



Information Technology and Business Strategy in Aramex Oil Company

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Abstract

Strategy has been always a key concern to top management. Recent developments in information technology have highlighted the capabilities and the strategic functionalities that IT could add to companies' strategies. More and more attention has been granted to exploit IT capabilities in supporting and introducing new business strategies. The aim of this study is to examine the strategic alignment and evaluate the recent research introduced by various scholars, in order to introduce a framework which refines the major factors which influence the strategic alignment. A study on Strategic Alignment between Information Technology and Business Strategy regarding the case study Aramex Company Profile provided which have different level of IT exploitation. Data was collected through questionnaire distributed to business and IT managers, as well as companies' press releases and disclosures. The findings support the previous research that the shared domain knowledge, trust and understanding, participation and involvement, and communication have an impact on the strategic alignment. However, through the analysis of the results, it has been found that the level of the industrial IT dependency plays a direct role in determine the level of strategic alignment in firms. To sum up, it can say that adopted strategy, level of communication, trust and understanding, participation and involvement, shared domain knowledge and the level of industrial IT dependency have a direct impact on the strategic alignment between IT and business strategy.

Keywords: Strategic Alignment; Information technology; Business Strategy; IT dependency.

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1. Introduction

Competition between firms is become more intensive, globalized markets are only creating new opportunities to firms but also creating new threats to them. Firms are trying to leverage their resources to adapt to the new updates, and they are trying to create new winning formulas. Firms are more aware of the importance of strategy, and they are spending more and more on the strategic planning and improvement. And with this new era of unlimited information flow, Information Technology is become more and more important to companies. Firms have realized that the role of information not only can be used in daily activities

but also in long term strategic planning and decisions. Thus, many companies are spending more and more on Information technology management systems (Carr, 2003). Information technology can spawn new business, change industry structure, and create competitive advantage (Porter and Millar, 1985). It can help firms to achieve price leadership and internal process efficiencies (Bruce, 1998), and it radically change the way business is conducted. However, IT has also a destructive role; IT has spread in all companies and its existence is vital for a company to survive; IT can create a threat if the company lies way behind its competitors when it comes to technology. So, the question is how to turn IT into a

strategic factor and how to leverage its output to create competitive advantage. The answer does not involve only the creation of IT strategy and the increment of IT expenses. In fact, the core functions of IT have become available and affordable to all firms. Strategic alignment is a process of creating a harmony between IT and Business strategies and leveraging IT functionalities to create and support new and existing business strategies. It is a dynamic process which needs a constant revision and reassessment due to the changing nature of business strategy. And this cannot be achieved unless there is a harmony and unity between IT and Business domain. And this is what firms should focus on. They need to identify the main factors which affect the strategic alignment, and try to maximize the enablers and reduce the inhibitors. This paper is conducted to present the main factors which affect the strategic alignment by reviewing and refining the main factors introduced by the various scholars. Findings on Aramex Company Profile, examining their strategic alignment and how the presented factors affect their alignment have been proposed. This study starts by reviewing the strategic analysis, to help the user build a wider understanding of strategy. Then a review to the various work introduced on strategic alignment emphasizing on SAM and the main added contributions to, in order to introduce a refined framework consists from the factors which affect the strategic alignment. A case study on Aramex Company Profile has been conducted to examine the strategic alignment and investigate how the proposed factors are affecting their alignment.

2. The relationship between Information Technology and Business

IT position has changed dramatically in the last decades from a support tool into an essential resource for obtaining and sustaining competitive advantage (Porter and Millar, 1985), even some business executives can no longer perceive it as exclusive territory of IT department; it is treated as a corporate resource. IT is offering new management and business opportunities which empowers firm to gain competitive advantage, improve productivity and performance, facilitate new ways of managing and organizing, and develop new business (Peppard, 1993 p.13). Nowadays, being competitive depends on the

effective use of IT to manage the information resources. Many opportunities can be missed due to the failure to plan and recognize the long term impact of IT on the firm's output. The high dependency on IT has increased to the level where IT responsiveness can create a competitive disadvantage (Smaczny, 2001). Failure to leverage IT may seriously decrease a firm performance and viability (Avison et al., 2004). Bruce (1998) warns that the failure to align IT and Business will decrease the IT creditability and reduce the strategic IT investment by providing proactive systems instead of reactive ones. Willcocks (1994) identified the value and the impact of IT on the firm's profitability and efficiency and marked four domains which can be affected by the leverage of IT; competitive advantages, cost base efficiency, product delivery, operational feasibility, and capacity to manage (Willcocks, 1994 p.114).

