване и ако резултатите от него представляват интерес за Вас, бих могла да Ви ги изпратя на посочен е-мейл адрес.

Благодаря Ви!

Олга Иванова
Ph.D. Candidate
Université du Sud Toulon Var &
EDHEC Business School
FRANCE

Subject: USTV & EDHEC Business School – Проучване

Appendix 6B: Body of the e-mail in English

Hello Mr./Ms. [insert the name of the manager/owner of the company] ,

My name is Olga Ivanova and I'm conducting a research of Bulagrain companies, which are part of the ICT (Information and Communication Technologies) sector. In fact, the survey is done by two French higher education institution *Université du Sud Toulon Var (USTV)* и *EDHEC Business School* and it is part of my doctoral dissertation. The topic is "Sources of legitimacy for small- and medium-size enterprises in transition economies" or what are the factors that help companies like yours to get business and/or corporate clients.

Up to now, the survey was filled by … [insert the number of companies] companies from the Bulagrian ICT sector. Your company [insert the name of the company] is important for this research and I'd be happy if you agree to fill out the attached quationnaire. My thesis director Jean-Luc Arrègle (jean-luc.arregle@edhec.edu) and I guarantee you the confidentiality of the information provided. It will not be published anywhere besides the processed results, which we would like to publish in academic journals.

This is an independent study and if the results are of interest to you, I could send them at an indicated e-mail addresses.

Thank you!

Олга Иванова
Ph.D. Candidate
Université du Sud Toulon Var &
EDHEC Business School
FRANCE

Subject: USTV & EDHEC Business School – Survey

Appendix 7A: Questionnaire in Bulgarian language

ПРОУЧВАНЕ

ИЗТОЧНИЦИ НА ЛЕГИТИМНОСТ ЗА МАЛКИ И СРЕДНИ ПРЕДПРИЯТИЯ В ИКОНОМИКИ В ПРЕХОД: БЪЛГАРСКИЯТ СЕКТОР ЗА ИНФОРМАЦИОННИ И КОМУНИКАЦИОННИ ТЕХНОЛОГИИ (ИКТ)

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Указания

Уважаеми Господине/Госпожо,

Вашето мнение е много важно за успеха на това проучване. За целта, ако е възможно, моля отговорете на <u>всички</u> въпроси в анкетата. Проучването е с чисто академична цел. Вашата анонимност и конфиденциалността на предоставената информация са гарантирани.

Моля, обърнете внимание, че всеки път, когато въпросът се отнася за ‘договори’ или ‘клиенти’, се имат предвид бизнес клиенти (B2B). Договорите с крайни клиенти (B2C), макар и важни, не се разглеждат в това проучване.

Една част от въпросите се отнасят за ‘чуждестранни’ клиенти. Категорията <u>не</u> включва клонове на чужди фирми в България.

Благодарим Ви!

Въпросник

1. Какво е разпределението на приходите (в %) по дейности във вашата фирма?

    a. Доставка на хардуер ……………………………….…………%
    b. Продажба и разпространение на софтуер ………….…………%
    c. Услуги ………………………………………………...........…%
    d. Аутсорсинг на ИТ услуги[63]…………………………….………%
    e. Други……………………………………………….…………%

2. В сферата на услугите, в кои от посочените по-долу области специализира вашата фирма? *Моля, отбележете дали определена услуга е предназначена за вътрешния (български), за външния (чуждестранен) пазар, или и за двата пазара.*

Вид на услугата	Български Пазар	Външен пазар
Управление на бизнес процеси		
CAD/CAM/CAE услуги		
Call центрове – изграждане, подръжка и услуги		
Компютърна анимация и графика		
Управление на връзките с клиента		
Съхранение на данни и бизнес интелиджънс		
*e*Business подръжка и услуги		
Инжинерингови услуги		
Enterprise Resource Planning *(ERP)*		
Географски информационни системи		
Интернет – доставка и поддръжка		
Информационна сигурност		
ИТ консултански услуги		
ИТ обучение		
Linux базирани работни станции и сървари		
Мултимедийни услуги		
Мрежи – изграждане и управление		
Разработване на софтуер и услуги по поръчка		
Системна администрация		
Системна интеграция		
Сертификациони услуги по управление на качеството		
Уеб услуги		
Други *(моля уточнете)*		

3. Вашата фирма има ли собствени разработки на продукти в сферата, в която специализирате?

---

[63] Аутсорсинг на ИТ услуги се отнася за услуги, които се предоставят на клиенти извън територията на България.

Да   Не

4. Фирмата ви получавала ли е някакво отличие за ваш продукт и/или услуга?

    Да   Не

    *Ако отговорът е **Да**, моля уточнете каква е наградата*

    _____
    ___

5. Какво е разпределението на приходите (в %) на вашата фирма в зависимост от географското местоположениие на клиентите ви?

    a. България……………………………………………….…....……%
    b. Европейски съюз (ЕС)[64]…………………………………………%
    c. Северна Америка (САЩ и Канада)…….……………...……...%
    d. Азия…………………………………………………..……….%
    e. Африка…………………………………………………………%
    f. Австралия и Нова Зеландия…………………………………%
    g. Други европейски страни[65] (извън ЕС)…………….………%

6. Вашата фирма има ли сертификат ISO 9001:2000? *Ако отговорът е да, моля посочете в коя година сте придобили сертификата.*

    a. Да, фирмата ни придоби сертификата ISO 9001:2000 в ……….. година
    b. Не, фирмата няма сертификат ISO 9001:2000

7. Вашата фирма има ли сертификат CMMI (Capability Maturity Model Integration)? *Ако отговорът е да, моля посочете в коя година сте придобили сертификата.*

    a. Да, фирмата ни придоби сертификата CMMI, в ………. година
    b. Не, фирмата няма сертификат CMMI

8. Вашата фирма е сертифициран партньор на кои от изброените по-долу компании? Моля, отбележете нивото на партньорство. Съгласно целта на това проучване, ние приехме следните категории:

---

[64] Европейският съюз включва: Австрия, Белгия, България, Кипър, Чехия, Дания, Естония, Финландия, Франция, Германия, Гърция, Унгария, Ирландия, Италия, Латвия, Литва, Люксембург, Малта, Холандия, Полша, Португалия, Румъния, Словакия, Словения, Испания, Швеция, и Великобритания.
[65] Тази група страни включва: Албания, Армения, Азербайджан, Беларус, Босна и Херцеговина, Хърватска, Грузия, Исландия, Казахстан, Македония, Молдова, Монтенегро, Норвегия, Русия, Сърбия, Швейцария, Турция, Украйна.

