A Framework for Analysing the Information Strategy Formulation Process in Large Organizations

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Thesis Summary

Growing complexities of the business environment worldwide, coupled with the rapidly improving capabilities of information technology (IT), has made it almost imperative for most large organizations to consider IT as a strategic alternative. This has created an unprecedented need for organizations to formulate long-term strategies for information systems (IS)/ information technology (IT), in order to ensure strategic deployment of their information resources.

Use of information systems and technology for gaining strategic advantage has been a topic of concern for academics and practitioners alike for the past decade. Most of the available literature relates to the following issues.

- a. Approaches and methodologies for IS/IT planning.
- b. Evolution of computing in organizations.
- c. Systems and procedures for managing the various IS/IT scenarios in organizations.

However, the research and practice in this area has still not reached a level of understanding where very dependable operational guidelines for planning and implementation of strategic IT applications emerge. This study addresses a major deficiency in the current focus of research, which relates to the information strategy formulation process or ISFP, as it is referred to throughout this dissertation.

Possibly the most important process, which has to be considered while building organizational capability for gaining strategic advantage out of information systems, in the very process by which an organization formulates its information strategy. However, no specific studies of this process as such are available in the literature today.

This study involves development of a framework for analyzing the process. The framework is based on available literature in the areas of corporate strategy formulation, information systems implementation and organizational change management and the findings of a detailed survey of Indian organizations in various industry sectors, undertaken as a part of this study. The dissertation also includes cases studies of seven Indian organizations, based on this survey.

Specifically, this framework presents an approach to achieving the following objectives.

- a. To obtain a detailed understanding of the different characteristics of the ISFP.
- b. To identify the characteristics of the organizational environment, which influence the ISFP.
- c. To delineate the nature of the influence of these organizational characteristics on the ISFP.

The framework is primarily in the nature of general guidelines at a conceptual level for analyzing the ISFP in large organizations. It can be appropriately categorized as belonging to the theory building type of research.

The framework represents a piece of research work which aims at developing a basic understanding of a process which is very important in the present context and yet into which there has not been any significant research. It leads to a significantly improved understanding of the organizational ISFP because of its following contributions.

a. The framework proposes two dimensions, viz., the content and the process dimensions, along which the ISFP can be described/ analyzed. Further, in recognition of the findings of the exploratory and the literature surveys that the content dimension of the ISFP may be dominated by technological and/or business issues, a construct called the dominant orientation, viz., the technology orientation and the business orientation, has been developed to describe the content dimension. Individual characteristics of the IFP which determine the dominant orientation of the content dimension have been delineated.

A similar analysis has been carried out for the process dimension of the ISFP. The process itself can be carried out in either a very systematic, structured manner or an unstructured, adhoc manner. This observation has been taken into account by defining two possible orientations for the process dimension, viz. the planning orientation and the innovation orientation. Accordingly, the ISFP characteristics which determine whether the process has a

dominant planning orientation or a dominant innovation orientation have also been delineated.

- b. The above analysis has enabled the study to delineate sixteen theoretically possible states of the ISFP depending on the dominant orientation(s) of the content and the process dimensions. On further analysis, eight of these states have been found to be infeasible in organizations. The remaining eight feasible states serve to describe the variations in the ISFP across different organizations. These eight states have been named in a meaningful manner, in this study.
- c. The framework also develops an explanation for the variations found in the ISFP across organizations, by using the concept of the ISFP states. The reason for these variations is found in the influence on the ISFP, of a host of factors related to the external as well as internal environment of organizations. In order to keep the scope of this study manageable, the framework has dealt in detail only with the influence of the internal environment which influence the ISFP characteristics. These factors include organizational aspects like the perceived strategic importance of IS/IT by the top management and the business orientation of the IT professionals in the organization. The study carefully examines the impact of each of these factors on the ISFP orientations. This analysis has enabled the study to develop organizational scenarios, in terms of these eleven factors, which would be conducive to the stabilization of a particular type of ISFP in the organization.

Thus, the framework facilitates analysis and evaluation of the ISFP in an organization. The individual characteristics of the ISFP as identified in this study and the constructs of ISFP orientations and the ISFP states help an observer to describe and analyze the ISFP. An understanding of the organizational characteristics influencing the ISFP and the nature of the influence enables him to evaluate the extent of fit of the ISFP with the organizational environment.

However, the framework also has significant predictive and prescriptive value for management of organizational IS/IT in general and the ISFP in particular.

If the internal environment of the organization is undergoing a transition, then the framework facilitates prediction / identification of the new desirable ISFP state which would have a good degree of consistency with the new organizational environment and hence would be sustainable and effective in the environment.

Finally, an understanding of the ISFP characteristics, orientations and states, combined with an insight into the nature of the influence of the organizational environment of the ISFP, enables one to determine the required course of action on part of the organization to,

a. manage effectively the transition from the current ISFP state to the new desirable one, and

b. ensure effective management of the new ISFP state, once the transition is complete.

The prescriptions typically refer to the changes required in the individual characteristics of the ISFP and those of the organizational environment, in order to improve the consistency between the organizational environment and the ISFP, leading to a stable and effective ISFP.

The value of the framework as discussed above, has been demonstrated through seven detailed case-studies presented at the end of the dissertation.

In addition, the dissertation presents a detailed literature survey on conceptually related topics like organizational process, business strategy formulation process and planning and management of IS/IT in organizations. Each of the above aspects of the literature survey has been structured to bring out the linkages between the different individual frameworks discussed and also between the findings of the survey and the main theme of this dissertation, viz., the ISFP.

The intensive survey of real organizations which was undertaken as a part of this study has also contributed significantly to the refinement of the understanding the ISFP and its environment and has played an important part in lending the framework a real-life touch.

Thus, this study is expected to help researchers as well as practitioners in understanding IT environments in organizations better. Equally important, it should also facilitate a more refined, and hence effective visualization and management of the transition entailed in transforming the information strategy of a firm, as transforming the ISFP would be a very important aspect of the required organizational change.