

Aligning IT and Business Strategies Adopting an HOQ , a Case Study in a Large Scale Iranian Bank

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Abstract. One of the contributing factors to the successful deployment of a technology in organizations is considered to be the alignment between Technology strategies and organizational objectives. The strategic alignment model, the framework for this study, is based on the theoretical construct developed by Henderson and Venkatraman [4]. this paper has proposed a modified version of HOQ (House of Quality) and it has been called "IT-alignment House of Quality". In order to increase the reliability of the mentioned model , it has been piloted in Bank Mellat.

Keywords: Technology, Business strategy, Alignment, Venkatraman's Framework, HOQ model

1. Introduction

The strategic alignment model, the framework for this study, is based on the theoretical construct developed by Henderson and Venkatraman [4]. This model explores the interrelationship between business and IT. It is based on two distinct linkages: strategic fit and functional integration. Strategic fit is the vertical linkage concerned with the integration of the external environment in which the firm competes (e.g. business scope, partnerships, alliances, core competencies) and the internal environment in which the firm performs (e.g. organizational structure, human resources, business processes). Functional integration is the corresponding horizontal link between business and IT. This linkage extends the notion of internal and external fit to IT. These two linkages are used to determine the relationships between IT and business. The model is divided into four quadrants. They are business strategy, IT strategy, organizational infrastructure and processes, and IT infrastructure and processes. These four quadrants are interrelated. How they relate represents a perspective. Effecting a change in any single domain requires the use of three out of the four domains to assure that both strategic fit and functional integration are properly addressed.

According to our research, most of the current IT alignment models and frameworks are subjective and don't hold a systematic and practical approach which leads to complicated and qualitative tools and techniques. We have found QFD (Quality Function Deployment) method as a useful solution for the mentioned problem of these techniques.

2. Theoretical basis of the research

2.1. Quality function Deployment method, concepts and applications:

Quality Function Deployment is a systematic approach to design based on a close awareness of customer desires, coupled with the integration of corporate functional groups. Ultimately the goal of QFD is to translate often subjective quality criteria into objective ones that can be quantified and measured and which can then be used to design and manufacture the product. It is a complimentary method for determining how and where priorities are to be assigned in product development. We believe that HOQ is a practical and advantageous tool for translating the requirements of a concept from one dimension or perspective to the other in a somehow more quantitative and systematic way. QFD has been considered as a useful technique in strategic planning process in previous researches and studies, although it seems that it has never been used in order to achieve strategic IT alignment. According to Maddux et al. QFD can be successfully applied as a

strategic planning tool for the design of an intangible product such as a program or activity [5]. Guinta, has helped many companies use QFD to solve customer-related problems and expanded its application to develop and resolve corporate strategic issues [1]. Marvin E. Gonzalez and et al. have proposed a modified approach to QFD, called “QFD strategy house”, as a systematic means of incorporating intelligence on markets, consumers and technologies in strategy development. It links marketing and manufacturing strategies by first developing a continuous improvement strategy [2].

2.2. The Strategic Alignment Framework:

Venkatraman et al [4] developed a model for conceptualizing and directing the emerging area of strategic management of information Technology. This model, termed the strategic alignment model, is defined in terms of four fundamental domains of strategic choice: business strategy, information technology strategy, organizational infrastructure and processes, and information technology infrastructure and processes – each with its own underlying dimensions. The concept of strategic alignment is based on two building blocks: strategic fit and functional integration. The former recognizes the need for any strategy to address both external and internal domains.

3. Research Results

The First perspective (strategy execution) is anchored on the notion that a business strategy has been articulated and is the driver of both organizational design choices and the design of I/S infrastructure. This alignment perspective is perhaps, the most common and widely understood perspective as it corresponds to the classic, hierarchical view of strategic management. Considering the determined moves of this perspective in the strategic IT alignment framework, the required sequence of “QFD IT-alignment house” would be depicted accordingly. As it is illustrated in the figure 1 ‘s first row, in accordance with the adopted perspective each domain will be considered as a primary or secondary dimension.

The second alignment perspective (Technology Transformation) involves the assessment of implementing the chosen business strategy through appropriate I/T strategy and articulation of the required I/S infrastructure and processes. In the Second perspective, the anchor is again the business strategy domain, which will result in the same primary dimension as in the previous sequence of “QFD IT-alignment house”. In the second perspective with having the I/T strategy as the pivot domain, the most integrated I/T strategies will be delivered as the primary dimension of the second HOQ of this sequence. Finally, the second HOQ will lead to the most fitted IS Infrastructures.

