

Knowledge Management in the Digital Economy: A Case of Republic of Korea

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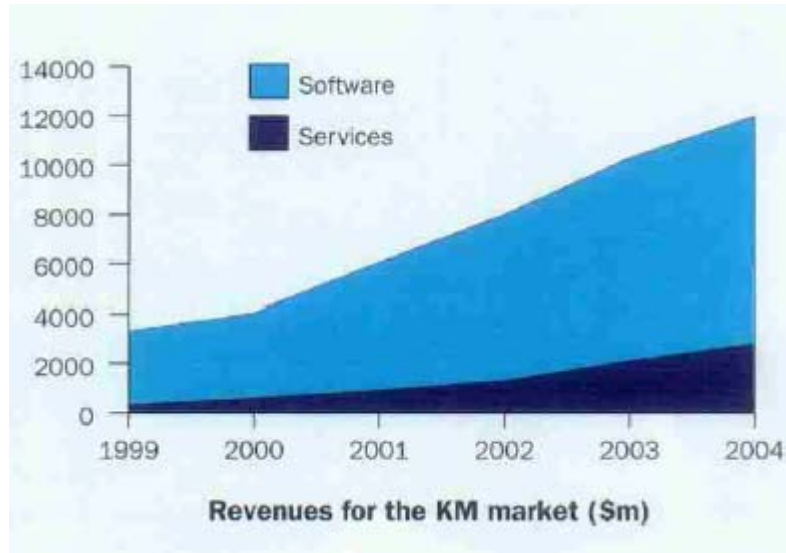
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ABSTRACT

Knowledge management has been a major research area for scholars and researchers for long time now. With rapid development and growth of Information and communication technologies in the economy, organizations are trying to attain maximum use of them in order to learn, expand and share knowledge across the organization. These efforts are many and different according to the existing context and culture of organization. This paper will find out knowledge management in Korean organizations. This paper further examines the drivers, characteristics, methods and implementation of a knowledge management system in Republic of Korea. In this process this will examine a case of Samsung Data System (SDS) a software corporation and its successful implementation of Knowledge management systems. Korea is in an advance stage in using information and communication technologies and internet related business while and it is becoming a test bed to the World for experimenting new advances in these technologies.

IMPOTANCE AND MEANING OF KNOWLEDGE MANAGEMENT:

Knowledge management is growing as an important part of corporate strategy and organization learning to take advantage of the competitive environment. This growing importance is further increased by several developments in past decade in the field of information technologies and communications networks. Growing numbers of corporations are tending towards networked organizations centralizing all the services. The exponential growth of knowledge management can also be seen in all areas of businesses. Knowledge management market is growing rapidly and it is observed expanding in the future.



Source: www. kmmag.co.uk (December/January 2002)

There is no single definition to satisfy all the areas of knowledge management. Several scholars explained in their own way depending on the existing context. Knowledge is the core asset of any organization to achieve competitive advantage. This depends upon how it is attained, accumulated and shared. This again depends upon the unique features of an organization and its structure. Knowledge management is a systematic and integrative process of coordinating organization-wide activities of acquiring, creating, storing, sharing, diffusing, developing, and deploying knowledge by individuals and groups in pursuit of major organizational goals. It is the process through which organizations create and use their institutional and collective knowledge (Rastogi, 2000). The concept of knowledge management is referred in the context by one researcher as ‘knowledge creating company’, is a management paradigm for the emerging ‘knowledge society’ and information technology can help implement this concept (Nonaka et al., 1996).

Knowledge management has been defined in the perspective of organizational learning also. According to Heijst, learning in the organizations can be of three types; first individual learning, second, learning through direct communication, and third learning using a knowledge repository (Heijst et al., 1997). The importance of knowledge management was studied greatly by the researchers. Given below are some areas.

Knowledge management context

Authors

Organizational learning	Heijst et al.(1997)
Organizational innovation	Johannessen et al.(1999)
Organizational impact	Hendriks and Vtiens (1999)

Table 1: Knowledge Management framework in the context of organizations

DIGITAL ECONOMY AND KNOWLEDGE MANAGEMENT:

In today's digital economy there is fast access of information and knowledge it can be seen as a main asset of the organization. Information and communication technologies (IT) are linked with organization means of communications and it is also linked with knowledge management as knowledge became an important success factor of many organizations. In many areas of organizational performance Information technology is providing a medium for sharing and exchanging knowledge. Managers are learning with all issues with the help of information technologies available in the organizations. Computers and networks have become a major source of knowledge to the managers in the organizations.

