

# DISCREPANCIES IN IT STRATEGIC ALIGNMENT

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## ABSTRACT:

Information technology plays a critical role in the healthcare industry. Healthcare IT, if efficiently managed, can reduce expenses; enhance hospitals processes, increase patient satisfaction and patient care. From this perspective, the need to improve the management of Information Systems becomes a significant governance and structural concern in hospitals. Thus, it is essential to have an appropriate strategy for IT systems and provide means to manage them. IT Strategic Alignment is critical to developing and maintaining all kind of information and communication that supports patients' treatment processes, business operations and improves organizational social and economic performances. Our study is an intervention research methodology, a transformative approach, conducted in a private hospital in Lebanon. As technical systems are turning out to be more complex and progressively essential to healthcare organizations, there is a rising awareness to keep up a sustainable environment, through maintaining intellectual, social and operational strategy of the organization.

**Keywords:** IT Strategic Alignment, IT management, Efficiency, Sustainable environment, Intervention Research, Healthcare

## INTRODUCTION

Lebanon is a standout amongst the most active healthcare markets in the Arab region. It has one of the best quality healthcare divisions in the Middle East (Ammar, 2003). Lebanon's advanced position as Healthcare contributor renders the nation as a local healthcare destination. Patients are attracted to the extremely specialized health services. Hence to improve patient care quality and security, technology has become vital to the success in Hospitals. It is coordinated with their business practices and plays an essential part in the efficiency of patient care processes.

Despite the developing interest attributed to information technology (IT) in healthcare, the level of technology sophistication fluctuates among healthcare organizations. Changes in the healthcare division and continual pressure to enhance the quality of care have driven the advancement of IT in hospitals. As IT investment and IT capacity have developed in hospitals, the

need to manage IT assets (Materials, Technology, and Human Potential) has increased. The constant and rapid evolution of computer technology has also transformed the business administrator by adding an increasingly important dimension concerning advice, technological and strategic intelligence. For that, managers must be able to think and integrate the management of information systems in the overall strategy of the hospital, which will aim to foster collaboration among its various actors and sectors.

Information Technology (IT) has changed from a traditional managerial support orientation towards a more strategic oriented role within organizations. Thus the strategic use of information technology (IT) is a fundamental issue for all types of organizations including hospitals. **Traditional approaches failed to address the alignment of the IT strategies with the business strategies, to allow the organization to use IT effectively and efficiently.** Because information systems are essential to the core of business, organizations dedicate substantial care to aligning them with the company's overall business strategy and operations. Efforts have been made to have an information system coverage of all organizational and IT aspects such as efficiency of the overall information system design, the discipline to distribute the information system resolutions, comprehensively planned training and major effects of the information system on the organizational and political development.

Therefore, the information system is a severe mechanism that should constitute a part of the core of business; organizations need to pay attention into aligning it with their global business plan and procedures. Strategic Information System (SIS) help improves business competitiveness by changing the manner business is carried out. Thus we developed our core hypothesis as follows *"Enhancing and aligning Information Systems Strategy as an integrated part of the hospital strategy can be a key factor to improve efficiency and productivity."*

There are numerous reasons for companies to align their information systems with their processes. The first and most essential one is to support itself, which means that the corporation should work hard to improve its information system to raise the operational effectiveness and the overall performance of the enterprise. Papp (1999) clarifies that firms also need to improve, apply and create a link between their businesses, deployed information systems and implemented information system plans. Thus, IT management is very focused on IT department, it emphasis on the technical aspects of the system rather than social aspects. Furthermore, lack of alignment between the IT strategy and the hospital strategy is blocking IT investment and implementation.

To meet the challenges of ambiguity, of continuous changes and to prevent arising risks and costs, hospitals need to adopt a new management model that allows them to overcome all actual and future challenges to survive and progress. In this regard, many questions may arise: How hospitals are able to achieve and sustain Strategic Alignments? What are the means to achieve a dynamic synchronization and active communication, coordination and cooperation? What are the dysfunctions resulting from non-efficient Business/IT strategic alignment in hospitals and what are their consequences and impacts and how to reduce them? What are the methods and tools to improve IT Strategic Alignment?

To answer these questions, the researcher provided a literature review, which incorporates the two primary strategic models. Then shaping and

presenting the research methodology used. At the end, results will be discussed and a set of research contribution, limitations and future perspectives will be developed.

