
ELECTRONIC MANAGEMENT A NECESSITY FOR ACQUIRING WORLD CLASS IN VIRTUAL ERA

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ABSTRACT

Nowadays there are lots of factors playing important role in acquiring world class; in today's competitive business world this is management style which leads to an organization's superiority and distinction over its competitors. Hence electronic management plays a vital role in occupying a constant position of world class for organizations. The electronic management (e-management) is more than trying to fulfill individually or collectively organization's goals and in fact refers to how management evolves under the network economy. Electronic generation is the dominant voice in 21th century and e-management bridges the gap between individuals and better performance. This study investigates e-management and its role inside and outside the organization and also examines the relationship between e-management and information technology (IT). After all clarifying the factors of information management a framework for technological processes will be presented.

Key words: electronic management (E-management), information technology (IT), technology management, world class.

INTRODUCTION

The term world class was introduced by Schonberger in 1981. World class includes the use of techniques and technologies designed to activate and improve an organization's activities in order to correspond to its competitors (Farsijani and Carruthers, 1996). Today's competitive world pushes organizations to strive more and more to reach a position in world class (Farsijani and Aref, 2011). There are certain requirements to achieve world class. One of the most important ones is technology management style in an organization. Electronic world needs both common ground among individuals and technology. The key element in achieving successful results depends on a revolutionary management which leads

organizations, staffs and technology appropriately. Emphasizing entrepreneurship, especial focus on creativity and innovation, leadership based on technical principles, developing effective culture and communication skills are among the major features of today's web based era; the era which introduces serious challenges at the face of management and leadership (Rafooni, 2001). Segal believes that 90% of problems facing companies' online activities result from management and not technology. Integrating management systems and technology requires a comprehensive relationship with customers, employees and the organization. Since 2013 in each 11 hours data has been doubled. To this fast changing rate you should add increase competition and change in customer's taste. Therefore, inappropriate management leads to losing a customer as fast as a click on a mouse (Berk, 2004). E-management is more than trying to fulfill individually or collectively organization's goals and in fact refers to how management evolves under the network economy. Electronic generation is the dominant voice in 21th century and e-management bridges the gap between individuals and better performance (Sarfarazi and Memarzadeh, 2013). According to lots of economists, experts and futurists a revolution has just taken place like industrial revolution in recent years which paved the way for world to enter to information era and has deeply changed lots of economic, social and cultural dimensions of human life (Momeni, 2002). World's future prospective by means of information technology is far different from current point of view. The next generation is called information community; a community which is severely influenced by information and communication technology that is intertwined with individuals' work, life and leisure contexts. Human life quality is under the impact of communicative infrastructures with high capacity and quick rate all over the world in order to transfer texts, sounds, documents, images, designs and etc. which constantly improve and influence individuals' information in all aspects (Samuelson and Varian, 2002). Terms such as electronic marketing, electronic government, electronic learning, and electronic community are familiar for people and it seems that information technology is a means that can be utilized to gain success in today's competitive arena. In the era of information technology organizations are changing into electronic organizations and staff are working outside of constant physical environment. With all this in view the new environment is a brand new chance for implementation of managerial skills. But what could be the key to success (Berck, 2004)?

Electronic management and required conditions for it implementation

Considering e-management despite of drastic changes in managerial roles, most of the main managerial skills are the same traditional ones namely to say: organizing business, monitoring, motivation, team making, quality guarantee, eliminating shortcomings, supervision, systematization and taking required steps to enhance the current conditions. The difference comes into light when scrutinizing the interaction and relationship between staff, work and customers. Those who pertain to traditional functions often believe that managers must be available all the time to challenge organizational affairs and staff. This may be true in the case of physical performances, but adherence to a fixed location is not efficient for most of the managerial tasks regarding electronic work environment. In e-management, managers' especial characteristics in establishing consistency, quick growth and innovative skills are of great importance. Internet era requires change in managers' skills and the way they learn (Walker, 2000). In order to integrate management and technology, adapting technological developments with all organizational systems is required. In this context it is expected that the electronic managers observe the following items:

