Organizational improvement using Organizational paradigms with the support of people paradigms

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***Abstract*— An organization is a vital part of social environment. Different parts of organization have great impact to the environment. On the other hand the different organizational strategy helps to improve the efficiency of organization and customer satisfaction. The people and tools of organization help to organization to work properly. This paper mainly describes about the organizational paradigms and people paradigms also the way how the people paradigms facilitate the organizational paradigms to improve the organizational architecture for better performance. This paper describes the different aspects of organizational like Information system strategy, Information system planning, Business process reengineering etc also End user computing, Knowledge management, Expert system of people paradigms. And finally there is a combination between those. Keywords: Business process reengineering, Customer satisfaction, end used computing, In Information System Strategy, knowledge management, Organizational improvement.**

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I. INTRODUCTION

An organization is an arrangement of different social issues which build for achieving a specific specific goal or collective of goals. These social issues play an important role in an organization. An organization has its own structure for identifying itself in its environment. Mainly an organization produces an output for its environment by processing the input from the environment. All organization has a structure that determines between function and ensure the performance as well as customer satisfaction. For designing and integrating the social units into a consistent and steady organization needs structural relationship and structural properties of the system. The organizational networks internal structures are interrelated to its subsystems. The frequent properties are characterized by the organization and also classify the organizational roles. The main goal of an organization is to accomplish or satisfy environmentally derived objectives, such as profit maximization in an entrepreneur environment. The social unit must comply with its existing behavioral models.

The Organizational paradigms main issues help to describe the structural design which is appropriate to the fulfillment of the functional necessities. "Organizational paradigm is a set of different strategies and rules for modeling a system in order to reach a specific goal. Organizational paradigms and differences between them have been recognized as important for IS research "(Joerg Evermann). For example, (Kendall and Kendall 1993) (Hirschheim and Newman 1991) discuss organizational paradigms in the context of IS development projects. However we are not discussing the organizational paradigms modeling language and its arrangement. The current research is based on work in organizational sociology by Reed (Reed 1992). Reed classifies five viewpoints.

People Paradigm is a combination of technology specialists groups who are knows the real environmental commercial requirements in business or Organization. For making performance oriented business every organization has both technical and social aspects which are co-related. In addition, both aspects are deeply related to each other and they only can exist with the equal support from the other. As a result, for effective business and its good performance, the capability of integrating both dimensions are very crucial.

Now-a-days for business, IT platform provides as the technical business operations for the time being human creation functions takes care of the social dimension of the organization. So, in this paper, I would like to write the basic practices of people paradigms in order to have better understanding in business in business functions and improve the efficacy of business especially in Information System and how these are facilitate with organizational paradigms. Making the well structured organization, improve the efficiency and customer satisfaction different aspect of people paradigm can work with the different parts of people paradigms. This paper has been discussed alignment of people paradigms with organizational paradigms how the different parts of people paradigms can use with the organizational paradigms for influencing the performance of organization.

II. END USER COMPUTING INVOLVEMENTS IN INFORMATION SYSTEM STRATEGY

Information system has become a necessary part in any organization with increasing strategic significance. A Strategic Information System helps companies to change or their business strategy and/or structure. It is typically utilized to streamline and quicken the response time to environmental change in the organization and aid it in achieving a competitive benefit.

The function of a IS strategy itself is best described by Wilson (1989) states that: "An information systems strategy brings together the business aims of the company, an understanding of the information needed to support those aims, and the implementation of computer systems to provide that information. It is a plan for the development of systems towards some future vision of the role of information systems in the organization."

This definition is qualified by Reponen (1993) who argues that: "An IS strategy is something which is essentially a planning process in the minds of the decision makers, users and developers of the systems. It is supported with written reports and plans, but they are of secondary importance." Strategic information systems should be different from strategic-level systems for managers that focus on long-term, decision-making problem [5].

A. Influencing factor of information system strategy

- There are so many factors that influence the information system strategy. Some are below:
- Efficiency
- Cost-benefit
- Competitive advantage
- Effectiveness
    - Redefine the boundaries of particular industries
    - Develop new products or services
    - Change the relationships between suppliers and customers
    - Establish barriers to deter new entrants to marketplaces [1].