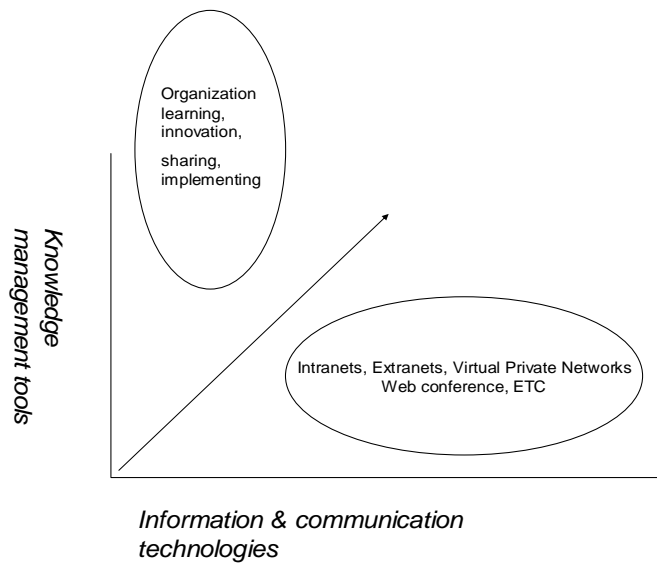


Figure 1: Relationship between Knowledge management and Information technology

Software tools like intranets, extranets, wireless web and virtual private network (VPN) are utilized to share and transfer knowledge from one place to another within the organization. (Tyndale2002). The importance and linkage of Information and communications technologies with knowledge management has been discussed elaborately by various authors. Knowledge management activities such as information sharing, organizational learning, and organizational memory are supported by Information and communications technologies. (Harun, 2002; Ramesh& Tiwana, 1999; Yoo& Kim, 2002)

Decision support	Hicks et al. (2002),and Ramesh , Tiwana (1999)
Organizational learning	Ramesh and Tiwana (1999), Caraynnnis (1999)
Organizational memory	Ramesh and Tiwana (1999) and Robey et al. (2000)
Knowledge transfer	Bolisani and Scarso (1999)

Table 2: Information and communications technologies and Knowledge management

With the development of IT and communication technologies the tools and applications to manage knowledge in the organizations also increased and broadened. The following figure shows an elaborated framework integrating knowledge management process and the role of information technology.

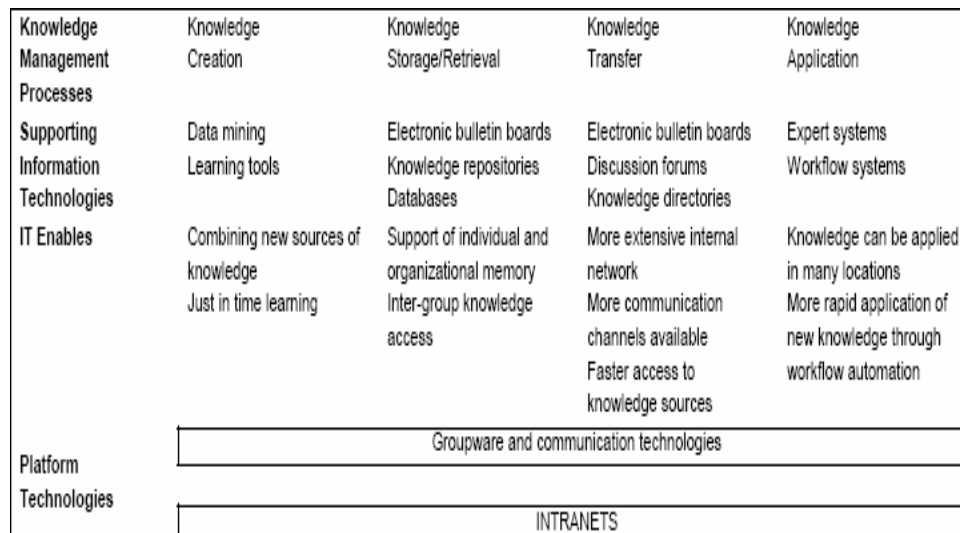


Figure 2: Knowledge management process and role of Information technology

Source: Adapted from (Alavi & Leidner, 2001)

THE CASE:

Republic of Korea (hear after Korea) is a country with homogenous population who used to adapt high technologies very fast. Korea became a test bed for all the new technologies before their release. Using Information technologies in all walks of life became a general way of living in Korea. These technologies are changing the basic nature of society, polity and economy.