3. Strategic Alignment Model

Mangers admit the strategic role of IT in their business but not all of them think that their IT and business domains are strategically aligned (Luftman et al., 1993). Henderson and Venkatraman (1993) argue that the inability to realize the value of IT investment is due to the lack of alignment between business strategy and IT strategy in an organization. Thus, they introduce the Strategic Alignment Model (SAM) which tries to demonstrate how Business can benefit from IT, and how IT can be used to support or introduce new Business strategies. Strategic Alignment Model can be used as a connection point between Business managers and IT managers which define and illustrate the roles of each. It is a structure which determines their roles and participation according to the chosen perspective. It provides a logical framework for analyzing the strategic choices in details to ensure the successful implementation (Luftman et al., 1993). Figure 1 demonstrates SAM and its components. SAM consists from four domains which are; business strategy, organizational structure, IT strategy, and IT infrastructure. Business and IT Strategy domains consist from scope, competences, and governance, while internal domains (IT infrastructure, organizational structure) consist from architecture, skills and process.

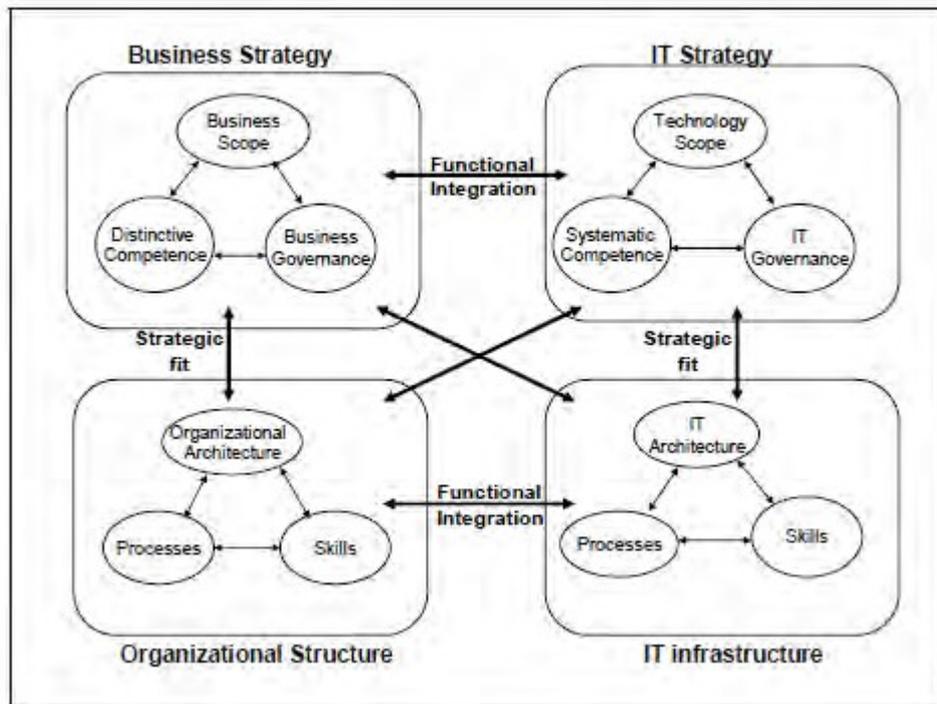


Figure 1: Strategic Alignment Model

According to the figure shown above, it can state that Business scope is the proposed strategic choices. Business competences are the attributes associated with the chosen strategy such as low pricing, quality, and value added services. Business governance is interrelationship with other firms which support to achieve the desired strategy, such as joint ventures, strategic alliances, and technology licensing. Business (organizational) architecture is the administrative structure and configuration of the roles, and responsibilities. Business skills are the resources training and development to support the business strategy and vision. While business processes are the processes which support and shape the ability to execute and implement the business strategy. Technology scope is information technology systems, such as export systems, BPMS, electronic imaging, that support the business strategy or could create new ones.

Technology competencies are the IT strategy attributes that contribute to support or create new strategies, such as flexibility, system reliability. Technology governance is the mechanisms of obtaining the required IT competencies, such as strategic alliances and joint research. Technology architecture is the configuration of the hardware, software and communication inside the firm. Technology skills are the training and obtaining the knowledge and capabilities needed to effectively manage the IT infrastructure. Technology process is the processes needed to maintain the IT infrastructure such as systems

development, maintenance and control systems (Avison et al., 2004, Luftman et al., 1993, Henderson and Venkatraman, 1993).

