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**Strategic Alignment and Business Performance Model
within the Corporate Governance**

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Abstract

This paper aims to explore and analyse a strategic alignment and business performance model within the corporate governance. The objective of our research is to debate on the actual organizational needs in terms of reshaping corporate business strategy in connection with the business performance, taking into consideration new IT developments and trends. A research model with seven dimensions for strategic alignment and two dimensions for business performance is considered. A questionnaire including forty-three items is developed based on a content analysis of the previous literature. The qualitative research construct is further tested through two in-depth interviews with a Chief Operations Officer of a Global Competences Centre in the insurance industry and a Managing Director of a Cloud Data Management Company in the software industry. Our contribution is the comparative analysis of perceptual data in terms of management policies related to the strategic alignment in relation with the business performance within corporate governance. The insights of the interviews reflect our choice to operationalize the strategic alignment model construct and complement the conclusions of previous research in the field of business strategy and performance.

Keywords: Strategic alignment model, business performance, corporate governance, information technology.

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1. Introduction

Strategic alignment is the concept used for understanding how organizations may translate the multi-dimensional business strategy into actual increases in performance (Johnson and Lederer, 2010). Deep changes follow the marketplace globalization and digitalization trends, as organizations need to struggle relations with stakeholders and reconsider their paths to value creation (Bergeron et al., 2004) to attain competitive advantage. In this context, Luftman and Brier (1999) noticed the failure of traditional cost centre or expense approaches of information technology (IT), and highlighted its quality as a driver of business value through strategic alignment, which should endeavour the “strategic fit between strategy and infrastructure as well as the functional integration between business and IT” (p.110).

As noted by Avison et al. (2004) and Chan and Reich (2007), the literature in the field disclosed several terms that are interchangeably used but with sensitive dissimilarities, each denoting strategic alignment: fit (Venkatraman, 1989; Bergeron et al., 2001), linkage (Henderson and Venkatraman, 1989), bridge (Ciborra, 1997), integration (Weill and Broadbent, 1998), harmony (Luftman et al., 1999), or fusion (Smaczny, 2001).

Corporate governance enables both business organisation and information technology to achieve the strategic alignment of an organization (De Haes and Van Grembergen, 2013). Moreover, skills and governance are two main criteria that relate to the strategy communication and execution (Nichol, 2018).

The objective of our research is to debate on the actual organizational needs in terms of reshaping corporate business strategy in connection with the business performance, taking into consideration new IT developments and trends. A research model with seven dimensions for strategic alignment and two dimensions for business performance is considered.

A questionnaire including a total of forty-three items is developed based on a content analysis of the previous literature. The qualitative research construct is further tested through two in-depth interviews with a Chief Operations Officer of a Global Competences Centre (COO of GCC) in the insurance industry and a Managing Director of a Cloud Data Management Company (MD of CDMC) in the software industry.

Our contribution is the comparative analysis of perceptual data in terms of management policies related to the strategic alignment in relation with the business performance within corporate governance. The insights of the interviews reflect our choice to operationalize the strategic alignment model construct and complement the conclusions of previous research in the field of business strategy and performance.

The results of the interviews provide further insights, leading to a reshaping of the strategy design perspective within the corporate governance. Further developments of the strategic alignment model, with possible impacts on growth and profitability are suggested as a result of the interviews.

The remainder of this paper advances as follows: Section 2 reviews the prior research and builds on the research design. Section 3 describes the research methodology. Section 4 presents the empirical results of the interviews. Finally, the main conclusions and future research are presented.

2. The research design

Strategic alignment literature implies that the holistic approach of the business strategy implemented as a pattern of critical decisions becomes a consistency in the behaviour of an organization, relative to the distinction between intentions and realizations (Venkatraman, 1989). Scholars have suggested a differentiation between the concepts of planned/intended and realized strategy (Venkatraman, 1989; Bergeron et al., 2004; Velcu, 2010), emphasizing the importance of analysing not only how the organisation's strategy is designed, but also whether there is a link to its performance.

Based on a literature review, six dimensions of strategic orientation were identified: aggressiveness, analysis, defensiveness, futurity, proactiveness, and riskiness. Next, the authors extended the alignment concept as the fit between each of the six dimensions of the strategic alignment model and a new dimension including indicators embodying the IT characteristics. This improvement of the model may explain the strategic alignment, tailored on specific requirements.