Especially it started in 1990's with Korea's drive towards globalization. It took an indication with Korea's top companies gaining international presence and earning profits abroad. This also brought a context to globalize the traditions of the organizations with in Korea to encourage global thinking and learning. A drive essentially create a new business culture, and to adapt the environmental changes in the market and the firm. Knowledge management became an important tool to learn new things and increase the flow of information in the organizations.

Samsung Data Systems (SDS) was founded in 1985, and it soon established an information network center in 1995 observing the growth and implications of Information and communication services. With this growth and implications of these technologies Samsung brought in several changes to understand and share these implications to the knowledge management. The changes in the economy, products and in the market had influenced the response of the company. A detailed framework has been provided in the figure given below.

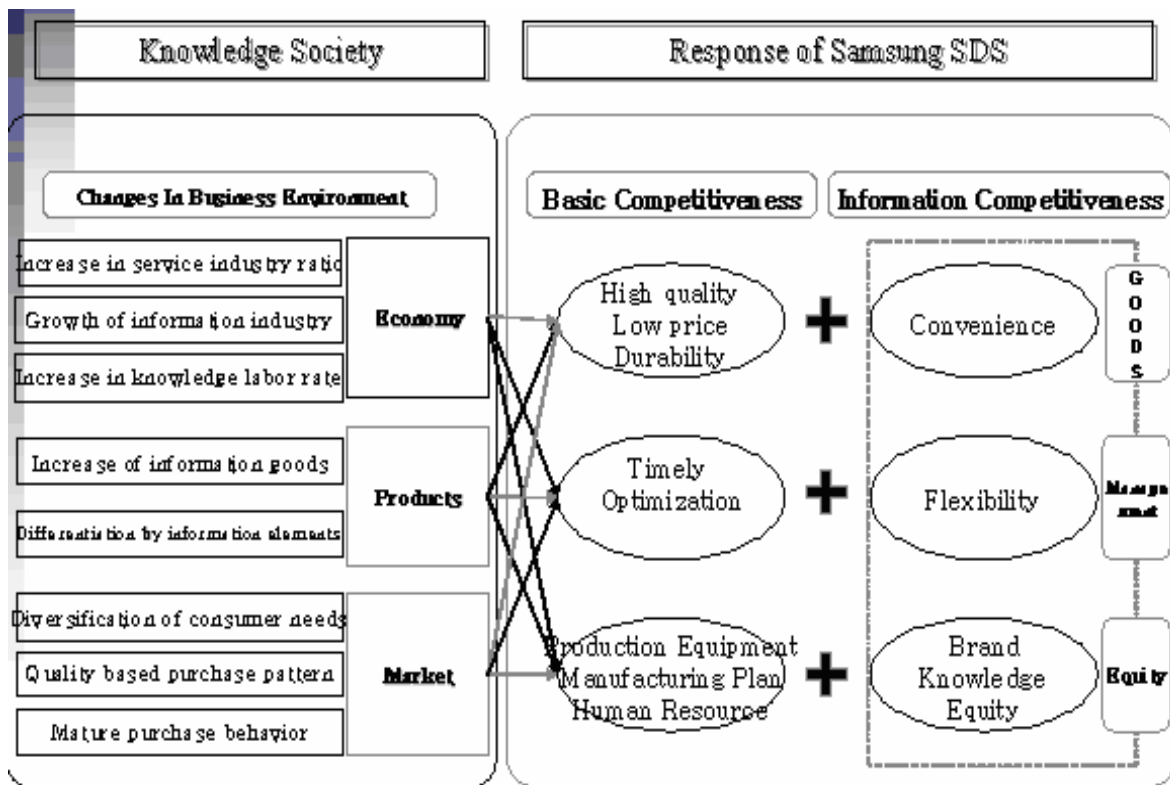


Figure3: A Framework to understand Samsung SDS Knowledge management process

CHARACTERISTICS OF KNOWLEDGE MANAGEMENT:

Cyber money:

The purpose of this is to first, set the standard for measuring the value of knowledge. This became practical by providing compensation for the knowledge provider in the knowledge circulation process. Second, it measures the intellectual value of individuals and organizations.