- **Rate:** in today's quick changing world, being fast is more than being big. Short period of goods endurance and services, markets' quick growth, diverse technological changes, change in customers' and consumers' expectations and tastes all result in the fast extinction of managers' decisions. To quicken decision making rate the need for internet based technology is inevitable. Forget not that bureaucracy controls, inhibits and devastates the rate of decision making.
- **Good staff:** human resources are the foremost input for an organization. Today organizations need less staff with the best qualifications. Talented, skillful and future looking staffs are what managers need. Organizations and companies need to rethink their employment policies to enlist and employ knowledge workers. Also performance evaluation methods must be revised too.
- **Honesty:** in electronic commerce suppliers' partners and even customers are allowed to access some of the online information and data basis of company. This requires trust and honesty. Honesty is the basis of success and key strategy towards attracting customers.
- **Cooperation skills:** internet introduces new opportunities for cooperation for teams and companies. Cooperation with customers, raw material suppliers and distributors, partners and commercial competitor notwithstanding time and place is possible via the internet. An electronic manager must be familiar with the advantages of cooperation and partnership and using outsourcing increase the added value of company's goods and services.
- **Discipline:** internet is nothing more than regular standard processes, protocols and programs. Companies need to design their websites in the way that is not confusing for their customers. The electronic manager should organize all stages towards communicating with customers according to regular principles to gain the most efficiency.
- **Strong relationships:** regarding change rate and complexity of competitive environment, communicative strategies are among the most important strategies for a company. Relationships cannot be limited to certain territories or countries. An electronic manager should scrutinize and pay careful attention in making relationship with all customers, suppliers and other companies.
- **Content management skills:** the base for every web based electronic companies is data. Unfortunately most of the managers know nothing about how to manage a business website or fall short of designing a well-established website or managing it.
- **Focus on customer:** in today's competitive world there are lots of new opportunities for making deeper relationships with customers and companies. Change in managers' point of view from the very employment to maintaining staff development, from production to presenting services and from big markets to specialize and unique ones explains the current trends in global relationships. An electronic manager should focus more on customer rather focusing on goods and process management. This is not achievable except with enhancing communicative channels and improving information strategies.
- **Knowledge management:** revolution in communication technology has increased the importance of knowledge management. Developing data basis and introducing internet to companies has made them capable of performing global activities. But global activity demand knowledge staffs which impose more complexity and sensitivity on management and leadership style.

- **Leadership:** most of the European and Asian managers do not know how to make use of the internet while in electronic business lots of the manager's time is spent on communicating via e-mail and online connections, updating the website and etc. . Electronic leadership is not different from other forms of effective leadership except for its electronic nature in organizations, electronic environment and electronic customers, high level of transformational leadership must be applied. Pertaining to transformational leadership helps the electronic manager to conquer his fear at the face of encountering electronic environment and adapt his activities as fast as possible with the changing competitive situations (Economist staff, 2000: Fayazi and Nikzad, 2006).

World Class

Production in world class means the philosophy to reach manufacturing goods at world class. The nature of production at the level of world class means continuous and on time improvement in different organizational resources to gain the best results of the related activities. Those organizations adapting their goals and activities with world class are seriously seeking the ultimate opportunities for enhancing their key fields like human force, the cost of good shipment, innovation and flexibility (Farsijani and Abdolkarimi, 2011). World class manufacturer must pursue their production in the way that gains external support. Such organizations tend to optimize their work force, facilities and systems more and more. Therefore, they continuously analyze other organizations and companies worldwide. One of the most prominent features of world class manufacturers is their capability to adapt quickly with changes in customers' and markets' needs. A company benefiting from rendering design, producing goods and shipping them in less possible time will grow faster and progress better (Farsijani, 2011). At national level it is important to know that nowadays a country's production capability at global competitiveness stage and achieving high level of gross domestic production is a part of its national entity and considered as its great achievements. In this way reaching a position in world class to be able to compete with other countries is a necessary requirement (Farsijani and Arefnejad, 2011).

The Role of Electronic Management in and outside the Organization

Electronic management is assumed to manage an organization by means of information technology facilities. This kind of management gains much attention with regard to developments in knowledge and technology in 21th century. In most cases for e-management method an organization is considered as an electronic one (virtually) and is managed electronically by a stimulation system. As you see in figure 1 e-management is able to process organization's internal and external data in order to reach presupposed goals and make required information available for managers (Sarfarazi and Memarzadeh, 2013).

