Organizational Performance and External and Internal Capabilities

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Abstract: While prior research looks at how specific capabilities of companies achieve organizational performance, few studies take a holistic perspective. In this analysis, follow a systemic approach to investigate whether the operational success ultimately accounts for specific capabilities. Also consider how intellectual capital mediates the relationship between the organizational and performance capabilities. In Taiwan Transportation Vehicle research involved a questionnaire study involving 160 executives. Using Structural Equation Modeling (SEM) based on partial least squares (PLS), it was found that business awareness, partnerships, and creative capacities have positive effects on intellectual property, although consumer knowledge has no major impact. Intellectual capital partially mediates the relationship between organizational capacity and performance of the organization. By demonstrating the mediating effects of intellectual capital on the relationships between organizational capacities, both in its external and internal dimensions, and organizational performance, paper contribute to the literature on organizational capabilities, as well as suggesting to companies aiming to enhance organizational performance, particularly those in the transportation sector.

Keywords: Competence-based view Intellectual capital, Knowledge-based view, Relationship-based view Organizational capability and Organizational performance.

INTRODUCTION
Social resilience issues have risen on the global agenda in recent decades, in organizations, nations, and communities alike, and increasingly new strategies are urgently needed for obtaining and sustaining it. At the same time, knowledge-based and intangible issues have risen to the forefront of interest for those who seek to understand and enhance organizational capabilities for sustainable firm performance and value creation. In this regard the non-material organizational bases are also known as human property. The literature has shown that intellectual capital is linked to high performance of the organization in terms of innovation, competitiveness and financial results. However, so far little has been discussed about the role of intellectual capital in the sense of socially sustainable corporate value formation. In particular, it will be interesting to learn under what circumstances organizations will build value for their customers by handling their internal partners fairly, reasonably and with respect[1].

The conventional way of handling human capital, according to Ehnert, is not appropriate for an organization's long-term, sustainable growth. There needs to be an approach which also covers social sustainability. The incorporation of internal social resilience into corporate value building processes within the literature, however, has been left largely unexplored. In comparison, so far social sustainability has been identified mainly by human rights or labor, health, and other community issues. However, it will be necessary to extend social sustainability to include workers to improve human resources within organizations as well, for ex-large[2].

This paper looks at the research gap mentioned above. From the internal stakeholder (job satisfaction and work well-being) sustainable corporate value development and consumer value creation viewpoints are adressed, which posits that value creation will help both staff and clients of the company. In terms of the three most traditional components of intellectual capital described in the current literature paper discuss the impact of intellectual capital on sustainable organizational value creation; human capital, institutional capital, and relational capital. In addition, divide relational capital into intra-firm relational capital and external relational capital, considering different intra-firm and extra-firm stakeholders and providing additional insight into our question of re-search. Taken together, paper examine the effect of four components of intellectual and job satisfaction on the creation of customer value, and in particular how job satisfaction acts as a moderator for IC[3].

The paper contributes to the academic debate about and managerial understanding of the role of intellectual capital and intangibles in organizations as drivers of sustainable value creation. Our research proposes a paradigm that incorporates the development of corporate reputation and internal social resilience that can better explain the connection between intellectual capital and customer satisfaction. This also contributes to management practice by emphasizing the essential role of intangible capital in sustainability value formation.
and describes the knowledge-based features are most important for sustainability facets. As an implication at the policy level, the results lead to recommend better education and services to improve the management of intellectual capital within organizations. Considering the compilation of observational evidence for the chapter in Finnish organizations, the study findings can be contextually constrained but can provide a valuable base for future analysis in other contexts. The present paper addresses the following research questions 1) what is intellectual capital and how it works? And 2) what is marketing knowledge, relation capabilities and Organizational performance?

Creation of sustainable value via intellectual capital

Sustainability can be addressed as a matter of individual, organizational or societal nature. Focus was given on the organizational level in this chapter and view sustainability from the economic and social perspectives. As an economic problem, sustainability is tied to the company’s positive financial performance. Siding with Cuganesan, and argue that this is achieved mainly by providing value to customers. As a social issue, sustainability at the organizational level can be approached from an internal stakeholder perspective (here: work satisfaction for employees)[5].