- **регистриран партньор** (най-ниското ниво),
- **сребърен партньор** (второто ниво),
- **златен партньор** (най-високото ниво) и
- **друг** (моля отбележете типа на партньорство).

Ако компаниите, с които имате партньорства не са отбелязани, моля допълнете списъка с имената им и типа на партньорство.

Име на компанията	Ниво на сертификата			
	Регистриран	*Сребърен*	*Златен*	*Друг (моля отбележете)*
3Com Corporation				
Adobe				
Apple				
Autodesk				
Cisco				
Dell Computers				
Hewlett Packard				
IBM				
Lenovo				
Macromedia				
Microsoft				
Novell				
Oracle				
Sun Microsystems				
Symantec				

9. В кои от асоциациите в ИКТ (Информационни и Комуникационни Технологии) сектора членува вашата фирма?

   a. Нашата компания не е член на ИКТ асоциация
   b. Нашата компания е член на асоциации, които не са част от ИКТ сектора
   c. Нашата компания е член на следните ИКТ асоциации (*моля, отбележете с кръгче всички асоциации, в които членува вашата фирма*).
      i. **БАИТ** (Българска асоциация по информационни технологии)
      ii. **БАСКОМ** (Българска асоциация на софтуерните компании)
      iii. **ББКЕПИ** (Българска браншова камара – електронна промишленост и информатика)
      iv. **БУА** (Българска уеб асоциация)
      v. **ЦПИКТ** (Център за право в информационните и комуникационните технологии)
      vi. **КИС** (Клуб "Иновационни сценарии")

vii. **Фондация "Електронно здравеопазване България"**
viii. **Интернет общество България**
ix. **Сдружение Интерспейс**
x. **НМБР** (Национална мрежа за бизнес развитие)
xi. **Национална изследователска мрежа**
xii. **Високотехнологичен бизнес инкубатор-Габрово**
xiii. **Високотехнологичен бизнес инкубатор-Варна**
xiv. **Асоциация „иЦентрове"**
xv. **СЕК** (Сдружение за електронни комуникации)
xvi. **Друга…………………………….**

10. Какъв е броят на мениджърите-основатели във фирма ви? _____

11. Колко от мениджърите-основатели във фирмата ви имат чуждестранно образование? _____

12. Колко от мениджърите-основатели във фирмата ви имат опит в чуждестранни фирми? _____

13. Колко от мениджърите-основатели във фирмата ви имат бизнес или икономическо образование? _____

14. Какво е разпределението на вашите клиенти в зависимост от начина на получаване на договора с тях?
    a. Препоръка от трета страна (напр. бивш клиент)
       ……….…%
    b. Социални контакти на мениджърите-основатели
       ……….…%
    c. Представяне на фирмата в специализирани списания, форуми и каталози
       ……….…%
    d. Участие в търгове и/или конкурси
       ……….…%
    e. Други……………………………………………..
       ……….…%

15. Колко референции от минали и/или настоящи бизнес клиенти можете да представите на потенциални бъдещи клиенти? _____

16. Можете ли да посочите 5 от вашите най-големи бизнес клиенти? Моля, уточнете нивото, на което работи фирмата – локално, национално или международно.

Име на клиента	Локално ниво	Локално ниво, но изнася за международни клиенти	Национално ниво	Международно ниво

17. Какъв е <u>общия брой</u> бизнес клиенти, които имате в момента? _____

18. С колко от тях имате сключени договори? _____

19. Каква е средната продължителност на един договор (в месеци)?_____

Въпрос <u>20, 21, 22</u> и <u>23</u> се отнасят само за фирми, които имат договори с чуждестранни клиенти. Ако нямате такива, моля преминете към въпрос <u>24</u>.

20. Колко референции от минали и/или настоящи чуждестранни бизнес клиенти можете да представите на потенциални бъдещи клиенти? _____

21. Какво е разпределението на вашите <u>чуждестранни бизнес клиенти</u> в зависимост от начина на получаване на договора с тях?
    a. Препоръка от трета страна (напр. бивш клиент)……….%
    b. Социални контакти на мениджърите-основатели……….%
    c. Представяне на фирмата в специализирани списания, форуми и каталози……….%
    d. Участие в търгове……….%
    e. Други……………………………………….……….%

22. Колко договора с <u>чуждестранни бизнес клиенти</u> имате в момента? _____

23. Каква е средната продължителност за един договор (в месеци) с чуждестранен бизнес клиент? _____

24. Каква е средната тарифа на час на вашата фирма (в лева/час)? _____

25. Какъв е ръста на продажбите на вашата фирма
    a. за 2007 в сравнение с 2006 _____ %
    b. за 2008 в сравнение с 2007 _____ %

26. В кой град се намира седалището на вашата фирма?
    a. Благоевград
    b. Бургас
    c. Плевен
    d. Пловдив
    e. Русе
    f. София
    g. Стара Загора
    h. Варна
    i. Велико Търново
    j. Друг град …………………………

27. Каква е вашата позиция във фирмата?

    a. Управител/Президент
    b. Генерален мениджър
    c. Мениджър по продажбите
    d. Мениджър на проект
    e. Маркетинг мениджър
    f. Мениджър развитие на бизнеса
    g. Друга *(моля уточнете)*
       _____

28. Дата на основаване на фирмата …………………………………

29. Брой служители във фирмата……………, от които…………са програмисти и/или инженери.

30. Какъв е общия брой на сертификатите, които имат служителите във фирмата ви (напр. Microsoft- сертифицирани, Oracle- сертифицирани и др.)? _____

Appendix 7B: Questionnaire in English

UNIVERSITÉ du SUD
Toulon·Var

EDHEC
BUSINESS SCHOOL
Lille · Nice

SURVEY

SOURCES OF LEGITIMACY FOR SMALL AND MEDIUM-SIZE ENTERPRISES (SMEs) IN TRANSITION ECONOMIES: THE BULGARIAN INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) SECTOR

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<u>Instructions</u>

Dear Sir/Madam,

Your opinion is very important for the success of this study. Thus, if possible answer honestly to <u>all</u> the questions in the survey. The purpose of the study is purely academic. Your anonymity and the confidentiality of the information presented are guaranteed (see the accompanying document).

Please, keep in mind that anytime we ask a question regarding 'contracts' or 'clients', we mean business clients (B2B). The B2C contracts although important are not taken into consideration in this study.