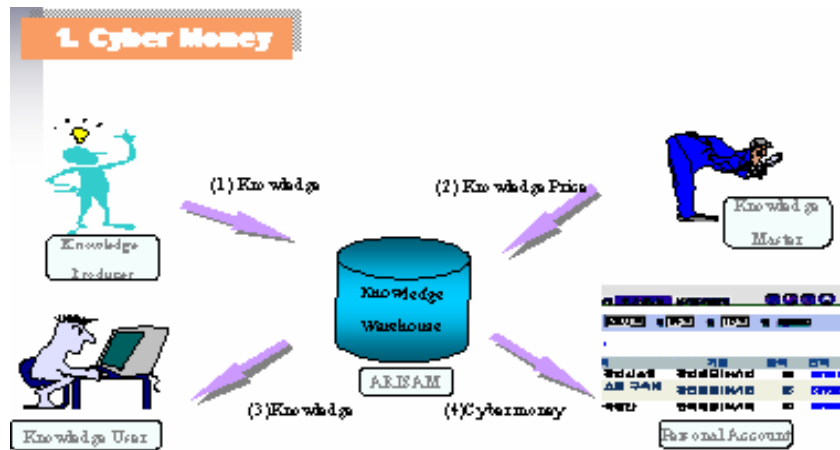


Figure 4: Characteristics of knowledge management-cyber money

Cyber consulting:

The essential purpose of this is to interchange experienced knowledge on cyber world through expert map, carried on with individual awarding based on the evaluation standard of knowledge activity carried in a specific time. Later, presentation of outstanding knowledge utilization cases an event which intended to motivate the employees.



Figure 5: Events of Cyber consulting

Knowledge sharing activities:

The company also inducted continuous concern on knowledge management in terms of publishing a semi-weekly newsletter 'K-Spot light'. A combination of on-line and off-line activities was carried out in the form of conducting seminars on knowledge management to share equally to all members of the forum. An interesting function of knowledge management is

implemented to activate a human centered knowledge. This in turn was supported by a team of experts from both inside and outside the company.

Achievements and improvement:

By implementing these far-reaching knowledge management activities, Samsung SDS attained numerous achievements. Firstly, in the finance sector it achieved rapid increase in the growth rate and subsequently increased profits. This also can be observed with an increase in number of orders received at a period. Secondly, achievements include overcoming the profitability decrease by improving individual productivity, and increase in the customer satisfaction index. (See Appendix Table 1)

CONCLUSION AND FUTURE RESEARCH:

In the paper, we elaborated the importance of knowledge in the digital economy. We conclude that it is a dynamic process with in the organization to attain, share, and use knowledge to improve organization capabilities and effectiveness. Firstly, an extensive and wide variety of studies were categorized in this respect and explained in detail. Secondly, this study explains the importance of information and communications technologies for knowledge management process in the organization. Thirdly, this presented a case study based on the knowledge management approach in Korean organizations. In doing so we explained the drivers and characteristics of knowledge management and the consequent implications to the organization and the company.

Knowledge management is becoming an important area for researchers for its diverse and expanding nature. Further research can be done on the efficiency of information systems in providing accurate information, can be observed with respect to multiple organizations. More research can be done on the issue of organization structure influence on the knowledge management.

APPENDIX:

Categories	Design Quality	Reutilization	S/W Defect	Defect Removal	Performance Test
Improvement Rate	11.7 %	23.3 %	247%	187%	344%

Table 1: Overcoming profitability decrease by improving individual productivity

Year	1999	2000	2001	2002	2003
Improvement Rate	6.6%	6.2%	-2.5%	14.1%	10%

Source: www.samsungSDS.co.kr

Table 2: Improvement in the customer satisfaction

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