Intellectual capital stands for the total stock of non-material value-generating assets that an organization can access. In particular, one of the most well-known definitions states that intellectual capital is "the possession of knowledge, applied experience, organizational technology, customer relations and professional skills that provide a company with a competitive edge on the market." Intellectual capital, according to another Stewart concept, is concerned with the material, intellectual property, intellectual material, expertise, core strategies, consumer relationships, and experience that can be used to build resources[6]. Sullivan further considered that intellectual capital consists of "knowledge-based resources that contribute to the company's sustained competitive advantage." In summary, intellectual capital covers key firm-specific intangible resources that create value for the company and are difficult to imitate, if not impossible[7].

Although the literature has proposed a variety of different types of intellectual property, the most common applies to three sources of corporate knowledge: workers, institutional systems and relationships. The latter may be further divided into intra- and extra-organizational relations. Such intangible forms of interest refer to four categories of intellectual capital: human capital, institutional capital, intra-firm relation capital, and external relation capital[8].

Researching how companies generate value for their clients by exploiting their human resources, and what part their internal partners – the workers – play in the well-being of this phase. The literature on management has increasingly included discussions about the importance of the "human factor" in building sustainable organizations and creating "shared value," which is often something that benefits both employees and the firm. It has therefore been suggested that employee well-being should be just as important for management as their work performance. Make this issue operational by examining the direct and moderating role of job satisfaction within the broader model of intellectual capital and value creation for customers.

The purpose of this paper is to examine whether internal market orientation facilitates, before influencing organizational performance, the development of external market capabilities, and to investigate whether learning orientation strengthens the above link. Design / methodology / approach: This study collected data from a survey and used moderated hierarchical regression analysis to analyze the relationships hypothesized. Findings: Internal business alignment promotes the growth of all business strengths and enhances the efficiency of the companies. The finding also indicates that a greater mediator between internal business focus and corporate efficiency is the capacity for customer-linkage. In fact, learning orientation does not change the interaction between the existing business orientation and the skills of the outside business. Analysis limitations / implications: this research discusses only two industry capabilities; addresses only the direction of the internal market and does not include any antecedents; and uses cross-sectional statistics instead of longitudinal data, consisting of information only from 159 Taiwanese service firms[9]. In the aspect of organizational capabilities, this chapter elaborates environmental management. First, internal integration is the decline of functional barriers and the facilitation of real-time sharing of information across various organizational functions. In particular, the introduction of internal environmental knowledge is helpful in enhancing organizational environmental adaptability, and in increasing the efficiency of company units in adapting to emerging developments such as shifts in consumer preferences and industry patterns. Internal integration helps companies achieve better delivery performance, manufacturing costs, product quality and flexibility in production. In addition, the willingness of an organization to implement innovative environmental management strategies that can promote the manufacture, assembly and delivery of a product or service while mitigating negative environmental impacts; thus, environmental creativity helps a company to continue economic growth, maximize return on investment and enhance environmental sustainability. Similar to environmental innovation, adaptability to the environment is vital for the firm to effectively reduce its environmental impacts. Environmental adaptability, relating to the degree of versatility and sensitivity in addressing emerging consumer demands and conditions, enables businesses to change their current products and processes and deliver new goods with reduced lead times to satisfy quickly evolving customer preferences and environmental regulations. Such incentives would
place the companies at the detriment of first-movers who will gain smaller market shares and better returns on investment[10].

**Market knowledge capability**

Business experience is linked to consumer intelligence, competition and new technologies, and thus relates to either an internal or external viewpoint. Li and Calantone describe capacity of market awareness as the comprehension of (internal) business facts by employees. While Day suggests that it includes information not only related to customers and competitors but also external markets, Moorman emphasizes network domain and connected information. Recent studies also extend these well-developed definitions to relate to constructs and dimensions; such as market sensing, customer engagement, partner linking, market breadth and tacitness, and capability for market integration. This research builds on Kohli and Jaworski’s work to describe market knowledge potential as the ability to obtain, develop, distribute, and collect business information, insight, and expertise, with special respect to customers, rivals, vendors, markets, and government.

**Customer knowledge capability**

Management of consumer information refers to gaining, handling and exchanging knowledge about customers. The capacity of customer awareness is integrated within consumers and relies on shared engagement. Developing capability of customer knowledge is critical to the performance of companies. This study refers to the ideas of García-Murillo and Annabi to define the ability to acquire, exchange, share, diffuse and accumulate customer knowledge effectively. While customer knowledge previously played a passive role (one-way exchange) it now plays a proactive and dominant role (interactive relation).