## **THEORETICAL BACKGROUND**

### **INFORMATION SYSTEMS STRATEGY**

Strategy in business is defined as a “definition of future direction and actions of a company specified as approaches taken to achieve specific objectives” (Bocij & al., 2006). Information System Strategy (ISS) consists of a specification of the information systems required to back and ameliorate organizational activity in the zones of the collection, distribution and usage of information. Information Systems Strategy (ISS) is distinguished from general business strategy by being specifically concerned with policy related to information technologies. **To develop an effective ISS, it is vital to focus on the information required to make the business run instead of concentrating on the technology used to hold the business information.** Consequently, Information System Strategy can be established through a process in which a functioning connection between the organizational environment and the business process environment are aligned, along with the internal configuration and types required in supporting the relationship (Al-Aboud, 2011). The information system arrangement and ISS application entail that forecasting must be taken more seriously and all variations that result from their adoption must be well managed in each business organization that pursues to use their deployed information systems effectively. Thus researchers are trying to link the Information Systems Strategy with Strategy-as-Practice. The Information Systems field has longstanding interests both in Practice theory and in the strategic role of Information Systems, while Strategy-as-Practice researchers increasingly recognize the importance of technology in strategy work. “SAP research partly draws on the Process approach to strategy-making (Bower, 1982; Burgelman, 1983; Mintzberg & Waters, 1985), as well as other-related approaches concerning, for example, decision-making (Eisenhardt & Bourgeois, 1988), planning (Langley, 1989), sensemaking (Gioia & Chittipeddi, 1991), and middle-manager strategizing (Floyd & Wooldridge, 2000).” (Vaara, & Whittington, 2012). Strategy as practice is a rapidly growing that seeks to understand strategists work by focusing on the micro-activities of strategists rather than strategy at the organizational level. Researchers who practice in this field are interested in the micro-practices of administrators, social activities, processes and practices that characterize corporate strategy and strategizing.

The SAP developed by Whittington is based on three main repositories “praxis, practices, and practitioners.” Praxis refers to the real micro-activities such as meetings, interaction, while practices, on the other hand, practices refer to collective behavior, including culture, norms, and procedures for thinking, and acting. Finally, the term practitioners indicate organizational members responsible for making, shaping and executing strategies such as managers, board, consultant, etc.

Well-structured planning phases are essential to guarantee that business strategy, organizational structure and adopted information system strategy are

well coordinated in a parallel relationship. Therefore, when making assessments on the deployment of information systems and application of information system plans, it is essential to consider the precise organizational policy and business strategy of the company in question, along with available selections of information system strategy. The top management requirements will be significant in the information system deployment in enterprises because there is a necessity for real change in management strategy to be observed when the company is installing an information system. The support of the top management in driving and embracing the changes that originate from the information systems deployment will be essential to the success of the newly deployed information systems.

According to Gutierrez, Orozco and Serrano (2009), to guarantee successful implementation of information systems along with implemented information systems policies, alignment of organizational strategy, business strategy and information systems strategy is highly relevant. An efficient IS strategy must be compelled by clear and simple organizational goals that can withstand the change of technologies and their scale over time. Aligning information technology strategy with business strategy is critical (Kearns and Lederer, 2001). Information system strategies must also take into consideration an integrated view of information and business procedures across the enterprise, the vendors/suppliers, and all departments involved.