In addition, some questions refer to 'foreign' clients – those clients are companies that reside outside Bulgaria. Subsidiaries of foreign companies in Bulgaria are not considered as being part of this group.

Thank you!

Questionnaire

1. What is the distribution of your company's revenue (in %) by activity?

       a. Hardware Delivery   ....%
       b. Software Sales and Distribution   ....%
       c. Services   ....%
       d. Outsourcing of IT services[66]   ....%
       e. Other...………………………………   ....%

2. In the field of services, your company specializes in which of the below-mentioned areas? _Please, check mark whether the service is intended for the internal (Bulgarian), the external (foreign) market or both._

Type of Service	Bulgarian Market	Foreign market
Business Process Management		
CAD/CAM/CAE Services		
Call centers – development, support and services		
Computer Animation and Graphics		
Customer Relationship Management (CRM)		
Data Warehousing and Business Intelligence		
_e_Business Support and Services		
Engineering Services		
Enterprise Resource Planning (ERP)		
Geographic Information Systems (GIS)		
Information Security		
Internet – supply and maintenance		
IT Consulting		
IT Training and Education		
Linux-based Work Stations and Servers		
Multi-Media Services		
Networks – Development and Management		
Software Development & Services		
System Administration		
System Integration		
Quality Certification Services		
Web Services		
Other _(please specify)_		

3. Does your company develop its own products in the field, in which you specialize?

    Yes   No

---

[66] Outsourcing of IT services refers to services provided to clients outside the country.

4. Has you company received any type of award for a product/service?

Yes   No

*If the answer is **Yes**, please specify the type of award.*

_____

5. What is your company's revenue distribution (in %) by geographic location of your clients?

    a. Bulgaria ....%
    b. European Union (EU)[67] ....%
    c. North America (USA and Canada) ....%
    d. Asia ....%
    e. Africa ....%
    f. Australia and New Zealand ....%
    g. Other European countries[68] (outside the EU) ....%

6. Does your company have ISO 9001:2000 certificate? *If the answer is <u>yes</u>, please mark in which year you obtained the certificate.*

    a. Yes, the company obtained the ISO 9001:2000 certificate in..........year
    b. No, the company does not have ISO 9001:2000 certificate

7. Does your company have CMMI (Capability Maturity Model Integration)? *If your answer is <u>yes</u>, please mark in which year you obtained the certificate.*

    a. Yes, the company obtained the CMMI certificate in ………. year
    b. No, the company does not have CMMI certificate

8. Your company is a certified partner of which of the following software and/or hardware corporations? Please, specify the level of partnership having in mind that the level maybe indicated in a different way by the different companies. For the purpose of this study, we adopted the following categories:
    a. *registered partner* – the lowest level
    b. *silver partner* – the second level
    c. *gold partner* – the highest level
    d. *other partner* – please, specify the type of partnership

---

[67] The European Union includes: Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark , Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.
[68] This group of countries includes: T Albania, Armenia, Azarbaidjan, Belarus, Bosnia and Hertzegovina, Croatia, Georgia, Iceland, Kazakhstan, Macedonia, Moldova, Montenegro, Norway, Russia, Serbia, Switzerland, Turkey, Ukraine.

If the companies, with which your company has partnerships, are not included in the list, please add their names and the type of partnership.

Name of the Company	Level of Partnership			
	Registered	*Silver*	*Gold*	*Other (please specify)*
3Com Corporation				
Adobe				
Apple				
Autodesk				
Cisco				
Dell Computers				
Hewlett Packard				
IBM				
Lenovo				
Macromedia				
Microsoft				
Novell				
Oracle				
Sun Microsystems				
Symantec				

9. Which of the ICT (Information and Communication Technology) sector associations your company is a member of?

    a. Our company is not a member of an ICT association
    b. Our company is a member of an association, which is not part of the ICT sector
    c. Our company is a member of the following ICT associations (*please, mark with a circle <u>all</u> associations, your company is a member of*).
        i. **BAIT** (Bulgarian Association of Information Technology)
        ii. **BASSCOM** (Bulgarian Association of Software Companies)
        iii. **BBKEPI** (Bulgarian Branch Chamber of Electronic Industry and Informatics)
        iv. **BWA** (Bulgarian Web Association)
        v. **CLICT** (Center for ICT Law)
        vi. **Club for Innovative Scenarios**
        vii. **E-Health Bulgaria**
        viii. **Internet Society Bulgaria**
        ix. **Interspace**
        x. **SEC** (Society for Electronic Communications)
        xi. **NBDN** (National Business Development Network)
        xii. **NRN** (National Research Network Association)
        xiii. **Association iCenters**
        xiv. **High-Technology Business Incubator – Gabrovo**
        xv. **High-Technology Incubator – Varna**

xvi. Other………………………….

10. What is the number of the founding team members in your company? _____

11. How many founding team members in your company have foreign education? _____

12. How many founding team members in your company have experience in foreign companies? _____

13. How many founding team members in your company have business education? _____

14. What is the percentage distribution of your new clients based on the way your company obtains a contract with them?
    a. Third party referral (i.e. previous client)   ……….%

    b. Social contacts of the founding team members   ……….%
    c. Presenting the firm in specialized magazines, fairs and catalogs ……….%
    d. Participating in an auction   ……….%
    e. Other……………………………………………….   ……….%

15. How many references from past business clients you present to potential future clients? _____ of which _____ are from foreign clients.

16. Could you list 5 of your biggest business clients? Please, check mark the box that corresponds to the level at which your client operates – local, national or international.

Name of the Client	Local level	Local but exports to foreign clients	National level	International level

17. What is the total number of corporate clients you have in the moment? _____

18. With how many of them do you have contractual arrangements? _____

19. What is the average length per long-term contract (in months) with a business client?
_____

*Question **20, 21, 22** and **23** are related to companies that have outsourcing contracts with foreign clients. If you do not have such contracts, please go to question **24**.*

20. How many references from past foreign business clients you present to potential future clients? _____

21. What is the percentage distribution of your new <u>foreign business clients</u> based on the way your company obtains a contract with them?
   a. Third party referral (i.e. previous client) ……….%

   b. Social contacts of the founding team members ……….%
   c. Presenting the firm in specialized magazines, fairs and catalogs ……….%
   d. Participating in an auction ……….%
   e. Other……………………………………………. ……….%