4. Research Method

A qualitative analysis has been introduced to examine the strategic alignment and whether the proposed factors are effecting the strategic alignment. Data has been collected from two main resources; secondary data will be collected from the available journals, publications, and the companies' press releases and disclosures. Primary data will be collected through a questionnaire which will be distributed to the participated firm. Interviews with the participated managers could have been a better source to gather data, but due to time and communication constraints, questionnaire was chosen as the adopted research method. Questionnaire is considered a significant resource to gather data because it allows researchers to capture snapshots of practices at a particular point in time (Galliers 1985).

5. Discussion and results

5.1 Aramex Company Profile

Aramex Company Profile is a market focus company aiming to introduce new values propositions to its customers. Although, it is an international company but it mainly focuses on the Middle East, African and Asian markets. And it always seeks to introduce new values and services to these customers to reduce the intensity of the

competition between itself and other big freight companies such as TNT, FedEx, and DHL. According to Porter generic strategies, Aramex is adopting the differentiation focus strategy by its pursuit to provide new services which differentiate it from competitors, focusing mainly on specific markets needs and acting proactively to introduce new value propositions to them.

In addition, mapping Aramex to Miller and Snow's strategy classification, Aramex is considered an "Analyzer" company. Analyzer strategy is concerned with minimizing risks and maximizing the opportunity. This can be achieved by building a system which contains two subsystems; one concerned with maintaining and controlling the core products, while other is concerned with searching and introducing new products and services. Aramex falls under this categories because it has its core services (freight, international express) which represent 77% of the total revenue, and it has introduced new services to the market such as 'shop and ship' and 'meals on wheels' services. Thus, this innovation process is a dynamic process which demands a high level of innovation and flexibility in the company structure and needs a robust IT structure which can support both systems. This need can explain the reason why IT is perceived as an essential element in Aramex, and why IT has a strategic and operational role. The top management awareness with the necessity of IT in Aramex value chain is translated by spending 30% of the total expenses on IT, and by constructing an IT department which is cable of providing Aramex with new systems to support the new Business changes and to ease the launching of new services to the market.

According to SAM, Aramex is following the technology transformation strategic alignment prospective. The finding was concluded after examining Aramex business strategies, top management vision, IT strategy and structure and management control. Despite the general awareness of the necessity of IT in the strategic decisions, Business strategies are still controlled by the business management with the secondary participation of IT managers. The Business management provides the technology vision that would support the business strategy, and IT managers' role is to support current and new business strategies and to architect and efficiently implement the IT infrastructure

which support the IT vision proposed by top management. Mapping the questionnaire results to the proposed model, it becomes obvious that Aramex is striving to achieve the strategic alignment. Figure 17 demonstrates the proposed model and the results found in Aramex. Both participators perceived IT as an important factor in Aramex, and both stated that the current

organizational structure supports the desired business strategy, and allow sharing same culture atmosphere. Also the current organizational structure allows the CIO to report directly to CEO, and allows him to participate in the strategic meetings which enriches the IT planning with Business logic and business understanding, and enables IT planning to align with Business planning. In addition, CEO participation in the IT planning increases IT awareness in the company. This finding align with (Kearns and Lederer, 2003) conclusion that CEO participation is associated with the reflection of Business planning to IT planning. The increased awareness of the IT necessity in Aramex endows a smooth and clear communication between IT and Business managers, where both participators stated that there is good communication between both domains. And, both participators reflected very good knowledge in the other domain. This can be expected due to the fact that the involvement of Business managers in IT project lifecycle and evaluation process is a necessity. s. Where one of the criteria to evaluate IT project is to assess its fulfillment to the planned Business needs. This participation and involvement has increased the success of IT projects in Aramex. A finding that supports Luftman & Sledgianowski (1997) findings that one of the six steps to build a better alignment is to establish a mixture teams which include Business and IT managers, and to choose and evaluate success criteria by both domain. Also, the history of IT projects success helps to strengthen the creditability of IT among Business managers, and empower the IT managers to introduce new strategic projects, and according to (Reich and Benbasat, 2000), it also leads to high level of communication. However, our findings align with Reich and Benbasat finding which indicates a high IT implementation success and a high level of shared knowledge domain results in high level of communication and endow the short term alignment, but our findings showed that a moderate level of communication was achieved in Aramex case. Furthermore, this general positive atmosphere increases the trust and understanding between both domains and empowers the long term strategic alignment, where business manager expressed his trust in IT department capabilities to fulfill his business needs. Also, the IT manager reflected in the questionnaire his understanding to the business domain needs and demands. However, the dissertation recommends Aramex to enhance the shared domain knowledge by encouraging the organizational learning process between departments. This can upgrade the communication level and enhance the strategic alignment level in the company.