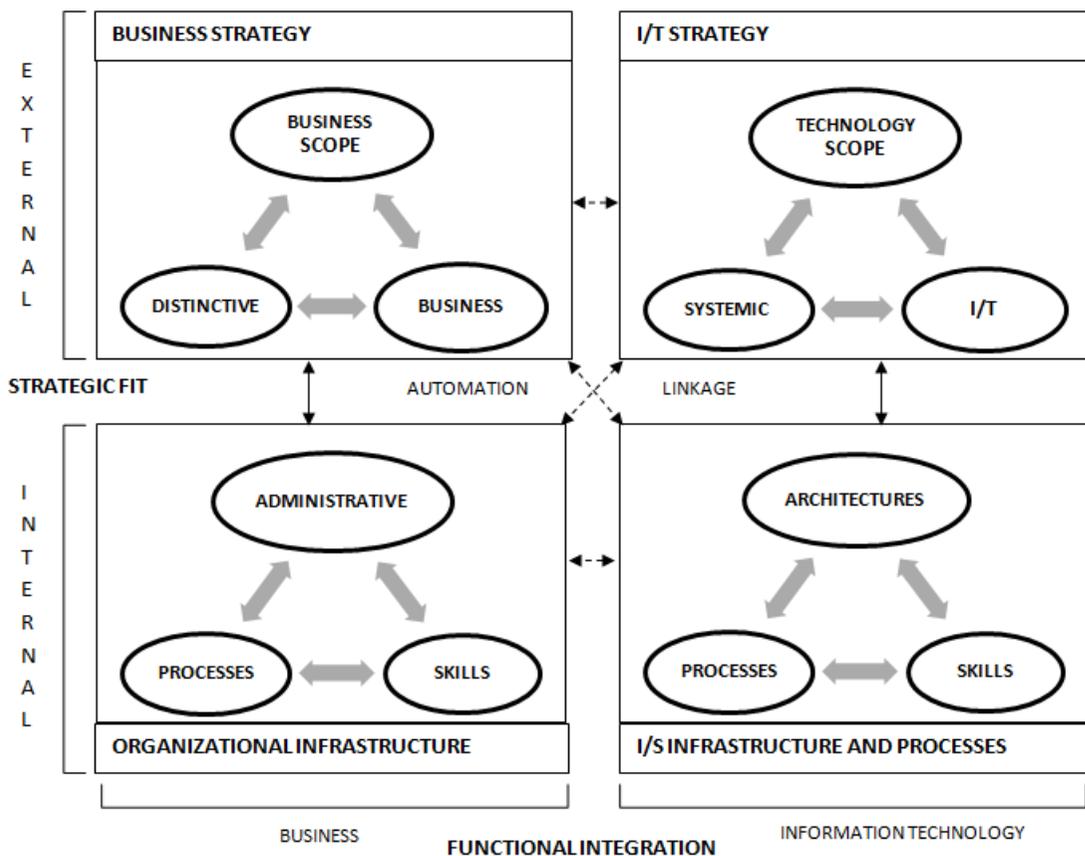
## **IT STRATEGIC ALIGNMENT**

Strategic alignment and forecasting have been a top managerial concern since the start of the IS career (Luftman and Kempaiah 2008; Taylor et al. 2010). Using information systems successfully necessitates an understanding of the organization, management, and the technology determining the systems. To manage Information Systems is imperative to have a suitable plan that outlines the systems and offer ways to manage them. Strategic Information Systems Alignment (SISA) is an efficient method of evolving and preserving the IS/IT systems that support the business processes. Today it is well-known that information knowledge is essential for managers. Also, organizations need information systems to survive and prosper, which can help them spread, offer new products and better services. If the information system is not controlled and lined up with the organizational business policy, it will deactivate the organizational capability in the competitive advantage. Thus, information system strategy should be combined with the corporate policy, with appropriate Strategic Information Systems Alignment (SISA) techniques. Those organizations especially hospitals need to integrate and align their I.S. with their business strategy. The purpose of SISA is to assist in applying information systems to mix with its business plan. It contributes in converting information into a practical form for synchronizing the workflow within the organization, and helps in decision making and resolving other problems. Systems directly affect the directors' decision, plan, and the way they manage their employees and outline what production, where, when, and how. Strategic alignment can be classified into two dimensions: (1) the intellectual and (2) the social. Studies on the intellectual aspect focus on the content of plans and planning procedures

while those dealing with the social issues concentrate on the employees responsible for creating of alignment (Reich and Benbasat 1996).

Henderson and Venkatraman (1999) offered a multidimensional model for strategic alignment; this model is one of the most widely used types of strategic alignment. The model categorizes the internal and external dimensions and how these can be functionally incorporated into the organizational business strategy. The Strategic Alignment Model reflects the view that business success depends on the linkage of corporate, IT strategy, organizational and IT infrastructure and processes. A strategic fit (Vertical Linkage) is needed between external and internal organizational processes to determine the infrastructure of the business; in addition to Functional Integration (Horizontal Linkage) between Business and Technology as shown in the model illustrated in the figure below.

Figure.1: Strategic Alignment Model (SAM), © Henderson and Venkatraman, 1999



Mainly, most of the alignment models are founded on the organizational structure and its goals. This model places alignment at the core of the organization's requirements and distinguishes between a strategic and an operational level. It concentrates on the link between strategy and technology. To develop a possible degree of alignment within an association, the IS rationale has

to be situated inside the organizational structure. The Strategic Alignment Model (SAM) refers to “operational integration” between business and IT, which covers not only the strategic level among high-level executives but must also be achieved across the different levels of the organization.

The literature identifies two dimensions of business–IT alignment, including: (1) **strategic and intellectual alignment** which examines the degree of fit between business and IT strategy and planning methodologies in addition to the structural alignment (IT decision-making rights, centralization or decentralization of IT, and the recruitment policy of IT personnel); and (2) **social aspects** of strategic alignment focuses on mutual understanding of and commitment to IT and business objectives and plans among business; and IT executives, communication and values. The social aspect at the Operational Level differs from the above stated social aspect at the strategic level. Wagner & al. in 2014, developed a model of “operational alignment and IT business value that combines a social perspective of IT and business linkage with a view of the interaction between business and IT at nonstrategic levels, such as in daily business operations involving regular staff.” (Wagner & al, 2014)

Prior researchers examined the antecedent factors that impact the IT **strategic and intellectual alignment** within organizations. Chan et al. (2006), Baker (2004) and Luftman et al. (1999) recognized some antecedent factors affecting alignment such as shared domain knowledge, business–IT partnerships, IS/business planning sophistication, IS success, prioritized IT projects and environmental ambiguity, Alignment of business and IT structures, IT architecture alignment, IT services alignment, IT standards and platforms alignment, alignment of IS and processes, Procedures/workflow alignment. All these factors impact the IT strategic alignment.

Moving to the **Social alignment**, at the strategic level, the antecedent factors of the social alignment are senior executive support for IT and CIO, competencies and leadership, CIO-TMT, communication, participation, planning and shared understanding between the Chief Information Officers (CIOs) and Top Management Team (TMT). Shared understanding and social alignment, has been acknowledged as an important antecedent of intellectual IT Strategic Alignment (Armstrong and Sambamurthy 1999; Preston and Karahanna 2009; Tan and Gallupe 2006). It is developed by integrating CIO, CEO and TMT knowledge. The interaction among TMT, CIO, and CEO by sharing their perceptions, combining knowledge, and developing shared understanding will influence IT / Business strategic alignment (Preston and Karahanna 2009). It is also essential for the CIO to interact with the other business manager and in particular TMT to “combine IS technical skills with an in-depth understanding of most other functional areas of the hospital to spot and jointly exploit opportunities that can lead to business value.” (Karahanna & Preston, 2013).