22. How many contracts with <u>foreign business clients</u> do you have as of today?
_____

23. What is the average length per contract with a <u>foreign business client</u> (in months)?
_____

24. What is your company's price per hour ratio (in euro/hour)? It applies also to service fee. _____

25. What was the sales growth of your company
   a. In 2007 in comparison with 2006? _____%
   b. In 2008 in comparison with 2007? _____%

26. Where (in which city) is your company located?

   a. Blagoevgrad
   b. Burgas
   c. Pleven
   d. Plovdiv
   e. Russe
   f. Sofia
   g. Stara Zagora
   h. Varna

       i.   Veliko Turnovo
       j.   Other…………………

27. What is your position in the company?

       a. President/CEO
       b. General Manager
       c. Sales Manager
       d. Project Manager
       e. Marketing Manager
       f. Business Development Manager
       g. Other (*please specify*)

          _____

28. When was the company established? …………………………………

29. Number of employees in the company……………, from which …………are certified engineers.

30. What is the total number of certificates that the employees of the company have (i.e., Microsoft-certified, Oracle-certified, etc.)? _____

Appendix 8

Checking for Nonresponse Bias

t-Test: Two-Sample Assuming Unequal Var.				t-Test: Two-Sample Assuming Unequal Var.		
OWNPR				AWARD		
	Interview	*Web*			*Interview*	*Web*
Mean	0,566038	0,72		Mean	0,490566	0,8
Variance	0,250363	0,21		Variance	2,370102	3,25
Observations	53	25		Observations	53	25
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0	
df	51			df	41	
t Stat	-1,34395			t Stat	-0,74028	
P(T<=t) one-tail	0,092456			P(T<=t) one-tail	0,231673	
t Critical one-tail	1,675285			t Critical one-tail	1,682878	
P(T<=t) two-tail	0,184912			P(T<=t) two-tail	0,463346	
t Critical two-tail	2,007584			t Critical two-tail	2,019541	
t-Test: Two-Sample Assuming Unequal Var.				t-Test: Two-Sample Assuming Unequal Var.		
ISO				PART		
	Interview	*Web*			*Interview*	*Web*
Mean	0,45283	1,84		Mean	41,69811	50
Variance	1,598694	9,973333		Variance	3687,446	3466,667
Observations	53	25		Observations	53	25
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0	
df	28			df	48	
t Stat	**-2,11764**			t Stat	-0,5753	
P(T<=t) one-tail	0,021609			P(T<=t) one-tail	0,283888	
t Critical one-tail	1,701131			t Critical one-tail	1,677224	
P(T<=t) two-tail	0,043218			P(T<=t) two-tail	0,567776	
t Critical two-tail	2,048407			t Critical two-tail	2,010635	
t-Test: Two-Sample Assuming Unequal Var.				t-Test: Two-Sample Assuming Unequal Var.		
ASSOC				WEST		
	Interview	*Web*			*Interview*	*Web*
Mean	0,509434	0,88		Mean	40,98113	66,33333
Variance	0,908563	1,276667		Variance	3221,211	6654,8
Observations	53	25		Observations	53	25
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0	
df	41			df	35	
t Stat	-1,41887			t Stat	-1,40205	
P(T<=t) one-tail	0,081747			P(T<=t) one-tail	0,084854	
t Critical one-tail	1,682878			t Critical one-tail	1,689572	
P(T<=t) two-tail	0,163494			P(T<=t) two-tail	0,169709	
t Critical two-tail	2,019541			t Critical two-tail	2,030108	
t-Test: Two-Sample Assuming Unequal Var.				t-Test: Two-Sample Assuming Unequal Var.		
BIZ				CLREP		
	Interview	*Web*			*Interview*	*Web*

	Interview	Web		Interview	Web
Mean	31,38994	50,2381	Mean	4,735849	5,84
Variance	1674,358	1737,056	Variance	8,851959	7,056667
Observations	53	25	Observations	53	25
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
Df	46		df	52	
t Stat	-1,87478		t Stat	-1,64728	
P(T<=t) one-tail	0,03359		P(T<=t) one-tail	0,052766	
t Critical one-tail	1,67866		t Critical one-tail	1,674689	
P(T<=t) two-tail	0,067181		P(T<=t) two-tail	0,105531	
t Critical two-tail	2,012896		t Critical two-tail	2,006647	

t-Test: Two-Sample Assuming Unequal Var.			t-Test: Two-Sample Assuming Unequal Var.		
FGNREP			NCLNTS		
	Interview	Web		Interview	Web
Mean	0,421509	0,6028	Mean	825,8679	260,56
Variance	0,816355	0,771254	Variance	9804669	980363,2
Observations	53	25	Observations	53	25
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
Df	48		df	70	
t Stat	-0,84296		t Stat	1,193876	
P(T<=t) one-tail	0,201717		P(T<=t) one-tail	0,118278	
t Critical one-tail	1,677224		t Critical one-tail	1,666914	
P(T<=t) two-tail	0,403434		P(T<=t) two-tail	0,236557	
t Critical two-tail	2,010635		t Critical two-tail	1,994437	

t-Test: Two-Sample Assuming Unequal Var.			t-Test: Two-Sample Assuming Unequal Var.		
AVFEE			GRWTH		
	Interview	Web		Interview	Web
Mean	34,90566	55,32	Mean	0,503962	0,56744
Variance	506,8659	5531,227	Variance	0,220612	0,399805
Observations	53	25	Observations	53	25
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
Df	26		df	37	
t Stat	-1,34371		t Stat	-0,44713	
P(T<=t) one-tail	0,095326		P(T<=t) one-tail	0,328694	
t Critical one-tail	1,705618		t Critical one-tail	1,687094	
P(T<=t) two-tail	0,190652		P(T<=t) two-tail	0,657388	
t Critical two-tail	2,055529		t Critical two-tail	2,026192	

t-Test: Two-Sample Assuming Unequal Var.			t-Test: Two-Sample Assuming Unequal Var.		
AGE			EMPLS		
	Interview	Web		Interview	Web
Mean	9,301887	10,2	Mean	25,81132	44,92
Variance	26,56096	29,66667	Variance	1946,425	5107,743
Observations	53	25	Observations	53	25
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
Df	45		df	33	
t Stat	-0,6913		t Stat	-1,23081	
P(T<=t) one-tail	0,246463		P(T<=t) one-tail	0,113547	

t Critical one-tail	1,679427			t Critical one-tail	1,69236	
P(T<=t) two-tail	0,492926			P(T<=t) two-tail	0,227095	
t Critical two-tail	2,014103			t Critical two-tail	2,034515	
t-Test: Two-Sample Assuming Unequal Var.				t-Test: Two-Sample Assuming Unequal Var.		
NOFFICE*LOC				WEBSITE		
	Interview	*Web*			*Interview*	*Web*
Mean	4,264151	5,32		Mean	10,4717	2,96
Variance	29,54427	53,47667		Variance	1819,946	96,29
Observations	53	25		Observations	53	25
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0	
df	37			df	63	
t Stat	-0,64299			t Stat	1,21552	
P(T<=t) one-tail	0,262099			P(T<=t) one-tail	0,114352	
t Critical one-tail	1,687094			t Critical one-tail	1,669402	
P(T<=t) two-tail	0,524199			P(T<=t) two-tail	0,228703	
t Critical two-tail	2,026192			t Critical two-tail	1,998341	