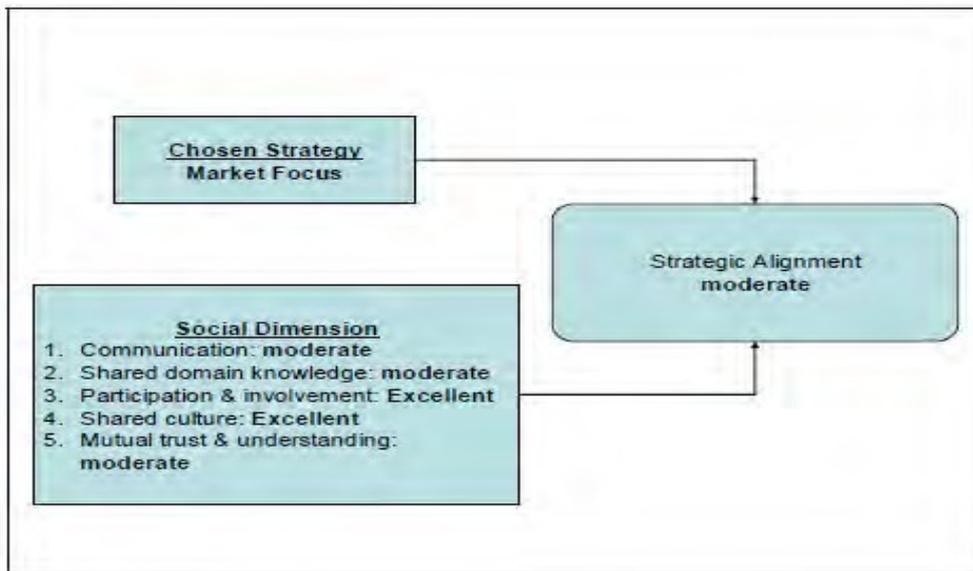


Figure 2: demonstrates Aramex strategic alignment status and the attitude of the influential factors in strategic alignment

Aramex case reflects a positive strategic alignment where from analyzing the results and mapping them to the proposed model, it would seem that Aramex has strived to achieve and fulfill the factors which maximize the strategic alignment. However, this can be attributed to the fact that Aramex operates in an Industry which highly depend on IT capabilities. IT has provided and it is still providing the freight industry with new capabilities to introduce new services or to update the current ones. This explains why IT is perceived by the top management in Aramex as a main input in Aramex Business strategies.

5.2 Aramex's questionnaire results

The IT operations Manager emphasizes on the current organization structure which supports the business strategies and allows mutual interaction between Business and IT managers. IT is perceived as an important factor in the company due to the fact that it plays a functional and a strategic role in Aramex's value chain. This may explain why IT managers are aware of the firm's business strategies, and why strategic IT projects are reviewed and managed by the business and IT managers. Yet, Aramex organizational structure allows the CIO to report directly to the CEO, and allow the IT managers to participate in the strategic planning meetings and decision making meeting. Also, the CEO participates in the strategic IT planning. This may explain why Business planning reflects IT planning, and IT planning reflects Business planning in Aramex. Also, he adds that due to the importance of the IT project success history, evaluating the success of IT projects is a task shared by IT and Business managers. And one criteria of evaluating the success of an IT project is to check if it meets the desired business objective,

states, "There are many factors; such as Delivering Project on time, Stable and problem free system, fulfills the business need."; The IT Operations manager perceives that IT and Business staff share a mutual culture which is guaranteed by the excellent communication and periodic meetings between IT and business managers. Similarly, the Business Development Manager shares with the IT Operations manager the same classification to Aramex strategy, inferred that Aramex is a market focus company that is seeking to introduce new values to the customers. As for IT, the Business Development Manager considers that he has a moderate level of IT knowledge. But nevertheless, he perceives IT as an essential element in the company and in the industry, and describes its role in the company as strategic and operational. Where Business planning reflects IT planning, and IT planning reflects Business planning. He also speculates that IT expenses consists 30% of the total Expenses. As for the organizational structure, he expresses his satisfaction from the current organizational structure which supports the adopted business strategies, and empowers one shared culture between all departments. The current organizational structure enables the CIO participation in the strategic meetings and the CEO participation in IT planning. It also includes a weekly meeting between Business and IT managers. He also confirmed that the decision to invest in a new is made by the participation of the two domains; and the evaluation process includes both domains involvement. One criteria of evaluating the IT project success is to compare the IT projects results to the business owner objectives and requirements. Nevertheless, he classified the IT success in Aramex as a moderate success. This influences the level of

communication, which he described as moderate. As for the trust, he shows his fully trust in IT capabilities to fulfill his business requirements, but with some conservation on the delivery time factor, which he is not satisfied with.