At the **operational level**, CIO should interact with staff, to foster knowledge, trust, respect and to guarantee an efficient and flexible IT utilization. “Operational alignment is at least as important as strategic alignment for IT service quality.”(Wagner & al., 2014). However, most parts of the strategy implementation, IT projects, and operations are not part of the strategic level and do not involve high-level executives, or involve them only to a minor degree. Alignment is not only a strategic or executive-level issue but that it is even more important at an operational level, in particular, when it comes to actual IT

utilization and organizational performance in business operations. It is important for the IT manager to communicate with end- users to have a clear vision on their actions, errors and how they affect system reliability and efficiency.

To reach success in the alignment issues, all organizational factors must interact together to achieve efficiency and effectiveness of the individuals and business on the whole. Thus, aligning IT with the enterprise policies is a complex phenomenon. It necessitates the senior management to take a different methodology towards IT and devote some time, understanding the usage of IS and IT in the business. It is imperative for them to comprehend that IT is at times the strategy and not only essential for the corporate policy.

Therefore, the **IT must be brought into the main business stream, and it should function as a unit in the firm.** The evolving role of IT requires the collaboration, cooperation, and communication of all the managers and staff in the organization. IT Managers are continually confronted with new and ever-changing Technology and health Innovations. **Traditional Approached cannot provide the managers the ability to respond rapidly to those challenges.** Thus according to Petter, DeLone & McLean (2008) “The impacts of IT are often indirect and influenced by human, organizational, and environmental factors” (Petter, DeLone & McLean, 2008). To achieve return on investment in the IT projects and to reach success in the Information systems project implementation, alignment is a must. Cooper and Zmud (1990) suggested one model of the IS implementation process involves six stages that emphasis on the importance of the strategic alignment as main repository to reach success. The first three stages, initiation, adoption & adaptation, illustrate the implementation of the IS. The other three steps, acceptance, standardization, and infusion can be used to characterize the levels of implementation success of the IS. Thus, acceptance covers the process of convincing employees to use the IS. Standardization describes the IS’s transition to a regular part of work activity when other business processes are adjusted to correspond with the IS. Infusion marks the degree of increasing effectiveness through full utilization and integration of the IS into the firm. IS that has reached the injection stage or in another word IS strategic alignment with business strategies is more successful than an IS that has only reached the other stages. **The alignment of an IS with business strategy is possibly more important than other factors in determining the success of the IS implementation.** Henderson and Venkatraman (1993) found that organization fails to achieve the return on investment in Information Technology due to the lack of alignment between the organization’s business and IT strategies. Wagner stated that “**Alignment of strategies leads to appropriate IT investments and implementation, which leads to - mainly driven by operational alignment -appropriate utilization and flexible adaptation of IT, which finally creates the business value of IT.**” (Wagner & al., 2014).

## **METHODOLOGY**

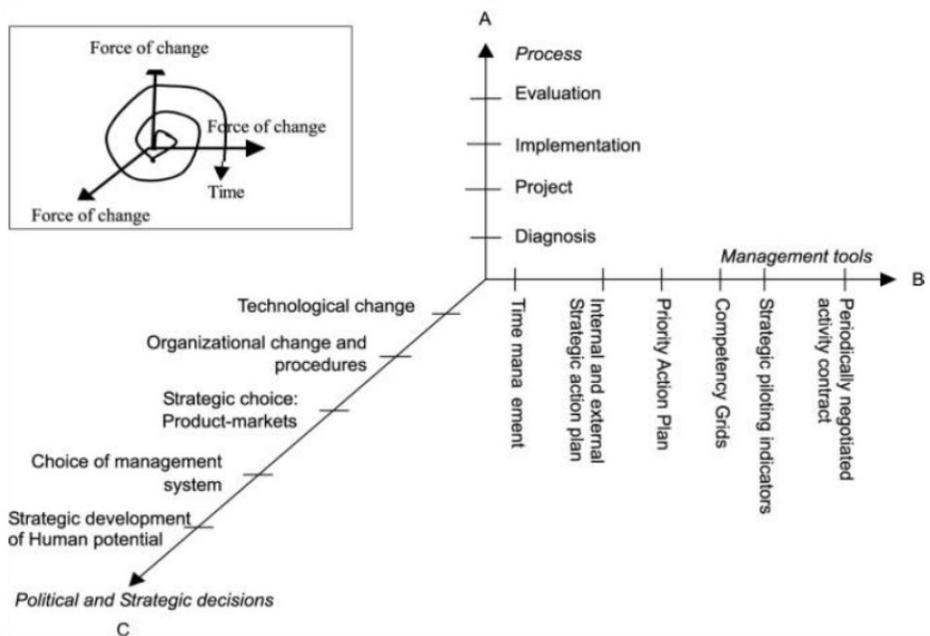
The methodology used is SEAM, Socio-Economic Approach to Management, it was established in 1973 by Professor Savall, and was developed and applied by ISEOR, the Socio-Economic Institute of firm and organization. Professor Henry Savall’s “beliefs that there is a double loop interaction between

social and economic factors in organizations, between behaviours and structures, and between the quality of life in organizations and their economic performance.” (Savall and Zardet, 2011).