The third alignment perspective (Competitive Potential) is concerned with the exploitation of emerging I/T capabilities to impact new products and services (business scope), influence the key attributes of strategy (distinctive competencies), and develop new forms of relationships (business governance). ”. In this sequence, the first HOQ is producing the most integrated Business Strategies with the chosen I/T Strategies. These integrated business strategies are the primary dimension of the second HOQ. The alignment requirements of these strategies are translated to the chosen organizational infrastructure through the second HOQ of this Sequence.

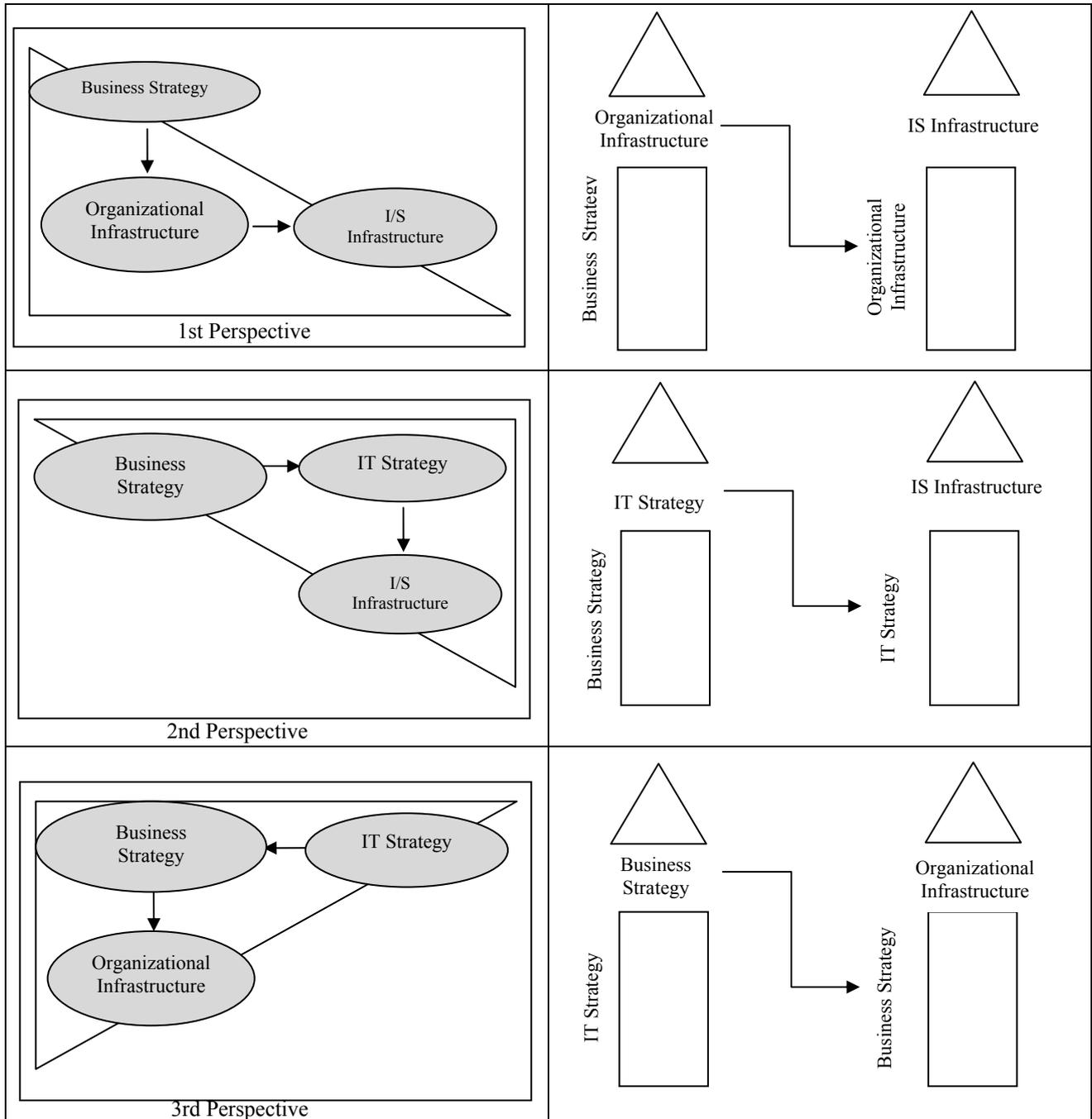
The fourth alignment perspective (Service Level) focuses on how to build a world-class I/S service organization. This requires an understanding of the external dimensions of I/T strategy with corresponding internal design of the I/S infrastructure and processes. This strategic fit for I/T creates the capacity to meet the needs of I/S customers. In the fourth perspective, like the third one, we have the I/T strategy as the driver domain, and the primary dimension of the first HOQ of the fourth sequence. In this sequence, the first HOQ will translate the chosen I/T strategies to the fitted IS Infrastructures. The most fitted IS Infrastructures will be the primary dimension of the second HOQ of this sequence. In this HOQ, the QFD logic will help us in selecting the most integrated organizational infrastructures.