A number of alignment models have been offered in the literature (Avison et al., 2004), amongst which Strategic Alignment Model (SAM) (Henderson and Venkatraman, 1989), strategic orientation of business enterprises (STROBE) (Venkatraman, 1989), strategic orientation of the existing portfolio of IS applications (STROEPIS) (Chan et al., 1997), and MIT90s model (Scott Morton, 1991). The conceptual and practical value of the models was demonstrated when used as a management tool to create, evaluate and support the strategic alignment of an organization.

In line with the prior research, we argue a holistic approach of strategic alignment, as noted by Venkatraman and Prescott (1990), to retain the complex and interrelated nature of the relationships between dimensions. The model of strategic alignment may be discussed in the view of coalignment pattern. Bergeron et al. (2004) identified that conflicting coalignment patterns may be generated between strategy and structure of business and IT as result of many contingencies in the research model.

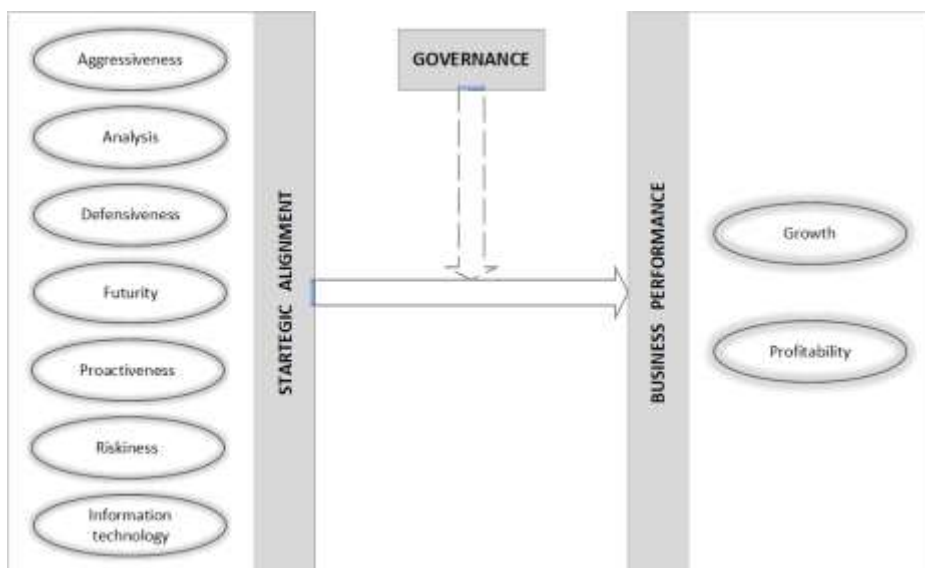


Figure 1. Strategic alignment and business performance model within the corporate governance

Source: Adapted by authors, based on Venkatraman (1989), Bergeron and Raymond (1995), Bergeron et al. (2004), and Johnson and Lederer (2010)

A brief description of the model's dimensions is provided in the following paragraphs.

Aggressiveness. This dimension refers to the policy adopted by an organization in term of resources allocation for improving its market position (Venkatraman, 1989). It also reflects the notion of outperforming competitors as noted by Bergeron and Raymond (1995) and Johnson and Lederer (2010), and the pursuit of market share towards achieving business performance.

Analysis. This dimension refers to the extent of tendency to search deeper for the roots of problems as noted by Venkatraman (1989), including to generate the best possible solution alternatives (Bergeron and Raymond, 1995; Venkatraman, 1989).

Defensiveness. This dimension addresses the prudent action of the organization seeking to attain the efficiency targets by cost reduction (Venkatraman, 1989) strategies. As the organization strategy concerns the preservation of products, markets, and/or technologies, the defensiveness dimension may be analysed, according to Johnson and Lederer (2010), both internally (by reducing costs) and externally (by developing customer relations).

Futurity. This is the dimension positioning the organization in time. As a component of the firm's strategy, futurity needs to be seen on long-term rather than on short-term (Venkatraman, 1989). Thus, the emphasis of strategic decisions lays on effectiveness versus efficiency of the organization (Bergeron and Raymond, 1995; Venkatraman, 1989). Johnson and Lederer (2010) highlight the long-term considerations as extensive forecasting or environmental trends.

Proactiveness. This dimension emphasizes the organization's proactive (devoted and active) conduct in perpetual seeking for new market opportunities, connected or not to the extant business (Venkatraman, 1989). Hence, by reacting to changing competitive environment trends (Venkatraman, 1989; Johnson and Lederer, 2010) and by taking pre-emptive actions (Bergeron and Raymond, 1995), a firm has proactiveness as a strategic pillar.