The Socio-Economic theory of organizations offers an integrated approach to managing change, called "socio-economic Intervention" that allows organizations to implement a socio-economic project for converting costs and hidden performance into added value by implementing appropriate management methods, called SEAM.

The research is an action-research, based on the "Qualimetrics" approach, which bridges the quantitative, qualitative, as well as financial methodologies. The socio-economic intervention research is a scientific observation standpoint of organizational transformation phenomena as they appear in the interaction between researchers and practitioners. It also allows measuring the impacts of these changes on the performance of the company during the intervention process. This process has two main techniques: acting on the three axes of the dynamics of change and implement the HORIVERT approach. The general principle of the socio-economic intervention is described by a trihedral articulating the cyclical improvement process, the permanent management tools, and the periodic political and strategic decisions (Savall, Zardet, & Bonnet, 2008)

**Figure 2: SEAM Trihedral**



SEAM is based on three main dimensions, three axes of change: The process of improvement, the management tools and the political dimension. These entire axes are interrelated with each other and complement each other.

The first axis is the transformation process axis. The process of intervention research begins with a participatory diagnosis which involves all

actors in the field, to identify the dysfunction as part of the problem-solving process. The second phase is the search for improvement actions, in another word, it is the project phase. The third phase is the implementation of these improvements, followed by evaluation as a fourth stage. The implementation of these four steps is done using the HORIVERT process, a double action process of driving the change, it is a HORIZontal action synchronized with VERTical action in different areas of the company.

The second axis, the management tools axis enable managers to reinforce the quality of teams, management activities and to facilitate and stimulate employees to act and be part of the dynamics of change, by developing communication, collaboration, decentralization, team-work and help clean up of dysfunctions & hidden cost.

The third axis, the political and strategic decisions axis, it is constituted by the decisions to be taken to drive the change process depending on the company's strategy. These decisions taken by the management team affect the activities intended to avoiding dysfunctions, back the solutions defined during the operation enhancement process (process axis) and are applied by using socio-economic tools (management tool axis). "The socio-economic intervention helps the actors of the company speed up the policy and strategic decision-making process. It also challenges these same actors to be consistent in their choice." (Savall, 2003). The policy decisions axis aim is to stimulate the strategic decision of the steering committee of the organization, which influences the implementation of the actions that contribute to the achievement of the strategy.

### *Data Collection & Treatment*

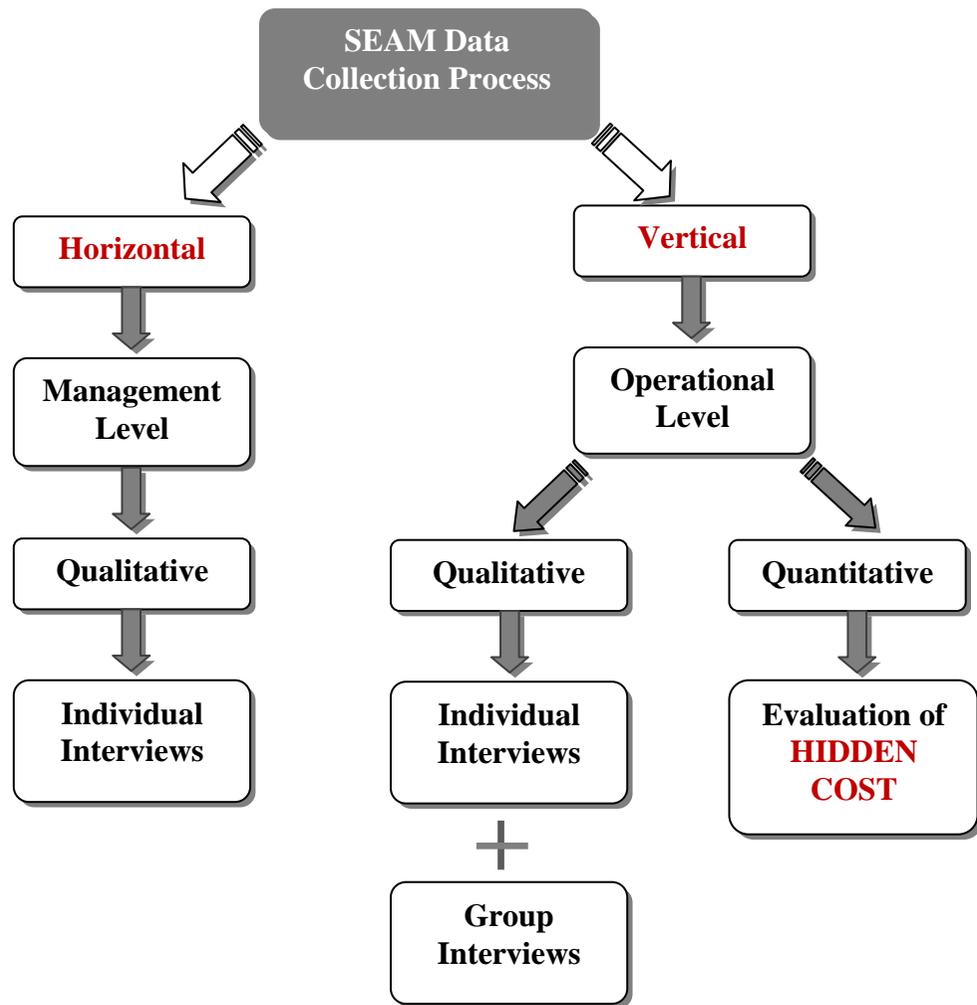
Starting with the diagnosis phase, the researcher explored the six areas of social performance (Work organizations, working conditions, Communication-coordination-cooperation, Integrated Training, Strategic Implementation and Time Management), using qualitative, quantitative, semi-structured interviews (Group and individual interviews), in addition to the direct observation. By using this socio-economic diagnostic, the intervener researcher first highlighted the weak points or dysfunctions of the organization to focus all the efforts on the improvement actions to be taken.

