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AN EVALUATION OF STRATEGIC ALIGNMENT MODEL IN DIGITAL TRANSFORMATION BASED ON INTEL CASE STUDY

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ABSTRACT:

The improvements in the technology of the organizational workflow may have an impact on organizational business processes and organizational structure. The innovation of the technology developments in industries such as the Internet of Things, Big Data and Automation could lead the organization to a new set of principles and values that could affect the organizational actions of the digital transition. The emergence of disruptive digital technologies, digital stands, and digital systems has transformed companies in a significant way by simply adding new opportunities with digital technology implications for value creation to streamline corporate business processes and organizational operations. The implementation of digital technology that could allow the company to meet consumer requirements creatively by connecting the information system and business strategies. The analysis of the Strategic Alignment Model will be applied in the Intel case study of strategic IT planning for business transformation. To identify the lack of coordination between the business strategy and the IT strategy within the company is the key reason for recognizing the true value of the IT investment.

INTRODUCTION

The information technology has been created by hominid and developed diverse expertise applications and platforms to transform the traditions of lifestyle into digital (Attaran, Attaran and Kirkland, 2019). The technologies have transformed the routine by refining the speediness of the period (Adamides and Karacapilidis, 2020). According to Ratheeswari (2018), that, nowadays the improvement of the information system is merged with people subsists at all angles. And the use of the information system is inescapable from every activity and business.

According to the viewpoint of Ciobanu and Neamţu (2017), the constant improvement of the technology and innovation in the business became compulsory for the success of the business actions and more importantly the information technology plays a vital role in the business innovation. According to Pasch (2019), the business innovation could be defined as a set of the procedural cycle to evaluate the maturity of the information system which utilized to accomplish the everyday business processes of the organization.

The innovational cycle utilized in the businesses to analyze the current information system and identify what needs to innovate and why it needs to be innovated (Van Looy and Shafagatova, 2016). According to Rajapathirana and Hui (2018), innovation is a technological change that organizations could go through over the past decades. The rapid technological changes in the business could create new opportunities and new range customers which could lead the organization for business globalization which makes the business face new challenges such as technological transformation, increased complication, and shifting customer preferences and legal necessities (Parida, Sjödin and Reim, 2019).

The business globalization and business innovation could lead the organization to move toward digital transformation (Perez, 2017).

Digital Transformation

The changes in the technology in an organizational workflow could be the effect on the organizational behavior and organizational structure. The implementation and the utilization of the technology within the organization could make an impact on the inner culture and actions towards investors. The innovational changes in organizations such as the internet of things, big data, and automation could bring the new set of standards and morals which could affect the organizational behavior that could be the digital transformation (Foerster-metz *et al.*, 2018).

The digital transformation could be defined as the incorporation of emerging technologies into all business fields, fundamentally improving the way the organization providing with value to the consumers. It is also the cultural changes that require organizations to repeatedly question the status of the businesses (Resego, Audrey, and Philip, 2017). The digital transformation could impact and change the organization from three different aspects as demonstrated in the following image.



Digital Transformation

Figure 1. The Digital Transformation Changes within Organization **Source:**(Parviainen et al., 2017).

According to the statement by Nambisan, Wright, and Feldman (2019), the continuous development of the technology the businesses are going through the essential changes which could be connected with the business information system and the innovational technology. With the growth of innovative and digital technologies, most of the organizations are directing the businesses into several initiatives to discover the potential benefits towards the digital transformations which could impact the business operations and affects the organizational structures (Reis *et al.*, 2018).

The Benefits of Digital Transformation

The development of influential digital technologies, digital stands, and digital structures has transformed the businesses to the revolution in significant ways by simply introducing new chances with digital technologies implications in value creation which could be the certain process needed to be utilized to streamline the organizational business processes and the organizational behaviours (Verhoef *et al.*, 2019).