**Relationship capability**

Relationship capacity refers to the practices and expertise that a company has for establishing, improving and sustaining partnerships with its partners. The notion of relationship capacity is very broad and so we are referring to five particular dimensions for the purposes of this study: trust, satisfaction, commitment, joint actions, and interactive communication. Trust between partners encourages the enhancement of reciprocal relations, which reduces opportunistic actions and rewards all parties in the long run. Low degree of confidence is likely to affect relationships. Prior studies also highlight the importance of fulfillment and engagement in developing relationships. Joint intervention, a relationship coordination tool, may allow parties to commit mutual assets to lower the costs of conflict and establish a longer-term partnership. Similarly, collaborative contact between parties is a big factor in increasing awareness of consumer preferences and creating a longer-term partnership through information exchange, which in effect provides a competitive advantage for an organization. This research builds upon these five essential measurements, which are well rooted in the literature, to calculate the potential for partnerships.

**Innovation capability**

Prior studies emphasize the importance of willingness to develop in achieving corporate success and competitive advantages. It is not easy to copy innovation capacity, and companies often use this power to improve competitive operations, such as reducing their production costs. Capacity for innovation underlies the ability to offer customers value-added services. This research builds on the notion of innovation potential by Nasution and Mavondo as a method of creating new innovations and integrating new goods, systems and administrative procedures to offer superior competitive consumer values.

**Intellectual capital**

An author effectively defines intellectual capital as the exercise of tacit and explicit knowledge. Three forms of intellectual capital Bontis proposes: individual, institutional, partnership. Human capital applies to workplace skills, competencies and interactions. Structural capital is based on productivity of organization. Capital of the relationship relates to cooperation with outside environments. If a company knows how to manage its intellectual capital then value can be created and a competitive advantage maintained. With reference to these ideas, we define intellectual capital as those that manage intangible and scarce assets with the aim of creating the competitive advantages of the firm, in particular those that involve perspectives of human, structural and relations. Specifically, this study defines human capital as the knowledge, skills and experiences of employees, structural capital as, the processes of creating value in a company, and relationship capital as, the assets and relationships a company builds, develops and maintains with its customers and suppliers.

**Organizational performance**

Organizational efficiency, a multidimensional concept, where one dimension (e.g., financial return) cannot be calculated. Therefore, previous studies use a number of metrics to assess organizational success; such as management and business performance, productivity and efficacy, subjective and analytical performance, and
operational management. The principal purpose of this study is to test organizational performance capabilities. To this end, we follow Delaney and Huseliy’s contextual methodology and concepts, i.e., business experience, consumer awareness, partnerships and creativity. With reference to these ideas, we define intellectual capital as those that manage intangible and scarce assets with the aim of creating the competitive advantages of the firm, in particular those that involve perspectives of human, structural and relations. Specifically, this study defines human capital as the knowledge, skills and experiences of employees, structural capital as, the processes of creating value in a company, and relationship capital as, the assets and relationships a company builds, develops and maintains with its customers and suppliers.

METHODOLOGY
Design
Model draws upon the input-process-output model's rationale. This theory is widely applied in social, service, natural, computer, and human activity systems analysis. Inputs (I) involve capital and capacities (e.g., goods, energy, human resources, or information), while processes (P) and outputs (O) can be present in specific ways (e.g., products, services, sales, or profits). A company could use its organizational capacity (market and customer knowledge and relationship) as an input (I) and develop its intellectual capital as a process (P) to achieve firm performance (an output (O). Figure 1 Reveals our structure for study and the hypotheses.

Market knowledge capability and intellectual capital:
Market knowledge capacity is not just an intangible asset but also a major source of competitive advantage. Market knowledge can improve the ability of the firms to transfer, create, diffuse and accumulate knowledge. Since business awareness power is dependent on market orientation presumption, this directs a firm towards developing strong consumer relationships and thereby increasing capital relationships. Companies can satisfy market needs when they have superior market knowledge management capability. That is, if a company owns the internal re-sources in order to increase operational efficiency then it can increase its structural capital. Prior work also proposes that intellectual capital influences the transfer of knowledge. In fact, business information management skills (absorption, integration) affect the efficiency of companies (in fields such as new product creation and growth, quality of operation and growth, and success in the supply chain). Based on those rationales, the following hypothesis is proposed:
H1: Capabilities of business awareness have beneficial impact on human property.