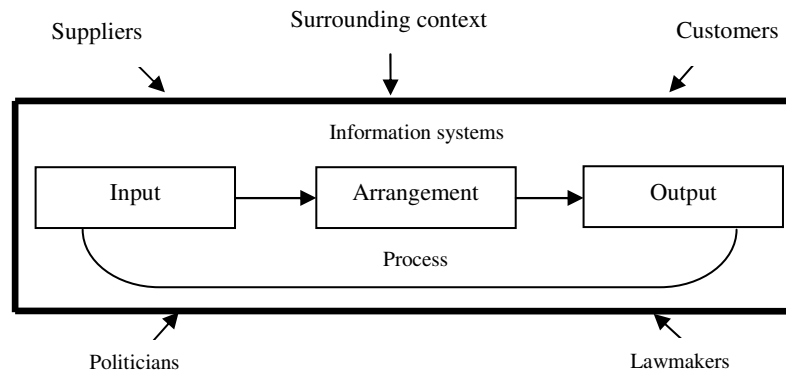


Figure 1: The role of e-management in and outside the organization

Source: (Sarfarazi and Memarzadeh, 2013)

Investigating the Relationship between E-Management and Information Technology

Direct and indirect impact of information and communication technology on all human life infrastructures and levels and the progress of its facilities regarding the most complex activities in current era have been the most influential factors in technological and consequently information developments. Potential capacities of information technology and relationships convince pioneer managers to embody organization's potential capacities with a deeper understanding on this phenomenon's tools. With this point of view it is tried to pave the way for information and communication technology and bring about the grounds for related functions of internal developments of organization and external organizational communications. Pioneer managers are always trying to find new technologies which facilitate the ongoing work process. In fact in order to establish effective relationships between organization's longitudinal and lateral surfaces and also to push current affairs easier and find appropriate information dependent approaches the pioneer managers need to recognize organization's current capacities and assess additional capabilities. Using the power of information and communication technology to encounter worldwide competitors to make the organization lead is necessary. Communication and information technologies enhance pioneer managers' capabilities and innovations. In this way when managers and staffs inject their communicative tools into the organization, they work faster and more accurate than before. Meanwhile the manager is able to experience decentralized monitoring and management. Hence any related tools of communication and information technology which corresponds to management systems can play a vital role in improving management way and establishing effective relationship with customers. Therefore, in changing the handy systems into technologically based ones lots of factors are involved namely to say: management commitment, experience of information technology, user satisfaction and the rate of environmental changes. Also while choosing the said systems you must observe the followings:

1. Function of the system should be clear for the staffs.
2. It should facilitate the processes for organization's customers.
3. Be flexible at a high level towards structural or technological changes.

With all this in view that management will be successful which chooses or designs the required communication and information technology according to organization's needs. In this way the manager will be able to adapt organization's services to correspond customers' demands appropriately (Sarfarazi and Memarzadeh, 2013).

COMPONENTS OF TECHNOLOGY MANAGEMENT

1. **Capability:** the purpose of related approaches to capability is to introduce an organization's knowledge separately without considering its ability to serve customers and clarifying possible reactions against competitors. The major advantage here is making use of hidden aspects of engineering and technology. The important subjects in this field include: understanding the opportunities introduced by technology-based actions, the importance of maintaining the major technological skill, and technology evolution paths.
2. **Research and development management:** in traditional view technology management is much focused on research and development. In addition the attention is paid just to some specific matters like resources and project management. But recent efforts are focused on the need to provide integrity as much as possible in related activities to research, development and other key activities and trying to prioritize potential projects. The most important factors here include: establishing relationship between research and development and basic sciences, revisiting and monitoring technologies in use on time and production management.
3. **Innovation:** earlier studies on innovation were focused on innovative and entrepreneurial activities. In innovative activities there are some dynamic dimensions of group work and team integrity.
4. **Organizational learning:** employees exclusive participation, systematically use of knowledge and capability, shaping new tasks and being able to fulfill new tasks are among the most important issues to be considered in this regard.
5. **Design and production engineering:** establishing computer based systems in order to support and expand the relationship between design and production engineering with benefiting from key tools, techniques and activities must be considered in this field (Sarfarazi and Memarzadeh, 2013).

A FRAMEWORK FOR TECHNOLOGY PROCESS

The following figure (2) shows a framework for technology management. The nature of each of the components of this model is accepted by all industrial managers. In order to evaluate the related details of model designing, there is a clear distinction between internal and external relationships. Further explanation is mentioned below.

- **Identification:** the center of attention and focus must be clarified. Successful electronic managers step towards establishing such patterns that enable them to convert ideas into revenues and profits. They outline a coherent strategy that integrates all organizational parts and goals. For example in current situation the major focus of electronic commerce is on customers and pertaining relationships rather than products and internal organizational processes. As a result managers must show great courage in decision making and if necessary make changes quickly to survive.

- **Selection:** managers should strive to recruit and maintain talented employees. Managers must employ certain programs to appreciate staffs, identify talented employees and brilliant skills and fulfilling different expectations.

