

Enterprise Resource Planning Implementation and Knowledge Management System

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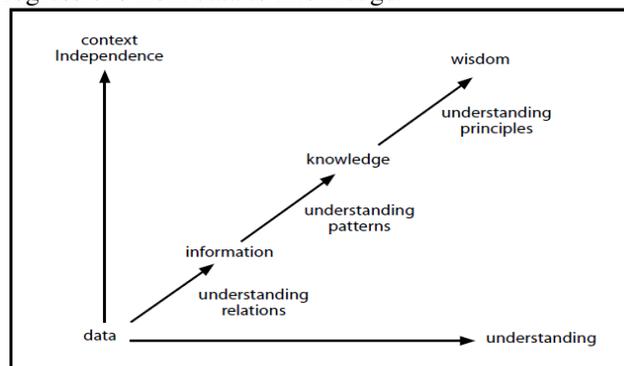
1. INTRODUCTION

In the recent age we noticed wide development in all sectors, these developments came to field of organisations and increases the competitive advantage in business environment. The organizations started looking for knowledge acquisition to utilize knowledge perfectly to help them to achieve their goals, but they clashed with barriers among knowledge users in communicating other departments, until developers come out with knowledge management system (KMS). This new system has the ability to eliminate the barriers among users and provides smooth flow of information and knowledge to all users¹². The corporation was suffering of delaying the raw materials which made the corporation lagging behind in the product manufacturing until the developers generated new systems called (MRP) which stands for material recourse planning, these systems was doing well but, there was no communication with other sectors like accounting, marketing, human resource and so on. The developers Release second generation call it (MRP2) which stands for material recourse planning this system has the ability to communicate with some not all sectors. The problem was still existed and the demand of integrated systems still increasing because of the globalization, open-market and appearance of new terms like E-commerce, Multinational Corporations (MNC) out of this point there was need for wide integrate systems to cover all organizational function here developers generated new systems called (ERP which stands for Enterprise Resource Planning these integrated systems allow all users to access the system with authorized and specific entry with single database. These systems proved effectiveness and efficiency by saving cost and time. ERP are interactive systems, it allows users to receive feedback from customers as well as send demeanas to suppliers, we can say these systems are doing well in organizational function. The focus has shifted to smart system to improve the managers decisions but these systems has no place in front of the new perspective which says "To reach success we just need effective tools (systems) in the hands of smart people"¹⁴.

2. CONCEPTS OF KNOWLEDGE

To understand the concept of knowledge we should ask ourselves . What is knowledge? How is it different from information? And how is information different from mere data? let's begin with data. What do we mean with the concept of data? Data is the raw material of information. Data is the main source of information like a number or word or letter without any context. Data is unordered For, instance numbers like 7,5,8 and 99, without any context, these numbers or data are meaningless points in space and time⁴. What do we mean by "out of context"? Out of context is the key phrase here, it means it has no meaningful relation to anything else. The context is the essential relation which makes collection of data turn to information. In the other-side Information is the understanding of the relationships between the pieces of data or between the collection of data and other information (figure1). shows the process of transferring data to knowledge¹.

Figure1. Conceptual progressions from data to knowledge.



we see from (figure1) that information includes an understanding of the relations between data (e.g. the relation between the number 1 and number 30 in the context of the number of days in a month). In general, the information is the organized, ordered and understandable data⁵. So we can Summarize all above in two main definitions the first is data which defined as raw facts and figure on their own so, they have no meaning. Data can be any alphanumeric characters i.e. text, numbers, symbols. The

second is information which defined as data that has been processed within a context to give it meaning. Information is Data that has been processed into a form that gives it meaning³ (figuer1).

2.1 KNOWLEDGE AND KNOWLEDGE MANAGEMENT

• KNOWLEDGE

Knowledge is a level higher than information. It is the capability of understanding the relationship between pieces of information and what to actually do with the information. Knowledge is the understanding of rules needed to interpret information. Who are the owners of knowledge? We can say that they have special knowledge that makes them “experts” based on formal and informal rules they have learned through training and experience. For example doctors, managers, librarians and scientists⁶. Many researcher said that “knowledge” is not only personal, it is also an evolutionary mental process. knowledge gives us the ability to formulate and structure what we know. Knowledge also includes intuitive and spontaneous responses to the environment surround us⁸.