Riskiness. Considering previous seminal research in the field, Venkatraman (1989) and Bergeron and Raymond (1995) conceptualized this strategic orientation dimension as the organization's risk-taking decisions related to resource allocations, products/services and markets choices. Latterly, Johnson and Lederer (2010) allied riskiness with organizational ventures that may have an uncertain outcome but a likely high return.

Information Technology. In the literature, IT alignment is mostly defined as an organizational-level construct developed in order to capture the degree of correlation between IT and business strategy (Queiroz, 2017). Henderson and Venkatraman (1993) proposed a strategic alignment model which is based on strategic fit and functional integration of external domains (strategy) and internal domains (infrastructure and processes).

Business performance. Contingency studies of the strategic alignment impact on the performance identify positive relationship of the fit between strategic orientation and business strategy on performance (Bergeron et al., 2004; Teo and King, 1996). Chan et al. (1997) found matching moderation in the strategic alignment as a predictor of business performance, while Sabherwal and Chan (2001) noted significant effects on the performance in relation with business strategies' alignment that are found for prospectors and analysers. However, Palmer and Markus (2000) could not find any relationship based on matching mechanisms between strategic alignment and business performance.

Research Questions. Based on the strategic alignment and business performance model within the corporate governance, the following research questions are addressed: *Which of the seven dimensions of the strategic alignment model are considered significant in relation with the business performance? Are there substantial differences between industries?*

Given the complex nature of research questions, Bergeron et al. (2001) and Bergeron et al. (2004) found that an increase in the structural complexity of business strategy may have no impact on the organization's performance, unless considered under the contingency theory. Thus, our proposal of adding a seventh dimension, focused on IT strategy may have a positive impact on the competitive positions in terms of growth and profitability (Chan and Reich, 2007).

3. Research Methodology

Based on a strategic alignment model previously applied and validated in the literature by Venkatraman (1989), Bergeron and Raymond (1995), and Bergeron et al. (2004), extended later by Johnson and Lederer (2010), our methodology involved a qualitative research based on a questionnaire tested through two

in-depth interviews with a Chief Operations Officer of a Global Competences Centre (COO of GCC) in the insurance industry (86 minutes) and a Managing Director of a Cloud Data Management Company (MD of CDMC) in the software industry (35 minutes).

The questionnaire contains items about seven dimensions for strategic alignment and two dimensions for business performance. Thirty-five items are related to the organization's strategic alignment and eight items to the business performance. All of the items used a Likert scale of 1 (strongly disagree) to 7 (strongly agree) with the indicators as they relate to strategic alignment and business performance in the organization.

The present research used the same indicators as in the original instruments incorporated into the STROBE model (Venkatraman, 1989; Bergeron and Raymond, 1995) for the first six dimensions, thus taking advantage of their previous validation. Moreover, the seventh dimension designed based on an analysis of IT concepts, previously used by Bergeron et al. (2004) and Johnson and Lederer (2010) ensures extensive validation for a strategic alignment model adapted to the current requirements of technology.

The first step of the research was to use the content analysis research method in previously published articles addressing the nexus between strategic alignment of an organization and its business performance. This approach helped the authors to design and present a review of previous results of the validation process for the six dimensions of the strategic alignment model, along with the two dimensions of performance, and to identify relevant indicators able to characterise the IT dimension. The research team members, with experience in management accounting, performance measurement, and IT research initially reviewed each instrument.

4. Findings

The dynamic and digitally-oriented 21st century business environment requires alignment between business and IT strategies. A challenging issue arising in this domain is linking the IT strategy with business requirements. For evaluating the maturity of strategic alignment including the IT dimension, the results of our case-study interviews support the proposal of Luftman (2000).

Further, the results of the research are presented, grounding on the validity of the model, assessed by Venkatraman (1989), with reference to both internal consistency of the items measured for each dimension in terms of reliability and unidimensionality, and external validity.

