Transformation of Organizational Elements As a Strategy to Adapt to the environment

Khaled. M. Abo-alganam[†], **Taiyseer. M.R. Mugdadi**[††]

[†, ††]KSA – King AbdulAziz University College of Alkamel – Department of Computer and information Technology

Abstract
In today's turbulent environment, which is characterized by global economy and transformation of industrial economy, firms are facing challenges to achieve their significant goals (survival, continuity and growth). This paper guides firms to better comprehend environmental forces and their affects, to enhance its ability to deal with theme, and propose performing key transformation of organizational elements (goals, process, people, structure, technology) from traditional approach and rigidity to a modern and flexible approach as a strategy to adapt to the environment.

Introduction

To better understand why the organizations need to transform their key components to more organic ones, not just for competitive advantage, but also for business survival, organizations need to comprehend the forces that shape the business environment. Today's business environment can be best characterized as one of increasing globalization phenomena, increased competitive pressure, frequent mergers, rapidly changing technology and evolving patterns of customer demands.
Change is currently the norm rather than the exception in business world. Organizations must learn to quickly adapt to these changes or face extinction at worst or as assimilation at best by competitors who can emerge any where in the world. Electronic information transfers the way we communicate, work and live.
Information technology (IT) has brought a bewildering array of capacities; people are getting accustomed to immediate solution. We feel the world at our doorsteps by having access to all that we could imagine. So, the predictability of the business environment has dramatically declined while its complexity has simultaneously accelerated due to the proliferation of technology and its ability to enable network organizations
Competitive advantage in this turbulent environment is no longer about having the products or the lowest price, but about having(jerry luftman,2004,p26):
Unsurpassed relationships with ones customers and suppliers.
Unique and adaptable business processes.
The ability to harness the information and knowledge of the firm's employees to continuously create new goods and services.
In short, this paper tries to propose key transformations of organizational elements (goals, processes, people, structure and technology) to make organizations more flexible, proactive as a strategy to interact with their environment.

Environmental analysis

Every organization in the world has three major goals: sustainability, continuity, and growth. To achieve these goals successfully it must deal effectively with its environment (which includes import inputs, export outputs, affect and affected by environmental forces). Therefore, organizations need to better understand their environment characteristics.
Furthermore, the organization needs to perform essential transformations of (goals, processes, people, structure and technology) to be more flexible to enhance its effective interaction with its environment to achieve its goals successfully . However, the researcher is going to explore essential aspects of the organizational environment, focusing on the information technology aspect in general and information systems in particular, that affects the organizational environment and leads the key proposed transformation at the same time.
The competitive business environment includes:

1. Global Economy:
The success of firms today and in the future depends on their ability to operate globally. Internet access allows companies to work globally. The entire world has become the marketplace. To succeed, large companies believe they need to be global, meaning huge and every where. The internet also allows small firms to have a global reach.
Globalization of the world's industrial economies greatly enhances the value of the information to the firm and offers new opportunities to business. Today information system provides the communication and analytical power that firms need for conducting trade and managing business on a global scale. Controlling the fare

Manuscript received February 5, 2012
Manuscript revised February 20, 2012

communicating with distributors and suppliers, operating 24 hours a day in different national environment, servicing local and international reporting needs is a major business challenge that requires powerful information system responses(Kenneth C.laudan&Jane P.laudan,2001,pp3-7).
Globalization and information technology also bring new threats to domestic business firms, because of global communications and management systems, customers now can shape in worldwide market place, obtaining price and quality information reliably, 24 hours a day. This phenomenon heightens completion and forces firms to play in open, unprotected world wide markets. To become effective and profitable participants in international markets and firms need powerful information and communication systems.

2. Transformation of Industrial Economy:
In knowledge economy, knowledge and information are becoming the foundation for many services and products. This trend is seen through the automobile industry, where both design and production now rely heavily on knowledge intensive information technology. Across all industries, information and the technology that delivers it have become critical, strategic assets for business and firms and their managers(Bieberstein N and others,P292). Information systems are needed to optimize flow of information and knowledge within the organization and help managers maximize the firm's knowledge resources, because the productivity of employees will depend on quality of the systems serving them. Management decisions about information technology are critically important to the prosperity and survival of the firm.
However, these environmental changes are challenging the firm's ability to achieve survival, continuity and growth. Accordingly, firms must perform transformation of its key components (goals, processes, people, structure and technology) which is driven and supported by information systems and collaboration communication. Below is a brief discussion of each of the organizational key components' desired transformation:

1. Goals

The best description of today's organizational goals is the transformation from rigidity to more flexible. It has become artistic, less programmed, and complex (Flona Graetz and Aaron Smith, 2005. pp312).
Therefore, one person cannot accomplish them. So, goals need more cooperation specialists and team projects to be achieved. The evolvement of external environment and the support of the strategic information systems can be important assets. Determine (shape, setting , and implementation) of goals can be described as follows:

Shape: information systems capabilities can support today organizations to shape its goals by providing analytical , integrated communication , collaboration capabilities for example (ESS, ERP, GSS) therefore organizational goals become accuracy definable , more flexible , and more integrated aligned with employees objectives , because there is no conflict among theme.