According to above points of view here going to discuss how information systems strategies can affect on different personals in organization. Information system and organization depends on each other. Organizations using information technology in a well defined way are efficient and more accurate, let suppose we take an example of an electric supply company which is using information technologies in a more sophisticated ways. Strategic information system can also help organization to contract in size, because it can reduce market participation cost. It is the cost when a firm buys on the marketplace what it cannot make itself it is also called outsourcing. According to transaction cost theory, ´´firms and individuals seek to economize on transaction costs, much as they do on production cost. Using markets is expensive because of costs such as locating and communicating with distant suppliers monitoring contract compliance, buying insurance, obtaining information on products and so forth´´ [5]. Strategic information system develops competitive (business) intelligence by getting information about different customers, currents products running in market, organization competitors, and also from environment change [25]. For example, if an organization came to new in advance about a change that will be happen in the field through strong strategic information system about a product, so this organization will automatically take an edge on its competitor by predating the situation. End User Computing in relation to organizations End User Computing (EUC) is a group of approaches to computing that aim at better integrating

end users into the computing environment or that attempt to realize the potential for high-end computing to perform in a trustworthy manner in problem solving of the highest order [24][11][6].

End user computing is the direct, hands-on use of computers by end users not indirect use through systems professionals on the data processing staff. End user includes executives, managers, professional staff, secretaries, office workers, sales person and others. A subset of end user computing is end user programming. Here, end user creates procedures that they store and use over and over. End user computing takes place mostly at the three level of the organization: the department, workgroup, and individual level (people paradigm). Departmental minicomputers and shared microcomputers generally serve a limited number of users for specific applications that data processing cannot provide. In short, these departmental systems supplement the services of the information services department. Some of the minis have fourth generation language, with which new application can be developed quite rapidly. Many provide high-quality office automation functions, so that almost as an extra, department managers can get facilities for automated calendars, computer messaging, word processing, and electronic file End user computing is appearing in work groups because it provides new ways to communicate. The ability to communicate with other people electronically will become increasingly important reasons for installing networks of small machines or using office automation systems.

For instance, since managers now communicate using various media (type written memos, telephone, and meeting) the same should be permitted electorally. A computer message system, for instance, can substantially reduce the number of interrupting telephones call that a managers receives without lessening the amount or timeliness of the information. More and more executives, managers, and professional staff members are finding that they can use personal computers as tools to support their thinking processes. The computers can perform tedious calculations and turn the number into graphics, while the users can try out different what if situations. Personal computer become decision support aids to support their analysis. Analysis support includes the ability to query electronic system conveniently, in a natural manner, and retrieve desired information. Personal computers can also serve as a calculator, a budgeting tool, an electronic spreadsheet, and a planning tool. Furthermore, these managers may also want to obtain external services, with additional analytical tools and data.

III. KNOWLEDGE MANAGEMENT (KM) INVOLVEMENTS IN INFORMATION SYSTEM PLANNING

Information system planning is a process for developing a strategy and plans for supporting information systems with the business strategies of an organization. To make an information system, modern information technology helps to reduce transactional cost and other operating cost. Information system planning plays important role for developing any organization. Information system planning has lots of benefit for different perspective view. Information system planning can help to access all the information centrally and easily can keep back up of all information of an organization. It also can distribute information to all of the stuff of that organization as well as customer, and easily can keep record of any stuff of customer. Information system planning also can help for tax preparation and customer trait identification. Discussion about IS planning and KM continually follows here in terms of organizational and people paradigm. There are three types of information system planning are as follows:

- Long-term planning: In general, a plan with a planning horizon of five years or more. Assessment of the strategic goals of the organization, which could be long-term survival, increasing market share, increasing profits, increasing return on capital, increasing turnover or improving public image[1].
- Medium-term planning: Assessment of the medium-term objectives to be used as a basis for allocating resources, evaluating managers' performance, monitoring progress towards achieving long-term goals, establishing priorities etc[1].
- Short-term planning: Short term planning is for short time or current issue. In generally in operational level of an organization the short-term planning is effective.
- In information system, for any organization most of the research in knowledge management (KM) assume that knowledge have positive implication. Definitions of KM share the perspective of collection and dissemination of knowledge to benefit organization and its individuals. Typically knowledge is defined like 'information that is relevant, actionable, and based at least partially on experience'. We must take a look at paradigms of philosophy and species of information to find out what is meaningful for KM [3]. In knowledge management if anyone does a small mistake, for this too little fault result will be too much that he/she cannot expect. It is like a double edge weapon. Knowledge management studies of information system researcher's responsibility raised to understand how the knowledge is treated and what are the themes and topics. In a knowledge based organization anyone can understand the economic value from their collective knowledge, assets, production, distribution and association. In knowledge based organization, knowledge management program can alter the difficulties of senior manager. For effective knowledge management the perspective knowledge infrastructure consisting of technology, structure, culture, conversation, application and protection are essential organizational capabilities or precondition. Knowledge

management may be motivating information system researcher where they struggle with difficult issues of power and conflict. Information system planning has huge impact on knowledge management. Some of those are as follows:

- Small mistake of knowledge manager has a great effect in information system planning.
- Knowledge collection, distribution helps in ISP.
- Knowledge management may be motivating information system researcher where they struggle with difficult issues of power and conflict.

IV. USERS' REACTION INVOLVEMENTS IN PORTER FRAMEWORK

In the past information systems were developed simply to improve the efficiency of specific business functions. More recently information systems have been viewed as tools for obtaining competitive advantage. Avison and Fitzgerald (1995) have discussed the following ways in which information systems can help to achieve competitive advantage:- "Redefine the boundaries of particular industries, Develop new products or services, Change the relationships between suppliers and customers, Establish barriers to deter new entrants to marketplaces."[15]. Porter's framework describes five forces for the business strategy and industry analysis discovered by Michael E. Porter 1979 [16]. The derived five forces determine the competitive intensity and therefore attractiveness of a market. Porter referred to these forces as the micro environment. Porter identifies five competitive forces that any organization needs to consider [3]:-

1. Threat of new entrants.
2. Bargaining power of customers.
3. Threat of substitute products or services.
4. Bargaining power of suppliers.
5. Rivalry among existing firms.

There are few roles we should consider in the development of Information System such as computer professional, system analysts, and end-users. The computer professionals and analysts directly involve in building the Information. The end-users are the ones that use the system and they rarely have control over making decision in Information System development. If the users can involve in the Information System development process in a certain degree particularly in decision-making process in analysis, design and implementation of the IS; they will feel more committed to the system when working with them. As a result, the Information System is likely considered as successful. There are some negative user's reactions that are essential to the success of the Information system such as aggression, projection and avoidance. The aggression behavior often happens when the users do not put their 100% trust to the system due to the feeling of being less secured, losing independence. The final reaction is avoidance – the users just want to have nothing to do with information system. In any of the above situation, the information system is unlikely to be considered successful or perform in full functions.

User reactions towards the systems highly depend on the level of involvement which is more than just the general agreement on the system requirements. Thus, if the users participate more in the development process such as design, they will fell more satisfied with the results because the system now is now considered as ―their small baby and they can feel the commitments and efforts in the system. It is only can be done with the hand-in-hand corporation from computer people. Each of the forces mentioned Porter's framework of competitive strategy can be considered as the users of the IS in the organization with different level of participant and it has significant impact on the user reaction. Therefore, besides market/economic, management strategies, the organization must also focus on IT strategy in order to reduce the harmful effect of competitive forces described in Porter's framework of competitive strategy.