Customer knowledge capability and intellectual capital
Campbell argues that the capacity of consumer information shape and grow by communicating with consumers and by incorporating the information into the internal structures of the businesses. To gain more customer awareness, companies need to center their efforts on exchanging information, income and influence in their customer experiences. Tiwana argues that customer capital (a relation) is created when a company engages in customer knowledge management. Companies need high-quality employees (employee capital) as well as efficient procedures and systems (structural capital) to sustain their customer knowledge capability. There is support for the notion that knowledge exchange with customers effects firms' value (customer capital). Customer knowledge management capabilities (knowledge development) can influence the positive performance of a firm in the area of customer purchasing intent, process innovation, and product innovation and service. They hypothesize according to the above:
H2. The capabilities of customer knowledge have positive influence on intellectual capital.
Relationship capability and intellectual capital

Relationship functions as a source of money, as it creates lifelong consumers who share healthy and secure profits. Since relationship capability focuses on trust, fulfillment, collective action, and collaborative contact, it encourages relationship capital growth. Relationship capacity develops through informal contact, and this has a positive effect on human resources. As companies and their partners work together they can enable them to set up internal value-creating processes, which in effect strengthens institutional capital. Recent studies also indicate the impact of partnership capability on human resources and on the efficiency of organizations (e.g., quality of operation, customer loyalty, and inter-company capabilities).

Innovation and the intellectual capital

Capacity for creativity requires a marketing and a technical view. Intellectual capital is made of intangible assets; for example, intellectual resources. A firm that needs innovation capability could improve both its employee quality (human capital) and its connection to external resources (relational capital). Caloghirou, Kastelli, and Tsakamillas suggest that in order to acquire external knowledge and thus improve internal processes (structural capital) if firms wish to perform better they require a better quality of innovation capabilities. Capacity to innovate has a positive effect on structural and social capital. Innovation capability has an important impact on the performance of companies, such as innovation, market share and financial returns.

Research design

We surveyed a total of 800 Taiwan Transportation Vehicle Manufacturers Association (TVMA) managers, and received 160 usable questionnaires (18% overall response rate). For the following reasons, we opted for TVMA as our research context. Firstly, Taiwan is a global pioneer in bicycle manufacture that now includes global brands (e.g., Giant and Merida). In this industry, knowledge creation and transfer is significant, as it fosters the production of associated products; such as electric bicycles. The TVMA is a central hub that links these bicycle makers, and is thus ideal for demonstrating CBV and KBV use. Secondly, the bicycle industry has an extensive network among its participants, and therefore relationships are essential to the performance (i.e., RBV) of businesses. Third, TVMA firms are well-known in Taiwan and possess well-established capacities and intellectual capital. Most of our respondents (38%) work in large firms (approximately 500 employees) with annual revenues of between NT$ 1 and NT$ 20 billion (42%). Respondents are primarily supervisors and managers (40%) or project managers and team heads (25%). Half of the respondents are university graduates and have been in employment for 6 to 20 years (41%). Annex 1 summarizes the profile of the sample.

Measurements

We produced a Chinese translation of all our measurement. The respondents judged all items on a Likert scale of 5 scales. The scale adopted from prior works is used to measure the capability of market knowledge. Five items (trust, happiness, engagement, collective action, collaborative communication) are taken from the works of Morgan and Hunt, and Mohr and Spekman, to measure the capacity for partnerships, and three items (product, institutional, production) are used to measure capacity for creativity. Intellectual capital is calculated by following three elements from the works of Damanpour and Higgins (structural, individual, and relationship capitals). We draw on Delaney and Huselid's work to measure organizational performance, and use firm size (number of employees) as a control variable through adoption from Damanpour and Evan and Yasuda's works.

RESULTS

Validity & reliability

Table 1 displays AVE from 0.679 to 0.730, and composite reliability (CR) from 0.920 to 0.870, respectively. This shows strong convergent validity and efficiency, as both surpass the reference values of 0.55 and 0.65, respectively. To examine the discriminating validity, we use Fornell and Larcker's test of shared variance between pairs of latent constructs. The results indicate that the correlation values between each pair of constructs do not exceed the square roots of any single construct of the AVE, and this confirms the discriminating validity of the model. Appendix 2 displays the load and cross-load factor for the products.