The digital transformation has become a high level infuses term in the modern business world which could include specific technologies that could play a vital role in modern businesses (Rachinger *et al.*, 2018). The business could shift into industry 4.0 which could be the combinations of the advanced system like big data analysis, internet of things, cloud computing, and artificial intelligence (Hausberg *et al.*, 2019). There are several major factors could be considered as the factors of the digital transformation.

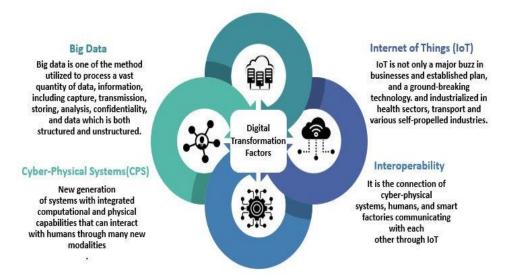


Figure 2. Digital Transformation Factors **Source:**(Mubarak et al., 2019).

The digital transformation could be evolving as an important driver of the comprehensive growth of the organizations and one of the key benefits of the digital transformation could be digitalizing the business processes (Parviainen *et al.*, 2017). The digital transformation also could benefit from the superior resource management.

According to the statement by Lei and Jing (2016), the digital practice represented the emerging technologies that could lead the revolutionary digital enterprise's resource management with a standardized and digitalized workflow. The digital transformation could be the solution to the problems faced by the organizations in managing the human resources in the past decades with the development of digital technologies (Mitrofanova, Konovalova and Mitrofanova, 2019).

Impact and Opportunities of Digital Transformation

Nowadays the transformative discussions and improvement could take place in most of the businesses, in the other side the organizational managers and directors forced to move towards the digital transformation before the other organization move towards the digital transformation to stay competitive and for the industry survival (Bouwman *et al.*, 2018). The past research study findings of digital transformation impact the business illustrated that the digital advancement pressure the businesses to restructure the organizational business models which could lead the organization for effective operational improvement and increased productivity (Mubarak *et al.*, 2019).

According to the research findings by Schwertner (2017), the integration of the digital transformation, the organizations could be performing the advance analysis which could lead the organization to predict the business performance in advance than the competitors so, it could allow the business to target the big range of the market. The revolutionary changes due to the digital transformation open new opportunities and add values to the customers (Nambisan, Wright and Feldman, 2019). The digital transformation plays a

vital role in the process of commercializing with the advanced technology which could be the added advantage for the organization and add value to the customers as well (Gbadegeshin, 2019).

LITERATURE REVIEW

The comprehension of current businesses and aim and purposes necessitates of an information system to strategizing progression method that could be endorsed the business and rapidly developing information technology with the innovative techniques (Nadeem *et al.*, 2018). The information system strategies to create collective knowledge about the organization to lead the subsequent IT investment and decision for the IT implementation into the business process (Matt, Hess and Benlian, 2015).

Business Models for Digital Transformation

The development of digital technologies which could allow the organization to achieve customer requirements in an innovative way which could impact the connection of the information system and business strategies (Chanias and Hess, 2016).So, the business model is a crucial need for an organization to innovate the business process to add value to the customers.

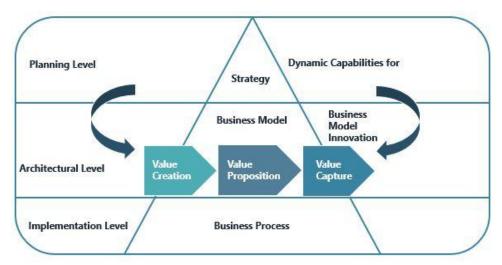
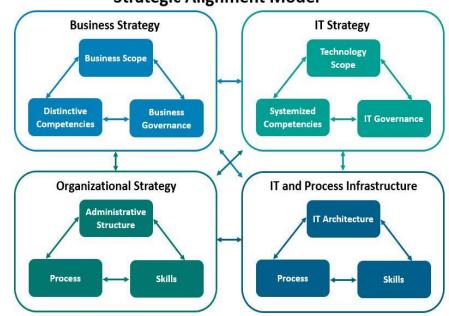


Figure 3. Illustration of the Business Model Innovation **Source:**(Rachinger et al., 2018).