Table 1. Interviews’ results on strategic alignment and business performance

Dimensions	Score	
	Insurance	Software
A. STRATEGIC ALIGNMENT		
<i>Aggressiveness Dimension</i>		
1 Sacrificing profitability to gain market share	4	6
2 Cutting prices to increase market share	1-2	2
3 Setting prices below competition	1-2	3
4 Seeking market share position at the expense of cash flow and profitability	3	6
<i>Analysis Dimension</i>		
1 Emphasize effective coordination among different functional areas	7	7
2 Information systems provide support for decision making (operational, tactical, strategic)	7	5
3 When confronted with a major decision, we usually try to develop thorough analysis	7	7
4 Use of planning techniques	7	5
5 Use of the outputs of management information and control systems	7	2
6 Manpower planning and performance appraisal of senior managers	7	7
<i>Defensiveness Dimension</i>		
1 Significant modification to the manufacturing/services technology	5	1
2 Use of cost control systems for monitoring performance	4-5	4
3 Use of production/process management techniques	7	1
4 Emphasis on product /service quality through the use of quality circles	7	5
<i>Futurity Dimension</i>		
1 Our criteria for resource allocation generally reflect short-term considerations	3	4
2 We emphasize basic research to provide us with future competitive edge	7	7
3 Forecasting key indicators of operations	7	7
4 Formal tracking of significant general trends	7	7
5. What-if analysis of critical issues	7	6
<i>Proactiveness Dimension</i>		
1 Constantly seeking new opportunities related to the present operations	7	5
2 Usually the first ones to introduce new brands or products in the market	7	3
3 Constantly on the lookout for businesses that can be acquired	7	3
4 Competitors generally preempt us by expanding capacity ahead of them	2	1
5 Operations in larger stages of life cycle are strategically eliminated	1	1

Dimensions	Score	
	Insurance	Software
<i>Riskiness Dimension</i>		
1 Our operations can be generally characterized as high-risk	1	1
2 We seem to adopt a rather conservative view when making major decisions	5	5
3 New projects are approved on a ‘stage-by-stage’ basis rather than with ‘blanket’ approval	2	5
4 A tendency to support projects where the expected returns are certain	7	6
5 Operations have generally followed the ‘tried and true’ paths	5	5
<i>IT Alignment Dimension</i>		
1 Knowing the information technology used by your competition.	6	7
2 Instituting a technology watch in order to adapt rapidly your information technology as a reaction to environmental pressure	6	7
3 Use of IT to reduce your production costs	7	7
4 Use of IT to improve your firm’s productivity	7	4
5 Use of IT to improve the quality of products or services	7	7
6 Use of IT to meet the deadlines requested by your customers/suppliers	7	7
B. BUSINESS PERFORMANCE		
<i>Growth Dimension</i>		
1 Sales growth position relative to competition	7	7
2 Satisfaction with sales growth rate	7	6
3 Market share gains relative to competition	6-7	6
<i>Profitability Dimension</i>		
1 Satisfaction with return on corporate investment	7	7
2 Net profit position relative to competition	6-7	7
3 Return on Investment (ROI) position relative to competition	6-7	6
4 Satisfaction with return on sales	6	6
5 Financial liquidity position relative to competition	6	7

Source: Synthesis of the interviewees scoring

The *aggressiveness dimension* is scored higher by the MD of CDMC in the software industry as compared to the COO of GCC in the insurance industry (Table 1) showing an increased willingness of improving market position at a relatively faster rate than the competitors for the revenue-oriented software company.

The two items related to the pricing policy are scored the lowest for both industries. With 2 out of 7, cutting prices to increase market share is classified as a rather inappropriate measure in the context of encouraging a continuous growth of the company, based on its possible perception of the market players.

“...if you have a good product and you lower the price, the market may perceive that there is something wrong with the product.” (MD of CDMC)

Although the policy of the insurance company is not characterized by a high aggressiveness, there are specific projects and markets requiring acceptance of a smaller rate of profitability to ensure gaining new markets on innovative products.

Specifically, the company introduced a digital device project, a pioneer at the moment they started.

“...was one of the projects that was not so profitable, but it helped us gain market share for two-three years...” (COO of GCC)

As result of the interviews, *the analysis dimension* is the highest ranked for the two industries, scoring above 5 out of 7 for most of the six items. The insurance company scored 7 for all items, emphasizing the effective coordination among different functional areas. Thus, ignoring the effective coordination amongst all the functional areas may generate negative consequences for both the internal organization of the business, and external customers' relations. Differentiating from the insurance company, the software shared centre scored 2 out of 7 for the *use of the outputs of management information and control systems*. The explanation points to the strong entrepreneurial spirit (“Keep it simple!”), which prevails over the corporate one, based on complex IT systems.