Common method variance (CMV)

To investigate common method bias we adopt Harman's one-factor test. A main factor analysis of the measurement items yielded seven factors with Eigen values greater than 1, accounting for 75.23% of the total variance and 40.08% of the variance representing the first factor. Because a single factor does not emerge, we discount common method bias as a problem, and one general factor doesn't account for most variance. Second, we add a common process component following Williams, Edwards, and Vandenb, whose indicators include all the indicators of the key constructs and measure the variances of each indicator. Appendix 3 reveals that the mean significantly stated variance of the variables is 0.70, while the average variance dependent on the procedure is 0.032. The ratio of substantive deviation to variation in procedure is about 23:1. Furthermore, most
loadings by factor are not important. Because of the low magnitude and insignificance of the variation, we contend that traditional system prejudice in this analysis is unlikely to be a serious concern.

| Table 1: Correlation matrix, AVE and CR. |
|-----------------|----------------|----------------|----------------|----------------|
|                  | IC      | MKC    | INTC    | RC     | OP     | CKC    |
| Innovative capabilities (IC) | .849    |        |         |        |        |        |
| Market knowledge capabilities (MKC) | .670    | .830   |        |        |        |        |
| Intellectual capital (INTC) | .819    | .720   | .830   |        |        |        |
| Organizational performance (OP) | .819    | .740   | .820   | .830   |        |        |
| Relationship capabilities (RC) | .740    | .560   | .760   | .739   | .830   |        |
| Customer knowledge capabilities (CKC) | .700    | .760   | .719   | .780   | .830   | .830   |
| Mean              | 2.189   | 2.180  | 2.220  | 2.300  | 2.210  | 2.350  |
| Standard deviation | 0.650   | 0.610  | 0.570  | 0.620  | 0.555  | 0.650  |
| a value           | 0.810   | 0.850  | .769   | .839   | .890   | .850   |
| AVE               | .730    | 0.690  | .690   | .680   | .679   | .690   |
| Composite reliability (CR) | 0.890   | 0.900  | .870   | 0.900  | .920   | .900   |

**Measurement model**
We test the predictive viability of the model by its R-square decision coefficient (R2). The findings demonstrate that both Human Capital Constructions (R^2 0.63) and Operational Efficiency (R^2 0.68) have adequate explanatory forces. In addition, we conduct cross-validated (CV) redundancy Q2 and CV community Q2 tests (omission distance 3) using the blindfolding function in SmartPLS 2.0 to reconfirm the robustness and stability of these models. We find the CV Red values ranging from 0.476 to 0.690 and the CV Com values ranging from 0.600 to 0.728. Because those values exceed the threshold value of 0, the three models’ cross-validity is re-confirmed.

**Structural Model**
Using SmartPLS 3.0, we follow Structural Equation Modeling (SEM) to evaluate the analysis assumptions. The method of bootstrap re-sampling (5000 re-samples), determined the meaning of the paths within the structural model. Important and constructive relationships on human resources between corporate capabilities are indicated by following values, i.e. business awareness (b 1⁄4 0.244, t 1⁄4 3.281), relationships (b 1⁄4 0.290, t 1⁄4 3.900), and creativity (b 1⁄4 0.407, t 5.300); All values b and t surpass the threshold, (t S 1.95) and hence H1, H3, H4. The impact on organizational performance of intellectual capital (b 0.825, t 23.902) is significant and therefore supported by H5. Hypothesis 2 is not supported because the ability of customer knowledge does not have a significant impact on intellectual capital (b 0.470, t 0.571). The non-mediating model (M2), and the partial mediating model (M3) were developed to test the mediating influence of intellectual property. M2 findings show the impact of the four capabilities pro-posed and INTC on OP, are important (except for the RC). M3 results, when all variables, including INTC, are treated as independent variables together, show a similar result, i.e. MKC, IC and INTC have effects, but RC does not. These results show the partial mediating effect that intellectual capital has on the relationships between MKC-OP, RC-OP and IC-OP. We also perform both Sobel and VAF experiments to validate the partial mediating effects (Sobel, 1982). In the Sobel study, we find that Z values vary from 3.20 to 5.20, and VAF values range from 50.98% to 63.73%, i.e. between 20% and 80%. These results re-confirm the partial mediating effects of intellectual capital on relations between RC-OP, MKC-OP and IC-OP.