Appendix 9A

CHI-SQUARE – OCCUPATION OF RESPONDENTS AND MISSING DATA						
	MISSING DATA					
OCCUP	Info	No Info				
1	0.595745	0.580645				
2	0.276596	0.225806				
3	0.12766	0.193548				
EXPECTED	0.5	0.5				
	0.5	0.5				
DIFFERENCE	0.095745	0.080645				
	-0.2234	-0.27419				
Chi-sq obtained	**0.281524**					
Df	1					
Chi-sq.(critical)	**3.84**					
Result	**No significant difference**					

Checking for Randomness of the Variable NCLNTS

T-TESTS						
t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.		
CLREP				**OWNPR**		
	Info	*No Info*			*Info*	*No Info*
Mean	6.692308	5,70		Mean	0.615385	0.5
Variance	26.995	31.34444		Variance	0.23976	0.277778
Observations	78	10		Observations	78	10
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0	
Df	11			Df	11	
t Stat	**0.531892**			t Stat	**0.656915**	
P(T<=t) one-tail	0.302688			P(T<=t) one-tail	0.262371	
t Critical one-tail	1.795885			t Critical one-tail	1.795885	
P(T<=t) two-tail	0.605376			P(T<=t) two-tail	0.524742	
t Critical two-tail	**2.200985**			t Critical two-tail	**2.200985**	
t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.		
AVFEE				**AWARD**		
	Info	*No Info*			*Info*	*No Info*
Mean	41.44872	30.35133		Mean	0.589744	0.4
Variance	2158.257	379.9646		Variance	2.634699	01.Юни
Observations	78	12		Observations	78	10
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0	
Df	35			Df	13	
t Stat	**1.440689**			t Stat	**0.431037**	
P(T<=t) one-tail	0.07928			P(T<=t) one-tail	0.336751	
t Critical one-tail	1.689572			t Critical one-tail	1.770933	
P(T<=t) two-tail	0.158559			P(T<=t) two-tail	0.673503	
t Critical two-tail	**2.030108**			t Critical two-tail	**2.160369**	
t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.		
GRWTH				**ISO**		
	Info	*No Info*			*Info*	*No Info*
Mean	0.524308	0.5884		Mean	0.897436	0.6
Variance	0.274488	0.800714		Variance	4.612721	2.488889
Observations	78	10		Observations	78	10
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0	
Df	10			Df	14	
t Stat	**-0.22168**			t Stat	**0.535919**	
P(T<=t) one-tail	0.414512			P(T<=t) one-tail	0.300213	
t Critical one-tail	1.812461			t Critical one-tail	1.76131	
P(T<=t) two-tail	0.829024			P(T<=t) two-tail	0.600426	
t Critical two-tail	**2.228139**			t Critical two-tail	**2.144787**	

Checking for Randomness of the Variable NCLNTS

t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.			
AGE				**PART**			
	Info	*No Info*			*Info*	*No Info*	
Mean	9.589744	10.33333		Mean	44.35897	34	
Variance	27.36197	27.75		Variance	3585.947	982.2222	
Observations	78	9		Observations	78	10	
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0		
Df	10			Df	19		
t Stat	**-0.40126**			t Stat	**0.862661**		
P(T<=t) one-tail	0.348335			P(T<=t) one-tail	0.199541		
t Critical one-tail	1.812461			t Critical one-tail	1.729133		
P(T<=t) two-tail	0.69667			P(T<=t) two-tail	0.399082		
t Critical two-tail	**2.228139**			t Critical two-tail	**2.093024**		
t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.			
EMPLS				**ASSOC**			
	Info	*No Info*			*Info*	*No Info*	
Mean	31.9359	14.88889		Mean	0.628205	0.5	
Variance	2987.048	243.8611		Variance	1.041792	0.5	
Observations	78	9		Observations	78	10	
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0		
Df	39			Df	14		
t Stat	**2.108088**			t Stat	**0.509343**		
P(T<=t) one-tail	0.02075			P(T<=t) one-tail	0.309223		
t Critical one-tail	1.684875			t Critical one-tail	1.76131		
P(T<=t) two-tail	0.041501			P(T<=t) two-tail	0.618445		
t Critical two-tail	**2.022691**			t Critical two-tail	**2.144787**		
t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.			
NOFFICE*LOC				**NDISTR**			
	Info	*No Info*			*Info*	*No Info*	
Mean	4.602564	4		Mean	8.064103	0	
Variance	36.86597	14.44444		Variance	1271.515	0	
Observations	78	10		Observations	78	10	
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0		
Df	16			Df	77		
t Stat	**0.435194**			t Stat	**1.997297**		
P(T<=t) one-tail	0.334618			P(T<=t) one-tail	0.024663		
t Critical one-tail	1.745884			t Critical one-tail	1.664885		
P(T<=t) two-tail	0.669235			P(T<=t) two-tail	0.049326		
t Critical two-tail	**2.119905**			t Critical two-tail	**1.991254**		