The collection of data is done using to HORIVERT process (HORIZontal & VERTical); Top managers, Middle managers, and Head of Department were involved at the horizontal phase and then cascaded down the hierarchical flow chart and worked with managers, head of department, nurses, technicians, physicians, help nurses, staff, and workers at the vertical phases. Involving all actors in the field will help address changes that will increase the effectiveness of the organization. The vertical diagnosis was divided into two parts: Qualitative and Quantitative. Quantitative interviews with the managers and some of the staff were conducted and an estimation of hidden costs has been provided. "A cost is said to be hidden when it does not explicitly appear on the company information system, such as the budget, financial accounting, and cost accounting, or in the usual ledgers and logbooks" (Savall, Zardet, 2008).

After finishing the data collection, data were treated by imputation of witness sentences by category of dysfunction in addition to the calculation of their Frequencies. Then the results were presented in the form of **mirror effect**,

which was derived from the data of the interviewees and fed back anonymously to the participants or involved actors. After the mirror effect, the researcher provided the **expert advice** and the **unstated ideas**, which are derived from the reaction of the players during the oral presentation and the Taboos, by providing his opinion on the impact of these dysfunctions. The aim of the expert advice is to help the client see the root causes of the hidden costs they had uncovered.

**Figure 3: SEAM Data Collection Process**



Thus, from the data collection, we have identified numerous form of strategic misalignment. There have been discrepancies by the strategic vision and the execution of the strategy. Strategic misalignment occurs when operational infrastructure is not in sync with the objectives of the organization. For example not one of the primary dysfunction was the lack of cooperation between all the board of directors to implement the strategy in addition to insufficient

Coordination and collaboration to first determine the plan, second to organize strategic implementation

In most organizations when IT and business strategy is misaligned, it's a result of two basic scenarios: first, the organization does not consider IT as part of strategic planning, to support this idea. We will refer to some of the witness sentences collected during the interviews that state: "They always work on projects that are related to IT department, without even taking into consideration our opinion neither our expertise in this field."

"Some projects or systems are dropped down from other departments or even from top management and at the end it is our responsibility to do their maintenance."

The second reason for misalignment is the misaligned relationship. Most often, business leaders update their strategies, and they neglect to focus on the impact of IT. "The management sign with the companies that we do not recommend. If they took our opinion, we would orient them toward a better solution."

Likewise, technology evolves; Organizations are hesitant to abandon new systems because of the additional costs and challenges. The heart of misalignment is that the business strategy has changed, but the IT strategy has stagnated, or worse yet, diverged. In all likelihood, many institutions function with outdated technology. Actors in both diagnosis (Horizontal and Vertical) stated that there is a strategic delay on some investments, material, and software and the information systems do not meet the needs in other word IS need an update and upgrade. Thus the misalignment creates many disadvantages which limit the achievement of strategic business outcomes and services, leads to inefficiency of customer services and operations, increases IT costs, increase risks.

The data collection process helped to determine the main issues or root cause behind the misalignment of business and IT. Which lead the researcher to work with the organization to find solutions through project groups that foster the collaboration and cooperation between all the actors in the field, top managers, executives, and staff.

### *Project Groups*

The second step after the diagnosis phase was the creation of projects groups to address the main issues of change. Based on the dysfunctions detected from the Horizontal and vertical Diagnosis the researcher proposed baskets, assigned the person responsible (the project manager, the restricted group, and the plenary group) and set up the objectives along with the CEO of the organization. Several Projects has been elaborated, one main projects treated issues related to strategy: "*Improve the strategic plan, the investment and establish a fixed budget for the IT department.*" This basket deals with strategic goals that tackle both social and technological investments. Technological investment deals with: setting budget to buy new equipment, new software and link all the existing materials and software to the main Health Information System (HIS). The social investments include recruitment of IT qualified employees (HR recruitment Policy specific for IT staff), training of both staff and managers. This basket sets the framework for IT investment management including decisions regarding process and people, accordingly, emerged the need to align IT strategy with HR