4. Deploying IT-alignment House of Quality Model for Bank Mellat

Mellat is a giant private Iranian Bank and in comparison to its other competitors Mellat enjoys a good reputation among the nation which is mostly due to its modern IT-banking services. To cope with fast paced

changes in the field of IT, it is now inevitable for bankers to update and revise their previous approaches, since today short term goals cannot be effective and efficient.

Having the vision of “Being a pioneer Iranian bank which create value for its customer more desirable than its competitors, through electronic services by fully integrated systems and different channels “ Mellat bank welcomed to pilot the proposed IT alignment idea.



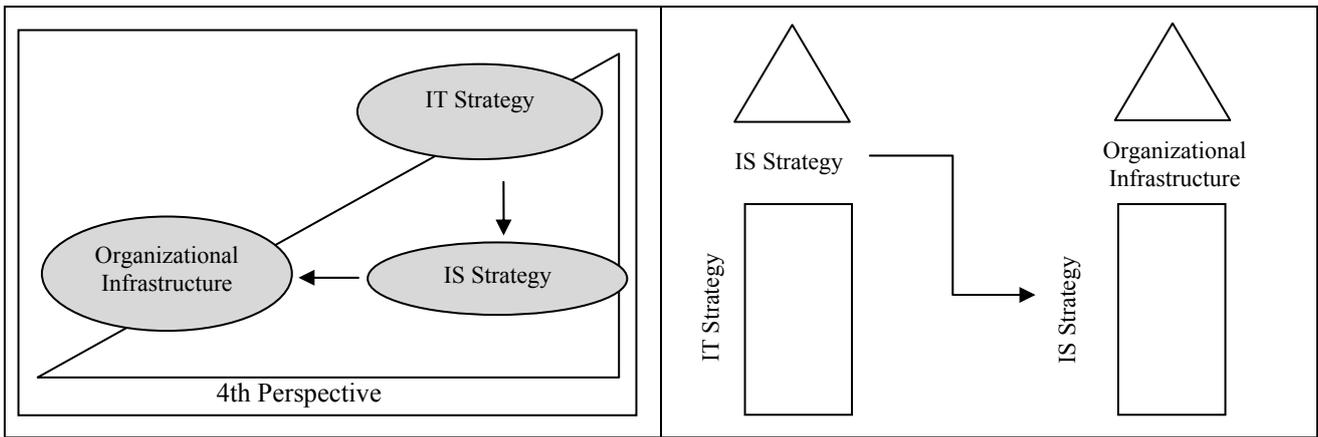


Fig. 1: QFD IT-Alignment House Model.

Regarding the four aforementioned perspective, Mellat bank desires fit in the second (the assessment of implementing the chosen business strategy through appropriate I/T strategy and articulation of the required I/S infrastructure and processes) and the third IT alignment HQ Model 's perspectives (exploitation of emerging I/T capabilities to impact new products and services (business scope), influence the key attributes of strategy (distinctive competencies), and develop new forms of relationships (business governance)). To implement this framework we need business and IT strategies of the bank.