The lack of conventional classification in the business and organization could approach the importance of the business model and the essential relationship between the business models and the strategy so, the business model could be stable with the business strategy. The following figure is illustrating the processes of the business model innovation and the implementation. And more importantly the involvement of the business strategy along with the business model in innovating the business process.

METHOD OF THE STUDY

The study of the business strategy models will take place in the research study by applying and analyzing the Intel case study of IT strategic planning for the business transformation. In the transformation of the organization, the substantial development of the IT strategy plays a vital role. Several businesses and innovations have been evolving at a rapid pace that illustrated the value of Intel's IT strategies.



Strategic Alignment Model

Figure 4.The Structure of Strategic Alignment Model **Source:** (Ahriz et al., 2018).

The Intel corporation permits the other organizations to achieve long-term profitability and sustainability. So, consequently, the objectives of Intel will be not included with the business operations. The success of the IT strategy depends not only on the information it contains and the comprehensive of the information but also on the actions and strategies of leadership at various levels within the organization. Intel has been closely partnered with other industry organizations to promote effective IT strategic planning. Besides, IT strategic planning was combined with the company's business strategy to ensure complete coordination with the company's goals and directions.

The main goal of this was to ensure the IT encounters the strategic goals of the company as well as reinforces the overall value of IT in understanding the company's current and potential success in the future. Strategic Alignment Model could be used to provide the basis for analyzing the existing IT and providing its potential use. In addition to the overview of the IT, a plan may be made with an interpretation to formulating specific business needs (Soares, Guimarães and Lara, 2019). Eventually, the model specified the scope of innovation for disruption for the new strategic opportunities. Therefore, the Strategic Alignment Model could show the way that IT approaches could be tackled the business models and business strategies for the current and future business processes and opportunities (Ahriz *et al.*, 2018). The Strategic Alignment Model has three different dimensions to be analyzed such as organizational strategy, information strategy, and business strategy.

Moreover, Intel aims to align with all business groups to facilitate and open to opportunities for new business initiatives. The alignment of different aspects is crucial for the long-term success and overall strength of the company. It allows the company to work closely with business groups within the organization and enable a more agile experience (Afandi, 2017).

To achieve the above goals, the company conducts annual summits to be in line and set synchronize priorities. Moreover, proactive discussions with product groups take place to exchange expertise in technology and trends within the industry. The particular activity allows reshaping the product and solution to keep up with the market and innovate the company's strategy. Additionally, departments such as product planning, design, marketing and IT have meetings to achieve the business goals of the company. Therefore, the Strategic Alignment Model can be applied to effectively align IT with other business strategies. Also, the conceptualization of IT could be done form a strategy and leverage IT role to consummate completive and sustainable advantage.

Strategic Alignment Model

SAM is determined to be an outline to align businesses and IT strategies (Ahriz *et al.*, 2018). Afandi (2017), stated that it is a complex process to identify the real value of IT investments and the main reason is poor in alignment within the organization between the IT strategy and business strategy. Moreover, another reason is the lack of an active procedure that facilitates the continuous arrangement of both strategies and goals (Kuipers and Giurge, 2017). Four dominant alignment perspectives could be illustrated as follows.

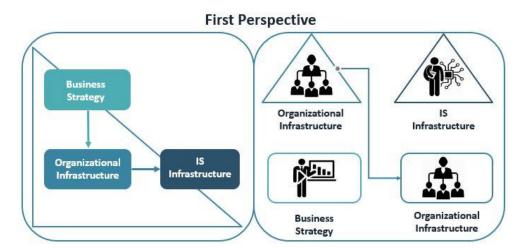


Figure 5.First Perspective of the Strategic Alignment Model **Source:**(Ardakan, Hatefian, and Gorji, 2011).