Goal setting : to asset organizations in order to achieve its goals it must be more integrated with its employees, customers, suppliers, distributors. So MIS capabilities support analyzing customer trends and perforation, communicate with suppliers and integrate with its employees. Therefore, all these groups play significant role in setting organizational goals.

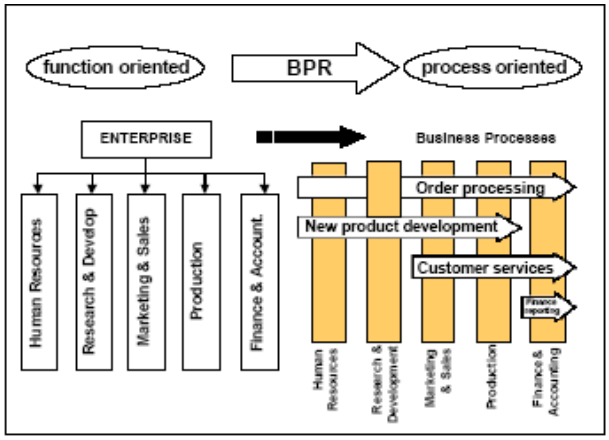
Implementation: the completion pressures enforce organization to enhance its ability to invest their resources to achieve its goals efficiently. This can be supported by implementing variety of information systems which can begin from transaction processing systems (TPS) at the lowest level to the executive support systems (ESS).

2. Process

As we know, we exist in a group economy, so we need to transform our process approach from task oriented to process oriented. Tasks are about individuals, while processes are about groups. Organizational problems are centered around how specialized tasks fit together to improve and facilitate managing and controlling efforts.
Therefore, we need to move from a sequential workflow (where each five people perform just one or a few parts of a job) to case management approach (where one person performs the entire workflow). The result is simpler work process, more complex jobs, employees manage themselves which leads to eliminating the need for a supervisor(Barbara C.Mcnurlin and Ralph H. Sprane.Jr,2004,p525).
Working and managing become part of every one's job in a process-centered structure. Accordingly, the organization needs new position called process owners in every process. According to this term, one person needs to have end-to-end responsibility, rather than managing the people. Process owners provide the knowledge of the process. Furthermore, process needs to be designed from a customer's perspective. Process design and process improvement become the essence of management in a process centered organization (Barbara C.Mcnurlin and Ralph H. Sprane.Jr,2004,p525).
This trend can be achieved by many information systems such as ERP which allows for integration across the entire organization. This shift to process-centered organizations is shown in figure 1 below.

Source: Walters Skok. & Hartmut. Doringer (2001)" potential impact of cultural differences on enterprise resource planning (ERP).

The transition to process-centered structure also requires measures of process which are different from measures of tasks. Measuring a process (how long it takes to be completed, its accuracy rate, its cost, etc.) means measuring its outcome from the customer's point of view. A task metric, on the other hand, would measure how many calls a customer service representative handles each hour. The process metric for the same job could be the percentage of problems handled completely on the first call, which is as an outcome.



(Figure 1)

3. People

Process centering also turns people into professionals rather than workers. In other words, you define a professional as someone who is responsible for achieving results rather than performing task. The professional is responsible to sense and explore customers' needs, solving their problems by producing results.

To do so means doing what it takes to complete a process. A worker, on other hand, aims to please the boss, keeping busy with lots of activity, to perform what they are told to do, and workers are told not to be with totality of the work. The shift to professional from worker is profound, it makes factory employees concerned with customer satisfaction rather than number of parts produced per hour, it requires greater knowledge and more holistic view by all the people involved. (Barbara C.Mcnurlin and Ralph H. Sprane.Jr,2004,p525).

4. Structure

There are new options for organizational design by the explosive growth in computing power and networks, including the internet, ranked from flattering organizations to networked enterprise, through allowing information to be instantly distributed with and beyond the organization. This capability can be used to redesign and reshape organizations by transforming their structure, scope of operation, reporting and control mechanisms as the follows:

Flattening organization: Large, bureaucratic organizations are inefficient, slow to change and less competitive. Some of these organizations have reduced the number of employees and the number of levels. Flatter organizations have fewer levels of management, with lower-level employees being given greater decision– making authority. These employees are empowered to make more decisions than in the past. They are no longer necessary working in the office. Moreover, such employees may be scattered geographically, some times working half a world away from the manager. Contemporary information technology which has made such changes possible as it can make more information available to line workers so they can make decisions that previously had been made by managers. Networked computers have made it possible for employees to work together as a team. Another feature of flatter organizations with the emergence of internet team members can collaborate closely even from distant location(Kenneth C.laudan&Jane P.laudan,2001,p18). These changes mean that the management span of control has also been broadened, allowing high level managers to manage and control more workers who are spread over far distances.