Appendix 9C

Checking for the Randomness of the Variable AVFEE

T-TESTS							
t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.			
REP				OWNPR			
	Info	No Info			Info	No Info	
Mean	6.457627	7.421053		Mean	0.627119	0.57894737	
Variance	28.35593	23.36842		Variance	0.237873	0.25730994	
Observations	59	19		Observations	59	19	
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0		
df	33			Df	30		
t Stat	**0.736637**			t Stat	**-0.36337**		
P(T<=t) one-tail	0.233274			P(T<=t) one-tail	0.359439		
t Critical one-tail	1.69236			t Critical one-tail	1.697261		
P(T<=t) two-tail	0.466548			P(T<=t) two-tail	0.718877		
t Critical two-tail	**2.034515**			t Critical two-tail	**2.042272**		
t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.			
NCLNTS				AWARD			
	Info	No Info			Info	No Info	
Mean	40.77966	272.4737		Mean	0.627119	0.15789474	
Variance	2783.287	567630.7		Variance	0.237873	0.14035088	
Observations	59	19		Observations	59	19	
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0		
df	18			Df	39		
t Stat	**1.339418**			t Stat	**-4.3911**		
P(T<=t) one-tail	0.098551			P(T<=t) one-tail	4.18E-05		
t Critical one-tail	1.734064			t Critical one-tail	1.684875		
P(T<=t) two-tail	0.197103			P(T<=t) two-tail	8.36E-05		
t Critical two-tail	**2.100922**			t Critical two-tail	**2.022691**		
t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.			
GRWTH				ISO			
	Info	No Info			Info	No Info	
Mean	0.87661	0.619789		Mean	0.915254	0.84210526	
Variance	6.571264	0.321526		Variance	4.94097	3.80701754	
Observations	59	19		Observations	59	19	
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0		
df	72			Df	34		
t Stat	**-0.717**			t Stat	**-0.13723**		
P(T<=t) one-tail	0.237848			P(T<=t) one-tail	0.445828		
t Critical one-tail	1.666294			t Critical one-tail	1.690924		
P(T<=t) two-tail	0.475696			P(T<=t) two-tail	0.891655		
t Critical two-tail	**1.993464**			t Critical two-tail	**2.032244**		

Checking for the Randomness of the Variable AVFEE

t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.			
AGE				**PART**			
	Info	*No Info*			*Info*	*No Info*	
Mean	9.542373	9.736842		Mean	0.915254	0.84210526	
Variance	27.80421	27.4269		Variance	4.94097	3.80701754	
Observations	59	19		Observations	59	19	
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0		
Df	31			Df	34		
t Stat	**0.140537**			t Stat	**-0.13723**		
P(T<=t) one-tail	0.444572			P(T<=t) one-tail	0.445828		
t Critical one-tail	1.695519			t Critical one-tail	1.690924		
P(T<=t) two-tail	0.889145			P(T<=t) two-tail	0.891655		
t Critical two-tail	**2.039513**			t Critical two-tail	**2.032244**		
t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.			
EMPLS				**ASSOC**			
	Info	*No Info*			*Info*	*No Info*	
Mean	32.23729	51.26316		Mean	0.644068	0.57894737	
Variance	4520.012	10687.43		Variance	1.233197	0.47953216	
Observations	59	19		Observations	59	19	
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0		
Df	23			Df	50		
t Stat	**0.752589**			t Stat	**0.303164**		
P(T<=t) one-tail	0.229665			P(T<=t) one-tail	0.381511		
t Critical one-tail	1.713872			t Critical one-tail	1.675905		
P(T<=t) two-tail	0.459331			P(T<=t) two-tail	0.763023		
t Critical two-tail	**2.068658**			t Critical two-tail	**2.008559**		
t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.			
NOFFICE*LOC				**NDISTR**			
	Info	*No Info*			*Info*	*No Info*	
Mean	3.881356	6.842105		Mean	5.135593	17.15789	
Variance	24.34775	72.25146		Variance	423.602	3958.918	
Observations	59	19		Observations	59	19	
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0		
Df	22			Df	19		
t Stat	**1.442059**			t Stat	**0.818879**		
P(T<=t) one-tail	0.081686			P(T<=t) one-tail	0.211504		
t Critical one-tail	1.717144			t Critical one-tail	1.729133		
P(T<=t) two-tail	0.163371			P(T<=t) two-tail	0.423008		
t Critical two-tail	**2.073873**			t Critical two-tail	**2.093024**		

Appendix 9D

Checking for the Randomness of the Variable GRWTH

T-TESTS							
t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.			
CLREP				**OWNPR**			
	Info	*No Info*			*Info*	*No Info*	
Mean	7.074627	4.363636		Mean	0.6268657	0.545455	
Variance	28.61556	12.05455		Variance	0.2374491	0.272727	
Observations	67	11		Observations	67	11	
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0		
Df	19			Df	13		
t Stat	2.196762			t Stat	**0.4836194**		
P(T<=t) one-tail	0.020323			P(T<=t) one-tail	0.3183501		
t Critical one-tail	1.729133			t Critical one-tail	1.7709334		
P(T<=t) two-tail	0.040646			P(T<=t) two-tail	0.6367002		
t Critical two-tail	**2.093024**			t Critical two-tail	**2.1603687**		
t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.			
NCLNTS				**AWARD**			
	Info	*No Info*			*Info*	*No Info*	
Mean	674.597	462.4545		Mean	0.6716418	0.090909	
Variance	7988856	1111037		Variance	3.0117594	0.090909	
Observations	67	11		Observations	67	11	
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0		
Df	39			Df	76		
t Stat	**0.452043**			t Stat	2.5174148		
P(T<=t) one-tail	0.326871			P(T<=t) one-tail	0.0069637		
t Critical one-tail	1.684875			t Critical one-tail	1.6651514		
P(T<=t) two-tail	0.653742			P(T<=t) two-tail	0.0139273		
t Critical two-tail	**2.022691**			t Critical two-tail	**1.9916726**		
t-Test: Two-Sample Assuming Uneq. Var.				t-Test: Two-Sample Assuming Uneq. Var.			
AVFEE				**ISO**			
	Info	*No Info*			*Info*	*No Info*	
Mean	43.3209	30.04545		Mean	0.9850746	0.363636	
Variance	2466.02	176.3227		Variance	5.1058345	1.454545	
Observations	67	11		Observations	67	11	
Hypothesized Mean Difference	0			Hypothesized Mean Difference	0		
Df	60			Df	24		
t Stat	**1.826357**			t Stat	**1.3611615**		
P(T<=t) one-tail	0.036386			P(T<=t) one-tail	0.0930535		
t Critical one-tail	1.670649			t Critical one-tail	1.7108821		
P(T<=t) two-tail	0.072773			P(T<=t) two-tail	0.1861071		
t Critical two-tail	**2.000298**			t Critical two-tail	**2.0638985**		