“In our context [of the continuous growth], speaking of strategic alignment, [we need] less systems, but let's do, let's grow, let's analyse.” (MD of CDMC)

Following the interview in the insurance industry, the first two items of *defensiveness dimension* were scored with 4 and 5 respectively, out of 7, and the last two received the highest rate stating the interviewee's strong agreement. The arguments of the COO-GCC describe a prudent behaviour:

“Processes are the main tools of the operations sector and sometimes they are overseen [...] there is no other way on how to deploy a competitive product.” (COO of GCC)

A totally different perspective is registered in the software company as regard to the cost reduction and efficiency seeking methods. Scores of 1 out of 7 assigned to the use of production/process management techniques and modification in technology items show that procedures and process management techniques hinder daily development of activities and it can transform “entrepreneurial” flows into ones specific to a corporation, affecting the firm's agility.

“It's not necessarily bad, but it transforms the company into several layers of approval...” (MD of CDMC)

Except the first item, which was scored with 3 for insurance industry and 4 for software industry, the other items of the *futurity dimension* received the highest rate explaining the companies' orientation on mid-term. Their considerations lay on effective and efficient strategic and tactical decisions.

“...but in multinationals, the vision is towards the future...” (COO of GCC)

“...it's rather midterm...” (MD of CDMC)

For the *proactiveness dimension*, the two companies demonstrated different approaches. The COO of the insurance company showed a high agreement related to the first three items, while the last two received 2 and 1, respectively out of 7, indicating high disagreement. As one of the insurance market leaders, they “... are the ones to introduce new brands or products in the market.” (COO of GCC). However, they are constantly searching for businesses that can be acquired.

“I would say that Mergers and Acquisitions will be a very important pillar to focus on, and especially in our company.” (COO of GCC)

Nonetheless, the COO of GCC expressed her disagreement concerning the operations in larger stages of life cycle that would be strategically eliminated.

“The operational function is the mechanism that makes everything move in every particular project implementation.” (COO of GCC)

For the representative of the company in the software industry, the indicators do not have high rates; on the contrary, for the item “constantly seeking new opportunities related to the present operations”, the MD assigned 5 out of 7. The software company is seeking for new products and trends, rather than researching for present activities. As for being the first to introduce new brands on the market, the score was 3 out of 7. The quality policy was previously indicated as important, therefore the MD specified also that, even though the firm risks to stay behind its competition, it is preferred not having the lowest price, but offering a product with an improved quality at the end. MD described in this way how the company operates:

“...if I am the second, I give it better than the one who launched it ... quickly after the competitor gave it...” (MD of CDMC)

The software company is not necessarily “on the lookout for businesses that can be acquired”, but rather intends to grow by itself; thus, the item scored only 3 out of 7. For the last 2 items, “competitors generally preempt us by expanding capacity ahead of them” and “operations in larger stages of life cycle are strategically eliminated”, the given score was minimum: 1 out of 7. The main argument is the business reality: its IT market sector is clearly defined in the context of sustainability, and the approach of the services offered is different from that of the main competitors.

Within the corporate governance, *the riskiness dimension* appears rated almost identical by the interviewee, except one item: *New projects are approved on a ‘stage-by-stage’ basis rather than with ‘blanket’ approval.* The scores are 2 for the insurance company and 5 for the software company. These different visions are also confirmed by the score 7 out of 7 for the use of activity planning techniques in the insurance company and only 5 out of 7 in the software company.

In terms of high-risk operations, the two managers rated with 1 out of 7, but the arguments differ: it seems that in the insurance industry the risks are carefully examined and mitigated, while companies in the software development sector are assuming acknowledged and unknown risks, specific to this dynamic area.

“In the insurance business in terms of operations you don’t take any specific risks [...]; it is extremely important that every process does not have any risk implication.” (COO of GCC)

“It’s more aggressive, we take risks.” (MD of CDMC)

The three items left show a moderate to high riskiness for both enterprises. Moderate risk was assigned to adopting a conservative view when making major decisions, but the two companies are seeking being permanently innovative. The

same evaluation has the operations generally following the ‘tried and true’ paths, both rated 5 out of 7.

“...we try to be more and more innovative. [...] The ways that were tried before are important, but I would not say that these should be like a mark point.” (COO of GCC)

“...it's a good product; go, do, try, do not stay conservative!” (MD of CDMC)

The item regarding the tendency to support projects where the expected returns are certain has received the highest rate, 7, respectively 6 out of 7. The COO of GCC strongly agreed and the MD argued:

“...it is about not doing 10 things, but only 3 things, for those ones taking care to be good and impactful.” (MD of CMDC)

An effective corporate governance policy includes also *the Information Technology dimension*. Following the interviews, for the insurance company, this is the second highest rated dimension irrespective of the indicators, as the first two were scored with 6 and the four lasted with 7 out of 7. The COO of GCC strongly agreed with all the items belonging to the IT alignment dimension and accents on improving the organization’s productivity.