The first perceptive is known as strategy execution or strategic fit which indicated that business strategy is a major driver for the company's design choices and IS infrastructure (Hourani, 2017). Therefore, there are two main parties involved such as top management of the organization and IS management that can be clarified as strategy formulator and strategy

implementer respectively. In a particular perspective, the three mainboxes are involved which create a process and named domain anchor.

It could be noted that a business strategy has been enunciated and identified to be the driver of changes and design for organizational aspects as well as IS and IT infrastructure (Burton and Obel, 2018). In the case of Intel, Peter, and Schuman (2012), noted that all changes within the organization need to be correlated with corporate strategy. Therefore, the first perspective of the alignment model can be viewed. Additionally, Strategy Execution is often measured in terms of financial aspects that can be measured numerically; therefore, it is a cost-focused perspective (Ahriz *et al.*, 2018). For instance, Intel aimed to increase the responsiveness of the supply chain which directly reflected on marginal benefit for the company.

However, it should be noted that in the particular perspective IT team is viewed as supported by the business process and not a driver of the change. The second perspective is known as technology transformation and potential business strategy is identified to drive the changes such as IT strategy and IS Infrastructure. From a particular perspective, the top management of the organization sets the vision for technology and articulate specific needs required for IT strategies (Rathnam, Johnsen and Wen, 2016).

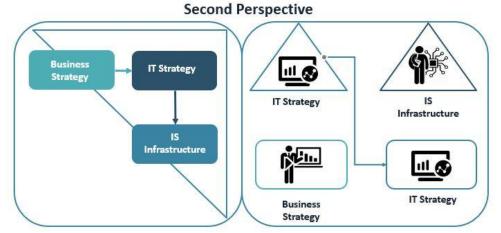


Figure 6.Second Perspective of the Strategic Alignment Model **Source:** (Ardakan, Hatefian and Gorji, 2011).

Simultaneously, IT management will determine the effective and efficient ways to design and develop the necessary infrastructure. According to Peter and Schuman (2012) stated that Intel CEO of the company and senior management determines and prioritizes a project that closely relates to corporate strategy. For instance, the business wished to achieve a more secure and trustworthy communication channel with its clients, partner, and other stakeholders.

Thus, business strategy influenced the planning of IT strategy which leads to the development of the secure Portal for communication. As a result, employees of the company could eliminate another worry while dealing with sensitive data. Consequently, it could be viewed that business strategy leads to changes in IT strategies of the company (Ahriz *et al.*, 2018). The first two perspectives take its starts from Business Strategy, in other words, it is initiated by the top management of the company.

Another perspective of the Strategic Alignment Model is named as Competitive Potential. The third perspective present capabilities of IT on the potential impact it can bring to products and services offered by the company. Moreover, it is stated to determine the main characteristics of a business strategy that allows developing distinctive competencies (Herri, Johan, and Handika, 2017).

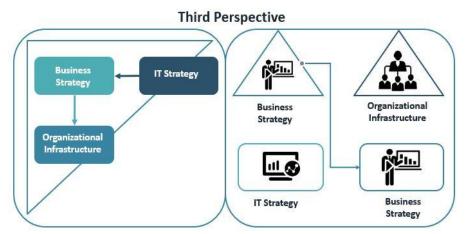


Figure 7.Fourth Perspective of the Strategic Alignment Model **Source:**(Ardakan, Hatefian and Gorji, 2011).

Additionally, new forms of building various relationships could be established which enables business governance. The establishment of a variety of energysaving technologies during the past two years has proved to Intel's top management that the particular IS strategy is efficient which as a result lead to changes in business strategy. Therefore, reduction of footprint became corporate goals of the company where every employee is advised to contribute which brought overall change to the organizational infrastructure of the business.

The fourth perspective of the model is the Server Level that focuses on developing and deploying a high level of IS service organization (Afandi, 2017). To facilitate the fourth perspective in the business, a good understanding of different dimensions of IT is required as well as knowledge of the internal design of IT and IS infrastructure. The particular perspective allows to expedite and simplify the process for IS customer.