Checking for the Randomness of the Variable GRWTH

t-Test: Two-Sample Assuming Uneq. Var.			t-Test: Two-Sample Assuming Uneq. Var.			
AGE			**PART**			
	Info	*No Info*		*Info*	*No Info*	
Mean	9.955224	7.363636	Mean	48.208955	20.90909	
Variance	26.8313	27.25455	Variance	3969.4708	709.0909	
Observations	67	11	Observations	67	11	
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0		
df	13		Df	33		
t Stat	**1.527597**		t Stat	**2.4544855**		
P(T<=t) one-tail	0.075286		P(T<=t) one-tail	0.0097759		
t Critical one-tail	1.770933		t Critical one-tail	1.6923603		
P(T<=t) two-tail	0.150571		P(T<=t) two-tail	0.0195517		
t Critical two-tail	**2.160369**		t Critical two-tail	**2.0345153**		
t-Test: Two-Sample Assuming Uneq. Var.			t-Test: Two-Sample Assuming Uneq. Var.			
EMPLS			**ASSOC**			
	Info	*No Info*		*Info*	*No Info*	
Mean	35.26866	11.63636	Mean	0.6268657	0.636364	
Variance	3389.109	104.4545	Variance	0.9950249	1.454545	
Observations	67	11	Observations	67	11	
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0		
df	76		Df	12		
t Stat	**3.048895**		t Stat	**-0.0247657**		
P(T<=t) one-tail	0.00158		P(T<=t) one-tail	0.4903245		
t Critical one-tail	1.665151		t Critical one-tail	1.7822875		
P(T<=t) two-tail	0.00316		P(T<=t) two-tail	0.9806489		
t Critical two-tail	**1.991673**		t Critical two-tail	**2.1788128**		
t-Test: Two-Sample Assuming Uneq. Var.			t-Test: Two-Sample Assuming Uneq. Var.			
NOFFICE*LOC			**NDISTR**			
	Info	*No Info*		*Info*	*No Info*	
Mean	4.820896	3.272727	Mean	8.835821	3.363636	
Variance	40.02804	17.41818	Variance	1467.927	74.05455	
Observations	67	11	Observations	67	11	
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0		
df	19		Df	69		
t Stat	**1.048334**		t Stat	**1.022497**		
P(T<=t) one-tail	0.153819		P(T<=t) one-tail	0.155059		
t Critical one-tail	1.729133		t Critical one-tail	1.667239		
P(T<=t) two-tail	0.307638		P(T<=t) two-tail	0.310117		
t Critical two-tail	**2.093024**		t Critical two-tail	**1.994945**		

Appendix 10A

Functional Legitimacy – Testing for Nomological Validity
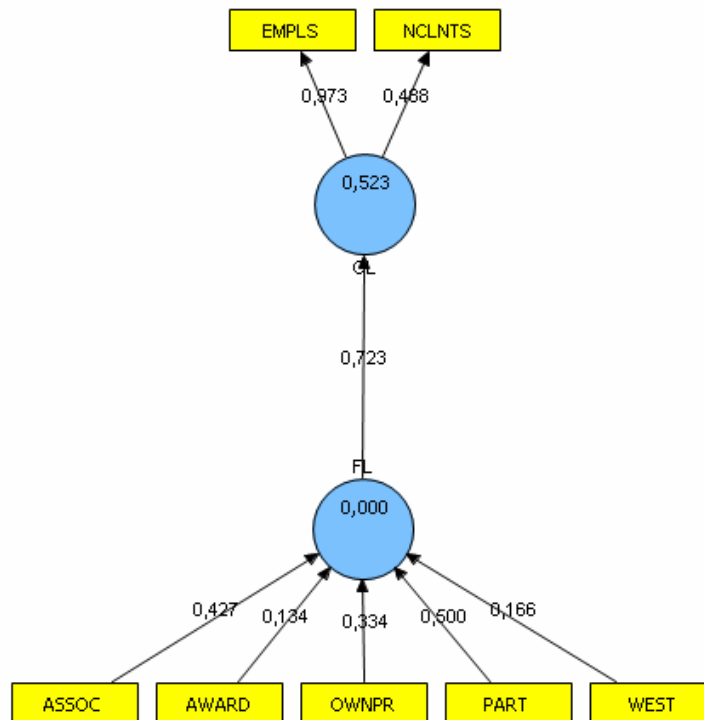
Relational Legitimacy – Testing for Nomological Legitimacy
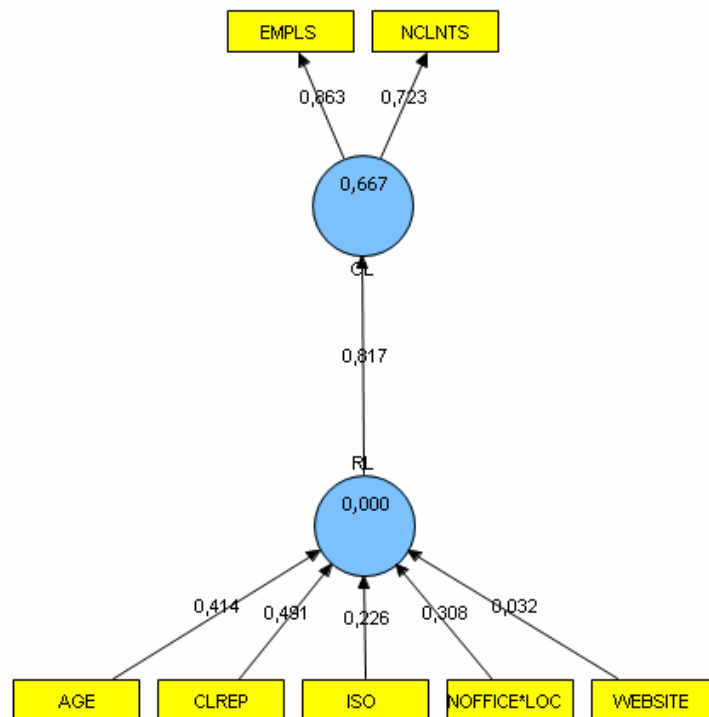
Appendix 11: Input EXCEL Matrix