5.3 Findings

The case study Aramex Company Profile represents a specific strategic alignment. It has been indicated that strategic alignment was presented in Aramex case that shares the same Porter generic strategy, with the specific social factor. Culture and communication were considered moderate in this case study, while mutual trust, participation and involvement, and shared domain knowledge were sharp. In Aramex, IT is perceived as a main contributor in the industry and many new services were being provided due to the information technology

development (e.g. the package tracking system). This study has concluded that the Industrial IT intensity and dependency has played a major role in determining the necessity to have a strategic alignment and it has affected the top management decision to support IT and to exploit its capabilities as a strategic element. This finding indicates that IT intensity is a new factor, which was missed by scholars, is determined. Hence, it could conceivably be hypothesized that the industrial IT dependency has a direct influence on the level of the strategic alignment in a firm.

Figure 3 demonstrates the refined model and the new added element to the model.

However, it is important to note that this study has only marked the industrial IT dependency relationship with the strategic alignment.

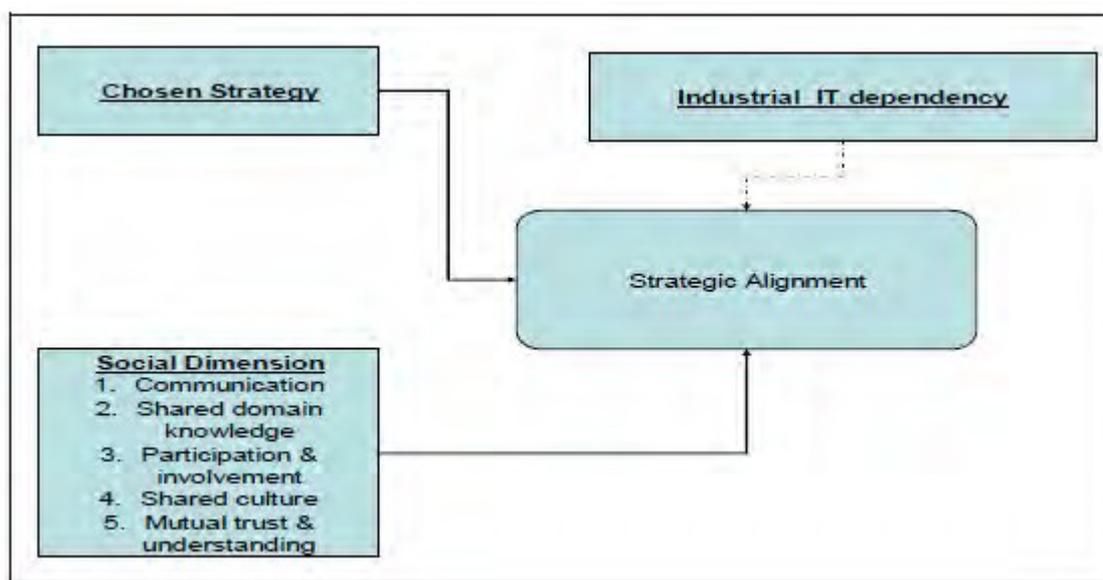


Figure 3: demonstrates the new refined model including the new factor

6. Conclusion

This study has investigated the strategic alignment between IT and business strategy. The presented study was designed to determine the effect of the adopted strategy, communication, shared domain knowledge, participation and involvement, shared culture, mutual trust and understanding on the strategic alignment. The study was tested on a company operating in different industrial environment. Aligned with previous literature, the study has found that participation and involvement, mutual trust and understanding, and the shared domain knowledge have a direct effect on the strategic alignment. However, one of the more significant findings to emerge from this study is the influence of the industrial dependency on IT. This finding enhances our understanding of the influential factors on the strategic alignment, and serves as a base for future studies and research.

However, the study was limited by the convenience sample size which may not give it the needed accuracy. Further work needs to be done to establish whether there is a direct affect between the industrial IT dependency and strategic alignment. And a cross-national study involving larger number of companies is recommended. Strategy has been a necessity element to win since ancient times –no better example than "The Art of War"-, and it still serves as guide and a blueprints to companies to achieve their success. In current age, more and more information technology is becoming an essential factor to survive in firm's life. A strategic partnership and association between strategy and IT will result positively and affect the success of the company. Therefore, identifying the influential factors and improving them will eventually improve the company's

performance and will draw new horizons for companies to thrive.

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