**DISCUSSION**
There are two research questions to this study. What are the effects on human capital and corporate success of organizational capacities (i.e. business and consumer awareness, partnerships, and innovation)? Second, does human capital mediate on the relationships between corporate and company efficiency capabilities? This
research includes three key conclusions. First, business awareness, partnerships and technological skills all have major impacts on human property, but the ability to identify the client is not. Third, human property has a significant impact on the efficiency of the organization.

This research includes three key conclusions. First, business awareness, partnerships and technological skills all have major impacts on human property, but the ability to identify the client is not. Third, human property has a significant impact on the efficiency of the organization. We build on the following points to illustrate why capacity to learn consumers has no major impact on intellectual property. First, due to their poor reliability, we use exploratory factor analyses and delete certain items in the capacity of consumer information, and these deleted items may be required to calculate this construction well. Second, while customer knowledge ability involves the need to interact with customers, many companies may not put a lot of effort into this dimension and therefore fail to accumulate intellectual capital. Third, we find that intellectual capital has a positive impact on the performance of the organization. The finding is consistent with previous research. This result shows an accumulation of intellectual capital can help the organizational performance of companies.

Most importantly, this study finds that intellectual capital partially mediates the relations between RC, MKC, IC and performance of organizations. These results reveal the critical importance of intellectual capital in increasing the performance of the organizations. In fact, the internal partnership capacity of a company cannot work effectively without handling the intellectual property of the company properly. Therefore, the external business awareness skills and the internal product capabilities require careful management. This will ensure that intellectual capital is used effectively to achieve performance in the organization. These findings echo those of previous studies that demonstrate the importance of intellectual capital on organizational performance.

As with others, this research is subject to a set of limitations. First, in this study we focus only on the effects between the constructs of the relationships that may overlook the influence of other factors. Second, while we adopt a cross-sectional approach, many important elements, such as the absorption and storage of knowledge, are more dynamic, than static. Third, this study contains no reference to capital for innovation. Four, the outcomes of this study are contextualized only for the transport industry. Taiwan's bicycle industry is mature, and most firms in this industry tend to adopt an OEM strategy. Marketing (related to market knowledge and customer capabilities) is therefore not considered to be of particular importance, whereas innovation capabilities (R&D) are given priority in this context.

CONCLUSION
This study finds the positive effects on organizational performance of companies of both external (market knowledge, relationship) and internal capabilities (innovation). We demonstrate how external, complement internal capabilities, in order to enhance their organizational performance. Therefore, we suggest that firms should develop their internal capabilities (e.g., research and development) along with their external capabilities (e.g., as partnerships or joint ventures) in order to improve their performance. We also find that capacity for innovation is the most important driver of intellectual capital and organizational performance, followed by capabilities in relation and market knowledge. It is therefore advisable for businesses, particularly those in mature industries; such as transport, to focus their limited capital towards innovation capabilities while retaining and leveraging existing partnership networks.

The assumption that consumer awareness capacity has little impact on human property indicates that businesses need to take a longer-term view. For example, this could occur through the use of Customer Knowledge Management (CKM) or the creation of a customer community. Garcia- Murillo and Annabi suggest three stages of handling consumer information, i.e. gaining, exchanging and disseminating. We suggest that companies wishing to develop their CKM should make good use of these three mechanisms to establish customer satisfaction and loyalty to both the firm and its customers' mutual benefits.

Our findings that intellectual capital has a partially mediating effect on the relationships between market knowledge, relationships, innovation capabilities and organizational performance reveal the importance and need of intellectual capital as a result of organizational capabilities. Thus, while companies establish these capabilities, it is suggested that they should allocate resources related to the development of intellectual capital; such as human resources to transform these well-established capabilities into organizational performance.

This study's results suggest 2 theoretical implications. Firstly, this IePeO model integration extends its underlying logic to the transport industry. Second, we combine external and internal capacities in a single paradigm, linked to three theories of knowledge-based view (KBV), relationship-based view (RBV), and competency-based view (CBV). This sophisticated modeling approach may well bring the complexity of corporate relationships with their environment closer together.

First, in view of the above study limitations, we suggest future studies to incorporate other environmental variables in this model, such as firm scale and typology. Second, in order to explore the complex complexity of essential elements such as the diffusion of information, we recommend future research to use a quantitative approach to help explain how these interrelationships evolve. Third, future studies could include important dimensions of intellectual capital (e.g., capital for innovation) in this model. Four, it is possible to test other
research contexts (e.g., telecommunications) to further understand how these capabilities and intellectual capital interact in influencing the performance of firms.

REFERENCES