Virtual organizations: Companies are not limited to physical location for providing products and services. Networked information systems are allowing companies to coordinate their geographically distributed capabilities and even coordinate with other organizations as virtual organizations. These organizations use networks to link people, asset and ideas, allying with suppliers and customers, and sometimes even competitors to create and distribute new products and services without being limited by traditional organizational boundaries or physical location(Mohammed,2004,p41).

One company can take advantage of the capabilities of another company without actually physically linking to that company.

5. Technology

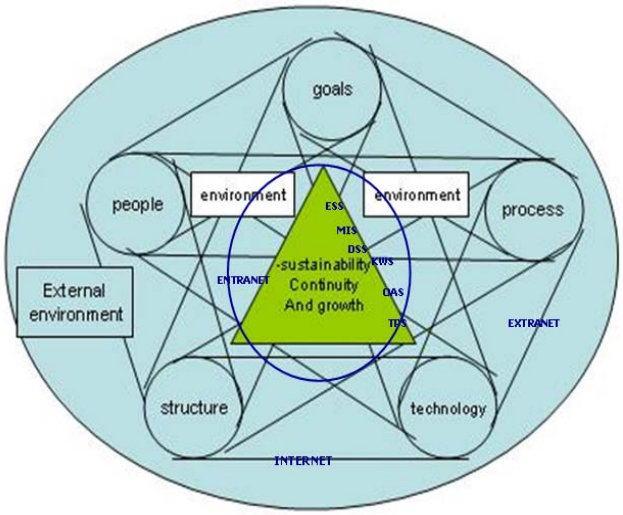
Reinventing business processes entails optimizing the full set of processes that constitute the business. The technology drivers in today's organization vary from relational database technology, reductions in storage costs, expanded public network infrastructure, deployment of client server technology, evolution of desktop computing to organization's software and hardware. Each of these

drivers provides certain technical capabilities that are essential to the organization's sustainability, continuity ad growth.

Redesigning the organization with technology might require several stage-to-stage transformations that range from business automation and rationalization, to business reengineering and even paradigm shift. Integration of systems and common application across the firm and the external networks will enhance the organization's smooth technical transition. Rapid sensing and responsiveness to environmental changes are of highest priority during the transition stage(Hirschheim R.2006.pp182-185).

Conclusion:

Organizations must analyze the effects of the possible changes in the environment (which are affected by global economy and economy transformation of industrial economy), and trying to deal effectively with them to achieve their goals successfully. Moreover, the organization must perform transformation of key elements (goals, processes, people, structure and technology) to more flexibility level, which can be affected and achieved by information systems and networks, as a strategy to better exploiting environment opportunities and to blocking environmental threats in away that is consistent with internal capabilities to be in superior position of other competitors. Figure 2 below highlights the interaction scheme that organizations need to consider to adapt and execute the proposed organizational transformations mentioned above.



(Figure 2)

Referenses

[1] Barbara C. Mcnurlin & Ralph H. Spragne. Tr. (2004). Information systems management in practice. Sixth edition, New jersey, prentice Hall.

[2] Biebrstein .N (2005). Impact of service oriented architecture on enterprise systems. Organizational. Structure, and individuals, vol, 44, No 4. retrieved aerial 16, 2006, from IBM systems Journal.

[3] Flona Gretz &AARON Smith.(journal of change management, vol 5, No 3 ,September 2005). Organizing forms in change management: the role of structures, processes and boundaries in alongitndinal case analysis .retrieved aerial 16, 2006 , ebesco database.

[4] Hirschheim R & Sschwrs A & Tood . P(IBM systems journal, vol 45, No 1, 2006), Retrieved aerial 16, 2006, from ebsco

[5] Jerry luftman and others. (2004). Managing the information technology resources : leadership in the information age . New jersey .Pearson education international.

[6] Kenneth C. laudan.& Jane P.laudan. (2001). Management information systems (fourth edition)New jersey, prentice hall.

[7] Mohammed NK &Feza TA (2004)reinventing business organizations: the information culture framework. Retrieved April 16, 2006, from ebsco

[8] Walters Skok. & Hartmut. Doringer (2001)" potential impact of cultural differences on enterprise resource planning (ERP), EJISD, 7, 5, 1-8. Retrieved April 16, 2006, from ebscohost.com.