“Mostly, because of the digitization, it is absolutely necessary to use the IT to improve the firm’s productivity. [...] we started to build our in-house tools. In order to adapt the need of the productivity increase and to have a tool to show our results for a better reporting.” (COO of GCC)

As a general observation, in case of the Cloud Data Management Company, being a software company, both score and response were related to applications and equipment needed not only to manage activities, but also to develop specific IT CDM product. That is how all scores of 7 out of 7, except one – 4 out of 7 -, can be explained. The score 4 was given to the item concerning IT tools dedicated to improving the firm’s productivity, referring, for example, also to the developers’, not only the sellers’ daily work. For the first ones, there are not so evident tools uses.

“In this area, if you don't know [the information technology used by your competition] ...”

“We have a team dedicated to Competitive Intelligence, we also analyze with dedicated people [the environment, in order to adapt rapidly to external pressure]...” (MD of CDMC)

The predictive validity of the six dimensions of the STROBE model, enhanced with the IT alignment dimension is addressed by introducing in the questionnaire two dimensions of *business performance*, growth (effectiveness) and profitability (efficiency). As such, after discussing the strategic alignment dimensions, the interviewees were challenged with statements related to growth and profitability describing the business performance for the last five years, relative to the organization’s competitors.

The items of both growth and profitability dimensions are rated 6 or 7 out of 7, indicating a high importance for the company in the insurance industry as well as

for the company in the software industry. The sales growth position relative to competition is considered:

“...a strong aspect because the operations are the engine of all the processes that are implemented in a company.” (COO of GCC)

Nevertheless, the companies scored with 6 out of 7 the *market share gains relative to competition*, indicating:

“...a strategically thinking point of view...” (COO of GCC).

“...because in the rest of the regions, we want more than the competition...” (MD of CDMC)

The *profitability dimension* received scores of 6 and 7 for all the items. Satisfaction with return on corporate investment and net profit position are seen at the maximum value, *“a very strong aspect, in any business”* (COO of GCC). Meanwhile, the financial liquidity position relative to competition is stronger for the software company. As for the satisfaction with return on sales:

“You will not implement any project if you do not have return on sales.” (COO of GCC)

5. Conclusions and future research

This study was constructed as an exploration of the management perspective on a proposed strategic alignment model in connection with the perceptual considerations on business performance. The authors' insight is that different economic contexts for companies in different services industries may be characterised by various management policies.

Summarising the findings, useful conclusions may be drawn. On one hand, similar management policies were found for strategic alignment items related to futurity, riskiness and IT alignment dimensions. They are both mid-term oriented and praise a prudent behaviour relative to high-risk operations, major decisions, and certain returns. These results are consistent with previous research (Venkatraman, 1989; Johnson and Lederer, 2010). On the other hand, proactiveness and defensiveness dimensions are differently perceived by the management. While the corporation activating in the insurance industry adopts a more proactive conduct in seeking new markets introducing new brands or acquiring new businesses, the smaller, niche software company assumes a moderate behavior. For the aggressiveness dimension, even if the scores are comparable, the underlying explanations residing from the in-depth interviews with the managers showed diverse perceptions. The different arguments of the managers were in line with the industry and companies' growth objectives, aspects also noted by Bergeron and Raymond (1995).

Furthermore, even if there is evidence that strategic alignment may not have direct or positive performance implications (Tallon and Pinsonneault, 2011), Chan et al. (2006) found that factors such as industry, organizational size, and type of strategy are possible contingent factors affecting the impact of alignment process on the business performance. In line with Tallon and Pinsonneault (2011), the results of the interviews highlighted an increased consideration on the business

performance relative to the investors, for both companies, regardless their performance objectives (profit vs. revenue) or organisational format (entrepreneurial vs. corporation).

IT and strategic alignment may go beyond organizational boundaries, as important changes are likely to occur within the industry as well. Further developments of the strategic alignment model, suggested as a result of the interviews and of the content analysis of previous research may include social dimension, environmental dimension, or sustainability dimension. Finally, the strategic alignment of technology may contribute to keeping the entire organisation focused on the established goals and may be recognised as a critical activity within the corporate governance.

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