strategy, to reach success in implementing the strategy and IT investments. It is focused on the risks and costs of IT investments, on the difficulties of integrating IT with strategy and on means to implement projects. In another word, this basket studies the need to align business strategy with IT strategy, which helps in building efficient decision-making regarding IT investments. All the objectives and actions derived from this project group have been introduced into the hospital strategy using SEAM tools. Thus the alignment has been widely investigated in the literature and still lack practice. Many researchers are trying to link the IT balanced scorecard (IT BSC) to the business balanced scorecard as mean to reach the IT/business alignment processes. According to Van Grembergen in 2000 “It is believed that shortly many organizations will use a cascade of a business balanced scorecard and IT balanced scorecards as a way of assuring IT governance and achieving the integration of business and IT decisions.”

### *Tools*

The socio-economic method proposes tools to act on targeted actions, by managing priorities. Following the research-intervention, carried out within Healthcare institution, the researcher note the efficacy of using the SEAM tools as mean to conduct the alignment process.

Many of the objectives of the project groups has been introduced in the Internal External Strategic Action Plan (IESAP) of the organization, Priority Action Plan (PAP) of each department and Periodically Negotiable Activity Contract (PNAC) of each individual to ensure an active synchronization of actions and notably allowing management to help actors to manage and implement the strategic actions of the organization.

The intervener researcher implemented three tools of socioeconomic management to enhance strategic alignment such as priority action plans, internal and external strategic action plans, and periodically negotiable activity contracts. Using these management tools allowed company staffs to implement the defined actions and foster fulfillment of short, medium, and long-term purposes.

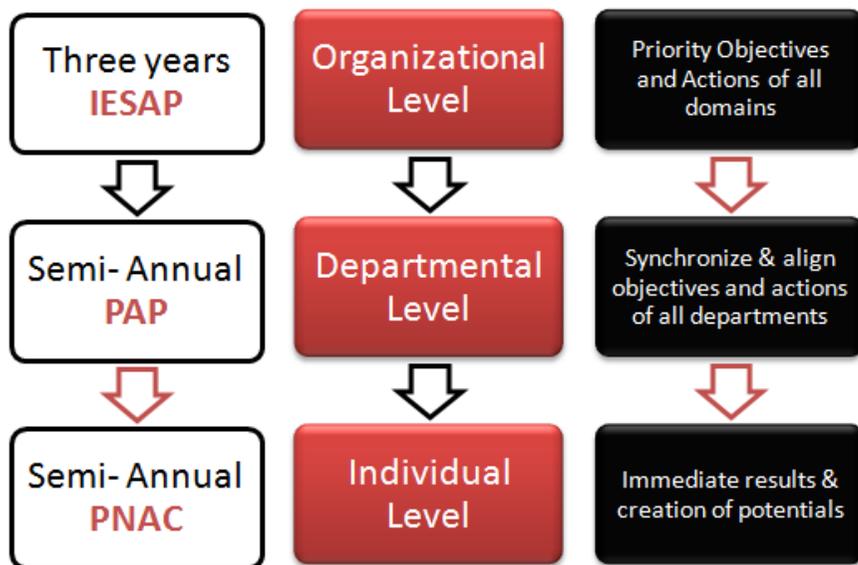
- **Internal and External Strategic Action Plan (IESAP):** It is an organizational strategic plan intended for three to five years, and it is updated each year. The IESAP specify the concerned external and internal actors. According to Savall, the IESAP “is crucial in making external strategic objectives consistent with the internal targets, mainly in the field of new products, new markets, and the development of technological know-how and human potential.” (Savall, 1981-2010). It combines the External & Internal plans and incorporates IT objectives and plans with all the other hospital domains.
- **The Priority Action Plan (PAP):** One of the characteristics that strengthen the PAP is that it multiplies the strategy of the organization as a whole, down to the smallest collective unit of work. Developed for each department and including actions from IESAP it ensures flexible and dynamic strategic implementation and unfolds and explains the overall strategy to all the hierarchical level. Its development method is double top-down and bottom-up through direct interaction between the

actors of the organization, allowing the identification of the objectives, the checking of their consistency, the measuring of their feasibility and the available time to be devoted to them.

- **The Periodically Negotiable Activity Contract (PNAC):** “is a system designed to fix targets and negotiate ways to achieve them. [...] the PNAC allows management to negotiate the effort required to implement the PAP successfully. The PNAC establishes a direct dialogue on the reduction of dysfunctions and improvement actions to implement the strategy.” (Savall, 1981-2010).

These tools helped the organization to achieve an efficient strategic implementation by breaking down the overall strategy of the hospital into departmental and individual level as illustrated in the figure e below

**Figure 4: Socio-Economic Management Strategic tools**



The socio-economic management makes it possible to develop the strategy with concrete actions for all the actors inside the organization, and to steer activities in a synchronized and coordinated way.

When the projects groups have been accomplished, the selected proposed solution constituted the actions that invigorated the internal-external strategic action plan, and it was scheduled over five consecutive years. Then, the actions appeared in the priority action plans of the departments concerned by the selected solutions. Afterward, PAP actions were broken down and distributed into the periodically negotiable activity contracts of the managers and employees in charge of their implementation.