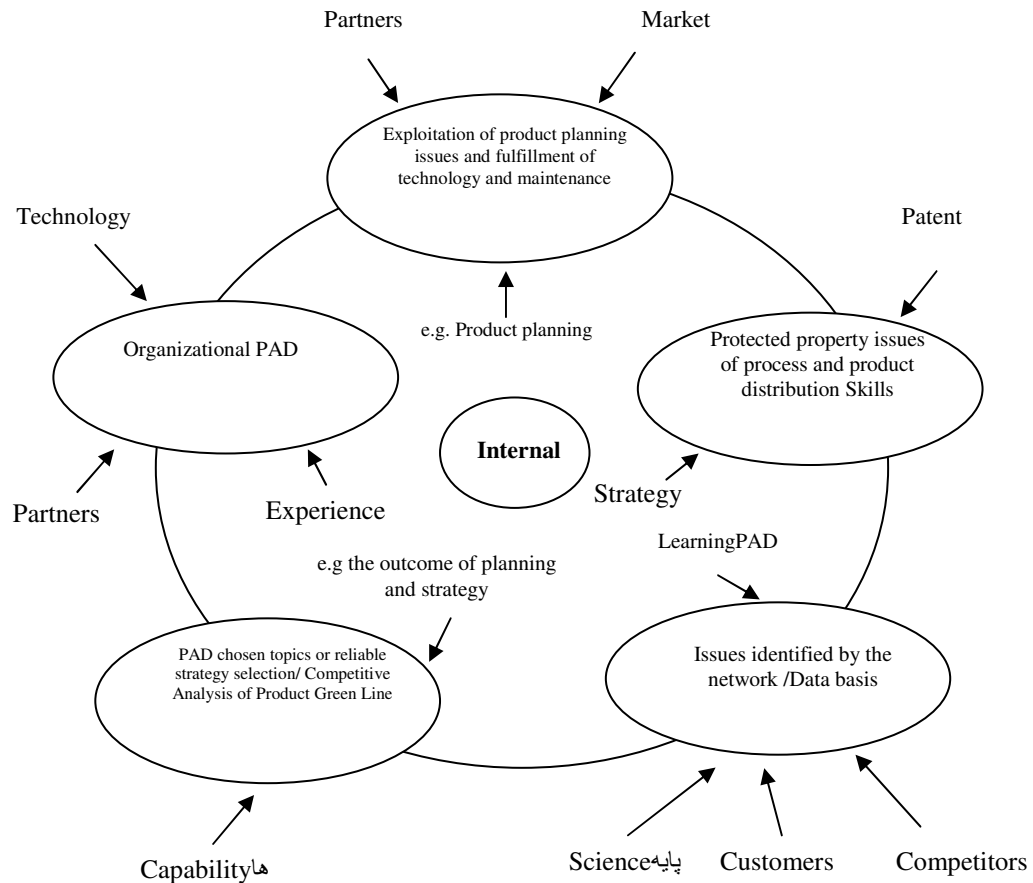


Figure 2: major issues in process and technology management framework

Source: (Sarfarazi and Memarzadeh, 2013)

- **Exploitation:** appropriate work culture improves better performance. Electronic work culture should result in better organizational performance and providing competitive advantage.
- **Protection:** development and distribution promotes knowledge and encourage organizational learning. Electronic managers must encourage innovation, creativity and learning in order to access market opportunities and provide needed context for developing learning skills and staff growth (Walker, 2000).
- **Model evaluation:** the framework of the above mentioned process has major advantages. First, it includes lots of related issues to the body of technology management literature. Second, it provides a comprehensive cycle and forms for auditing organization's internal activities. In addition this model is in line with organization's current process and operation correspondingly and facilitates coherence and integrity between technological observations and organization's internal operations. The said accepted framework is not certain and absolute, but it provides a normal way for managers to think about technology management and ease of

understanding and learning. Above said framework corresponds to lots of management and organizational approaches.

CONCLUSION

Management is an art which in today's chaotic and competitive world gains more importance regarding its place and role. The challenges facing electronic world are so complex that cannot be encountered and conquered without strategic boost encompassing all organizational individuals and components. In current era organizations which detect and make use of modern technologies and new patterns regarding their customers, competitors and staffs can benefit from competitive advantage and survive. Meanwhile e-management and governing business processes are of great importance. Every good manager can also be a good electronic manager. Although in e-management organizational role experience severe changes, most of management skills are the same traditional ones and the difference appears just when interacting with staffs, work and customers. Increasing management efficiency, optimized use of organizational resources, organizational data integration, quick and precise decision making, boost in fulfilling organizational operations and effective monitoring at the level of subordinate managers are among the positive and notable effects of e-management in order to reach world class in current era.

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