V. EXPERT SYSTEM INVOLVEMENTS IN BUSINESS PROCESS RE-ENGINEERING

Business process reengineering (BPR) is an approach of elevating effectiveness of the organizational business process for improving organizational outcome and goodwill. The core process redesign' or the new industrial engineering' also express the same idea that focuses on integrating both business process redesign and deployment of information technologies (IT) to support the reengineering work. Peter Carter defines the BPR as "Business process reengineering (BPR) is the main way in which organizations become more efficient and modernize. Business process reengineering transforms an organization in ways that directly affect performance." [17]. Hammer and Champy (1993) in their book Reengineering the Corporation: A Manifesto for Business Revolution has been define BPR as: "[Reengineering is] the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as

cost, quality, service and speed. (p. 32)"*18+.‖ Dr. Michael Hammer is the primary originator of the business reengineering concept and the founder of the reengineering movement which has been discussed in "Reengineering Work: Don't Automate, Obliterate", Harvard Business Review, 1990 [19]. Teng et al. (1994) define BPR as "the critical analysis and radical redesign of existing business processes to achieve breakthrough improvements in performance measures.‖ The two keystones of any organization are the people and the processes. If every people or stuffs are motivated and working hard, but the business processes are not good enough, organizational performance will be poor. Business Process Reengineering is the key to transforming how people work. The minimum changes in processes can have dramatic effects on cash flow, service delivery and customer satisfaction.

An expert system is a knowledge-based and expert skill embodiment within a system. The expert system can offer intelligent advice or take an intelligent decision about a processing function. The style adopted to attain these characteristics is rule-based programming [1].

The expert system can support organization to important decision making and improve organization productivity. Today, Expert System has demonstrated their potential, gained credibility to solve a variety of business problems in industry and government [20]. Those capability to effectively improve the way an organization does business and it has been used to change a variety of business processes [21] [22].

A. Customer satisfaction using BPR

All Business process re-engineering is used to successfully reinvent an organization and increase the organizational focus on customers. Business process re-engineering (BPR) may good enough as a management efficiency tool than a strategy for organizational marketing. But BPR is also customer-oriented and market driven. Reengineering starts by looking at the market and assessing a company's - and its competitors'. In BPR, an important part is finding out what customers want and need, rather than what managers want. In company's strategic goals, executive teams and employee teams would have ambitious objectives to meet and exceed customer expectations, often by developing new products or services. Using BPR tools, it is possible to review and redesign key business processes that affect the organizational ability to satisfy customers. The organization may reinvent itself to meet customer expectations. BPR helps organizations design new processes that make the most of technology's potential. During BPR the organization can achieve a new process and also a new IT infrastructure which can helps to customer can get better service. For example if we think about a bank. Using BPR the bank can get new infrastructure new services like Mobile Banking, Internet Banking, and Credit card payment in shopping, ATM etc. And using those services a customer can withdraw money, shopping, fund transfer etc very easy and secure way. After all, the customer satisfaction will be increased. BPR improve the business process and make a dramatic benefit for organizational external customer who use organizational services, as well as its internal customer, the employee and the shareholders.

B. BPR facilitate by Expert system

The BPR is a process reengineering in an organization for better environment and services. So, in this reengineering we can think about a highly efficient infrastructure or organizational environment which will be very useful for internal organizational people like employee as well as external people like customer. If the outcome of an organizational reengineering is an expert system then maybe it will be more satisfaction for internal and external people. Expert system is an intelligent information system combination of hardware and/or software that behave as a human expert. The expert system introduced some major new feature which able to explain decisions in user understandable form. Expert system is adaptive, flexible and relatively cost effective. It is also a useful decision support tool. Expert systems are typically combination of two modules [23] namely knowledge base and an inference engine. In knowledge base of expert system contains the knowledge about a particular problem. In this expert system knowledge can be represented in various patterns. In addition, these formalisms are usually capable of dealing with imprecision, uncertainty, and qualitative (nonnumeric) nature of the expert knowledge. The inference engine (1) solves problems stated by the user by applying a certain reasoning procedure upon the knowledge base and (2) generates user-oriented explanations of the solutions.

VI. 6. CONCLUSION

In this paper I have tried to describe the few aspects of organization paradigms and people paradigms in brief. Here, there is few combination of different aspect of those paradigms. This paper describes that the end user computing influence the Information system strategy, Users' Reaction involvements in Porter Framework and Expert System involvements in Business Process Re-engineering very well. I have described how the organization paradigms help to make the business strategy, organizational planning or business in a way with the help of people paradigms. This paper is a small foundation for further study in that area.

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