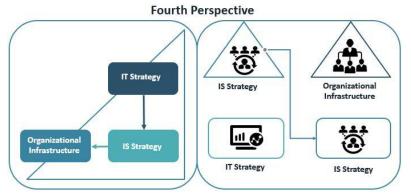


Figure 8. Third Perspective of the Strategic Alignment Model **Source:** (Ardakan, Hatefian and Gorji, 2011).

Top management's role is indirect in this perspective as IT leaders act as the main contact point and required to set specific tasks to make the internal business succeed. The final two perspectives are clarified IT Strategy as an enable which indicates that the movement starts from it. It is a direct representation of how IT could enable new opportunities or improve existing business processes and strategies while corresponding with the organization's implications (Ahriz *et al.*, 2018).

From the business perspective, it is crucial to understand what is the nature of the business and its main scope. Moreover, clear identification of distinctive competencies and governance is important to facilitate full alignment of business and IT aspects. Additionally, the management is required to pinpoint its strongest and weakest domains to establish clear communication with the weakest aspects. Therefore, it can be said that an effective relationship should be enforced to facilitate future changes in strategy.

ANALYSIS AND EVALUATION

This specific issue could not be solved with an easy solution however, many advise applying more flexible methodologies. So, studies stated that there is a need for some level of formalism as too much flexibility will result in poor implementation. Therefore, the process of establishing IT strategies in Intel is based on corporate objective allows setting boundaries.

Nevertheless, Strategic Information Systems Planning is essential to any organization to improve organizational operation and financial performance (Alshubaily and Altameem, 2017). The role of particular planning is crucial as it ameliorates business activities and enhances the flow of information. Moreover, according to the statement by Aljuhmani and Emeagwali (2017), that IS strategic planning has following benefits that add importance to it:

- Link together IT and Business processes and needs.
- Stimulate the company's competitiveness.
- Improve the effectiveness of IT.
- Cooperate to indicate specific application by information electiveness.
- To justify IT investments.

Malik (2001) stated that the major role of Strategic Information Systems Planning is to support the identification of new IS and strategies that will allow resource allocation, positing, and gaining competitive advantage. Moreover, it is importin for the company to ensure that its investments are bringing financial benefit to the company (Alsurori and Salim, 2018).

It could be concluded that any organization can implement Strategic Information Systems Planning to obtain benefits it offers (Kamariotou and Kitsios, 2016). However, resolving the solution for the above-stated problem could lead to a successful IS strategy which could help to facilitate Digital Transformation. More importantly, it could be said that more and more companies understanding the importance of IS Strategy and the role of each methodology which is shifting digital aspects with the help of IS strategic planning and digital transformation which could be applicable in all aspects of people's lives and especially within organizations.

CONCLUSION AND RECOMMENDATION

The strategic information management planning is becoming increasingly necessary for optimizing business processes and optimizing the IT investment of the organization. In a modern and more digitalized world, it is important to have plans in place to make the most of the tools available. However, in a well-established company like Intel already has its strategic planning in place. A thorough re-evaluation of the process could be needed to ensure that it meets business needs and is readily adaptable to changes. Additionally, based on the above-mentioned discussions on planning and approaches, IS preparing for companies that have not yet set up a formal process could be strongly recommended.

IT planning shifts or is prioritized based on the organizational goal of the specific year of the period. Thus, it is a successful practice to update IT planning and IS strategy. On the other hand, it could be considered that it is difficult for the IT department to be a catalyst for a business plan transition in a big company like Intel. The following difference could be found in the study of the Strategic Alignment System. It could be defined that the IS strategy consists of planning, execution, and maintenance. Therefore, the organizations should not only be able to apply tools and methods when the process is set up but also be able to change processes during the evolution phases. The research study centered only on IS strategic planning approached, which did not make it possible to have the best advice that would be suitable for the organization, as a more in-depth analysis is needed. The method of defining and executing the IS strategy is very multifaceted and requires commitment and resources.

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