COMPID	LVLOPT	OWNPR	AWARD	ISO	PART	ASSOC	WEST	CLREP
1	1	0	0	0	10	0	100	1
2	1	1	0	0	10	0	0	3
3	1	0	0	4	30	1	0	3
4	1	0	0	0	40	1	0	3
5	1	1	0	0	10	0	0	3
6	1	1	0	0	50	1	0	3
8	1	0	0	0	0	0	100	4
9	1	0	0	0	10	0	0	3
10	1	0	0	0	0	0	0	1
11	1	1	0	0	0	0	0	3
13	1	0	0	0	10	0	0	1
14	2	1	0	0	20	0	50	6
15	1	0	0	0	0	0	0	3
16	2	1	0	0	10	1	100	10
18	2	1	0	0	60	0	200	7
20	2	1	2	0	10	0	50	7
21	1	0	0	0	10	0	100	1
22	1	0	0	0	0	0	0	1
23	1	1	0	0	0	0	0	1
24	2	1	0	0	0	1	0	10
25	1	1	0	0	50	0	0	4
26	1	0	0	0	10	0	0	3
27	1	0	0	0	30	0	0	1
28	1	0	0	0	0	0	0	1
29	1	0	0	0	0	0	25	1
30	3	1	0	0	20	0	200	7
31	2	1	0	4	180	0	125	7
32	3	1	0	7	170	2	67	7
33	1	0	0	0	20	0	0	1
34	1	0	0	0	60	0	0	3
37	2	1	2	5	180	1	0	7
38	3	0	1	0	10	0	100	4
39	1	1	0	0	10	0	0	1
42	3	1	0	0	0	0	0	7
43	3	1	1	0	70	1	67	7
44	1	1	0	0	10	0	50	4
45	1	1	0	1	60	1	80	7
46	2	1	0	0	0	0	100	6
47	2	1	0	0	0	0	0	10
48	2	1	0	0	60	1	0	7
49	2	1	2	4	80	1	0	3
50	2	1	0	0	100	1	0	7
51	2	1	1	0	90	2	200	10
52	2	0	0	0	90	0	100	3
53	2	0	0	0	50	1	0	7
54	2	1	1	0	10	0	100	9
55	2	1	0	0	30	4	200	3

56	2	1	1	0	0	0	0	7
57	2	0	0	2	260	1	0	10
58	2	0	0	0	10	0	100	3
59	3	1	0	0	100	0	100	7
60	3	0	0	0	10	0	0	7
61	3	1	10	0	130	3	50	7
62	3	1	0	0	30	0	50	7
63	2	1	5	8	0	0	200	10
65	3	1	1	9	70	2	50	7
66	2	1	0	7	190	5	0	10
67	1	1	0	0	70	0	0	4
68	1	0	0	0	110	0	0	1
69	3	1	1	0	30	2	171	8
70	2	0	0	0	10	1	200	9
71	1	1	0	0	20	0	200	6
72	3	1	7	0	10	1	0	5
75	2	0	0	0	20	1	29	3
76	3	0	0	0	10	0	0	4
77	2	1	0	0	0	1	200	3
78	1	0	0	0	10	1	0	1
79	2	1	0	0	0	0	0	7
80	2	1	0	0	0	0	0	7
81	2	1	0	7	60	1	50	8
82	2	0	0	0	20	0	0	7
83	2	1	1	0	50	2	0	3
84	2	1	0	0	20	1	100	7
85	1	0	0	4	110	1	0	1
86	3	0	2	4	250	4	67	7
87	3	1	4	0	0	0	0	7
88	1	1	0	0	10	0	50	3

Appendix 11 : Input EXCEL Matrix

NCLNTS	AVFEE	GRWTH	AGE	EMPLS	NOFFICE*LOC	NDISTR	WEBSITE
20	25	0,41	3	4	1	0	0
97	21	0,20	14	3	1	0	1
30	20	0,41	7	8	1	0	0
250	25	1,00	7	6	1	0	0
85	30	0,10	11	5	1	0	1
580	25	0,15	17	12	1	0	0
13	21	0,41	2	3	2	0	1
20	18	0,40	12	5	1	0	0
6	20	0,60	6	2	1	0	0
150	30	0,00	4	2	1	0	1
6	17,5	0,41	2	3	1	0	1
75	18	0,50	2	3	1	0	0
100	21	0,45	4	3	1	0	1
3347	57	0,77	11	25	15	28	1
400	57	2,00	13	10	3	0	1
1000	40	2,00	12	25	4	0	1
40	22,5	0,28	14	6	1	0	0
20	15	0,41	10	2	1	0	0
6	36	0,41	2	3	1	0	0
5200	23	0,07	19	130	21	75	1
79	20	0,45	4	5	3	0	1
45	15	0,20	7	5	1	0	0
7	18	0,50	2	4	1	0	0
12	3	0,15	9	4	1	0	0
200	21	0,30	10	3	1	0	0
10	49	1,13	8	30	18	0	1
20	57	0,40	7	250	36	0	1
20	49	0,38	18	155	12	0	1
4	15	0,00	0	2	2	0	0
8	15	0,30	11	7	4	0	1
100	38	0,38	16	250	28	0	1
5	49	0,00	11	15	4	0	1
70	10	0,24	14	18	6	0	0
80	35	0,20	7	9	3	0	1
80	49	0,58	6	25	3	0	1
500	40	0,20	15	6	3	7	1
6	21	2,00	15	18	3	0	1
1000	21	0,35	18	10	3	15	1
1500	35	0,77	13	28	6	9	1
100	43	0,75	3	13	3	0	1
460	70	0,35	14	50	18	0	1
70	57	0,84	4	43	6	0	1
275	57	0,92	18	20	3	275	1
10	57	0,00	0	15	6	2	1
24	57	0,30	6	32	4	0	1
20	20	0,30	7	4	2	0	1
35	25	0,77	7	17	3	0	1

4000	30	1,50	13	16	3	10	1
1500	120	0,15	14	55	6	0	1
25	80	0,50	9	15	12	0	1
50	52	0,97	16	60	3	0	1
25	40	0,50	5	15	3	0	1
41	100	0,37	8	40	3	0	1
20	49	0,50	10	95	6	0	1
5000	30	0,22	13	24	3	45	1
55	45	0,32	12	75	3	0	1
110	60	0,30	17	250	6	0	1
30	30	0,41	18	10	2	0	1
185	35	2,50	14	4	3	0	1
45	50	0,53	5	110	3	0	1
270	57	0,34	13	15	3	21	1
42	10	0,30	15	8	2	0	1
20	50	0,30	9	38	3	0	1
22	400	1,85	4	30	3	0	1
6	40	0,10	6	5	2	0	1
10	14	2,00	3	10	3	0	1
50	12	0,10	18	22	2	0	1
5	20	0,30	2	6	3	0	1
16	30	0,20	6	2	3	0	1
50	100	0,17	9	22	3	0	1
8	45	0,15	2	3	2	0	1
200	30	0,20	17	8	6	8	1
20	40	0,35	5	5	3	0	1
210	21	0,25	15	14	3	0	1
20	50	0,11	8	150	3	0	1
30	60	0,80	13	2	3	0	1
35	15	0,50	14	4	1	0	0