All these tools help readjust the part played by the supervisors and the board of directors in enhancing and ensuring a proactive strategic alignment. Furthermore, they focus on the development of the human potentials, instead of only focusing on the short-term financial goals. All actors can play a big part in the process of change and by applying these tools the hospital will secure a sustainable workers performance and attain an efficient strategic alignment.

## **RESULTS**

Following the implementation of the socio-economic approach to management, we have observed many evolutions in the field especially concerning the management of IT assets and specifically the IT Strategic Alignment.

### *Qualitative Results*

An augmentation of users' awareness of the impact of their actions on the system, a progress among the top managers concerning the IT and hospital strategic alignment; an enhancement of working relationships, trust and effective communication; clear understanding of the business and technical environments, an enhancement of the working condition which has a positive effect on the performance of the users and in consequence it affects information system efficiency; better synchronization of actions and plans between IT department and all other departments; an enhancement of the IT managerial competencies which affects the whole organization and a progress in communication inter and intra-departments. An encouragement and improvement of team work, more commitment to objectives, an enhancement in strategic direction for the overall technology environment, better recognition and support of IT by senior management, an enhancement in working practices and processes of staff and finally an improvement in the ability to coordinate activities enterprise-wide

### *Quantitative Results*

Moving to the quantitative results; the hospital could achieve great results: Higher job satisfaction, increase of the users' satisfaction from 75% to 84%., reduction of the users' errors from 36 errors per month to 22, decrease of the number of system shut downs from three or four times per week to once per week, an increase in the number of training and the number of participation in training from 40% to 62% and a decrease the number of Hardware and software errors from 84 to 51.

## **CONTRIBUTIONS TO IT STRATEGIC ALIGNMENT**

In the effort to gauge strategy and alignment, the socio-economic management concentrates on the perceptions, comportment, and assessment of people (Boje & Rosile, 2003; Lallé, 2003) while others emphasize on technical processes and only integrate the human dimension when people constitute a mean to reach strategic goals. We have developed the table below to illustrate how the implementation of the socio-economic methodology contributed to the enhancement of the IT strategic alignment within the field of research.

**Table 1: SEAM contributions to IT strategic Alignment**

<b>Strategic Alignment</b>		
<b>Model/Theme</b>	<b>Before</b>	<b>After</b>
<b>Intellectual Alignment</b>	No Cohesion between IT manager and other managers	Setting and applying cohesive goals across the IT and other functional organizations using IESAP- PAP- PNAC
	IT decision centralized by the management	Decentralized decision making
	Not all Procedures are aligned with IT	Procedures/workflow alignment.
	Decisions are focused on IT	Better quality decisions
	CIO not involved in business projects	Coherent relationships between CIO and business Managers
	No alignment	Alignment of IT/business structures and processes
	No clearly defined policy	Setting up norms and policy for patients files treatment
	Poor communication with management team	Direct Negotiation of IT strategic goals
	IT strategy not connected to organization strategy	IT strategy incorporated in the Overall strategy
	Poor synchronization	Better Synchronization business and technical environments. (Dynamic Synchronization)
<b>Social Alignment at Strategic Level</b>	Poor interaction of CIO with the management team	CIO – CEO – Top Management active communication, cooperation and coordination
	Sharing IT and Business skills is limited to some managers	Shared knowledge
	CIO not involved in all meetings and committees	CIO involvement
	CIO role is not considered important and limited to technical skills	Better relationship between CIO and top and middle managers
<b>Social Alignment at Operational Level</b>	Limited contact with users	Improve working relationships, trust and communication between IT and staff
	Staff role is limited to system use and do not participate in decision making	Staff involvement (Top and Bottom Up strategic Goals)
	Huge number of errors	Improve system adoption
	Limited trainings	Skills enhancement

## CONCLUSION

The field of information systems has evolved along with the development of information technology over the past twenty years. The IS strategic alignment has become the backbone of most organizations prompting the IS researcher to try to find out a solution for how to put IS theory into practice. From this perspective, the socio-economic management will constitute a perfect fit since it bridges the gap between researchers and practitioners; it combines theory, research, and practice. In SEAM practice enriches research, which in turn assists in building the theory that can be applied to practice. (Heorhiadi & Conbere, 2015).

This study will be beneficial; it serves as a future reference for researchers in the field of IT strategic alignment. By applying the SEAM intervention and tools, the researcher could have a clear understanding of the organization, management, technology, human potentials, dysfunctions and hidden costs. The strategic alignment within the hospital has been improved through setting and achieving cohesive goals across the IT and other functional organizations and creating harmony between the business and IT. Then again, the time limitations in addition to organizational constraints prohibited the full application of the socio-economic methodology and tools, the full evaluation of the change process and the outcomes. Furthermore, there is little previous research on IT strategic alignment in the Lebanese healthcare sector which encourages future studies to expand and explore more on this subject and to design, implement and incorporate strategies to enhance alignment in hospitals.

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