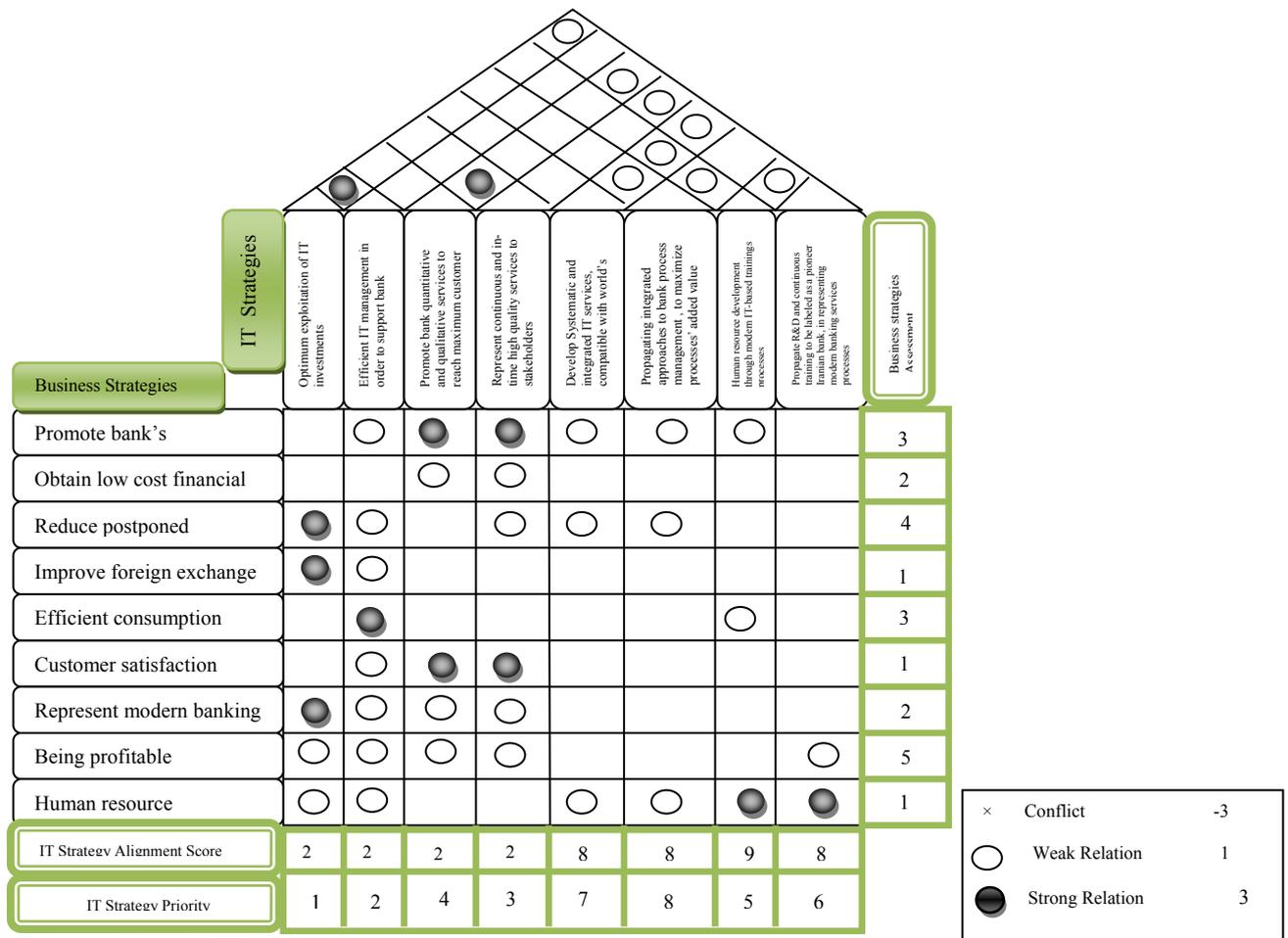


Fig. 2: QFD Bank Mellat's IT-alignment HOQ Assessment.

Considering competitive characteristics of the case in this research the second perspective deployed in QFD IT-alignment house model, is not presented in this paper. Although the second House is a great deal of help in implementing IT strategies through IT infrastructure requirements.

5. Conclusion

This study is concerned with extending the concept of the alignment between business strategy and IT strategy and proposes a method to facilitate this procedure and make it more applicable by employing the QFD model into Venkatraman's Strategic Alignment model. To more clearly express the authors' idea, the proposed model was run in a large scale Iranian bank and the results were presented.

6. Acknowledgements

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7. References

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