• KNOWLEDGE MANAGEMENT(KM)

Knowledge management is very attractive concept to many organizations whom trended to be associated with. Basically, knowledge management is the process of collecting and storage information that have been processed into a form that gives it meaning, so users could Retrieve it at any time for fulfilling their needs. Information management is a subset of KM and technology should be seen as an enabler and part of KM infrastructure¹². Whatever the integrative work between several components within an organization gives a positive impetus for achieving its goals. KM provides organisations with efficiency, maximising organisation’s potential and competitive advantage. knowledge management is also not that easy to implement due the issues which could be such as strategies, technological, organizational culture and so on¹⁵.

2.2. IMPORTANCE OF KNOWLEDGE MANAGEMENT(KM)

In the new rapidly global changing of business environment, the organizations should be always ready to face strong competitors and for that they should remain their awareness in high level at the same time they should continuously keep improving their systems flexibility to avoid frailer or Clash with customer’s changing demands, this is intrinsically tied to the ability of rapidly collaborate with customers and stakeholders. KM tends to generate information from the organization, then deliver it to decision makers to take the right decision at the right time^{2,12}.

2.3. TYPES OF KNOWLEDGE

There are vary categories of knowledge but the most common types are tacit-explicit.

2.3.1-Tacit knowledge(TK) is something not easily visible orexpressible like personal experience, ideals, values and emotions he or she embraces. TK is difficult to be documented and articulated. Tacit knowledge is Subjective insights, intuitions and hunches(feeling) fall into this category of knowledge. Additionally, it difficult to communicate or share with colleagues¹².

2.3.2- Explicit knowledge is intellectual assets which could be tangible, or physical descriptions of specific knowledge which organization can possess ownership rights. it could be stored, modified and expressed in the form of words, numbers, formulas, manuals and principles¹².

2.4. DIMENSIONS OF KNOWLEDGE MANAGEMENT IMPLEMENTATION

- **Strategy:** KM strategy must be rely on corporation’s strategy, which aim to manage, share, and create relevant knowledge of assets to meet tactical and strategicrequirements⁶.

- **Organizational Culture:** The organizational culture has real impact on the way of people interaction, the context within which knowledge is created, the change resistance, in the end the **Organizational Processes:** is the right processes, environments, and systems that enable Knowledge Management to be implemented in the organization⁶.

- **Management & Leadership:** KM demand skilful and experienced leadership at all levels. There are a wide variety of KM-related roles that sometime the organization may or may not need to implement, including, knowledge managers, knowledge brokers and etc⁶.

- **Technology:** is the most broadly term which defined as the systems, tools, and technologies that properly designed to fit organization’s requirements. Also technology concedes as the machines , material which used to solve real-problems⁷.

- **Politics:** politics is the study or practice of the distribution of power and resources within a particular community as organization. it is the long-term support of implementation and sustain initiatives that involve almost all organizational functions⁷.

Figur2



2.5. KNOWLEDGE MANAGEMENT SYSTEM (KMS)

Knowledge Management (KMS) has become more interesting in the recent years and has become the latest management buzz in town. It is important to look at the sequence of events that led to the rise of knowledge management. The arrival of the information society and the move toward the knowledge-based economy which highlighted on the need of manage knowledge resources including skills and competencies⁵. "Knowledge management as a concept with people taking the centre stage has prompted us to rethink of information management and shift focus from trying to develop intelligent systems to that of developing tools for intelligent people."¹⁰ Knowledge Management system (KMS) is nothing but getting the right knowledge to the right person at the right time with keeping in mind the strong correlation to organization's strategy (figure2). The good understanding of where and what knowledge forms needed, helps in creating processes that span organizational functions, and ensuring that initiatives are accepted and supported by organizational members. Knowledge management may also embedded new knowledge creation, or it may only focus on knowledge sharing, storage, and refinement for a more comprehensive. We can say that the main objective of knowledge management is to create value to assets to meet organizational goal⁹.

2.6. NEED OF KNOWLEDGE MANAGEMENT SYSTEM (KMS)

For managing the organization knowledge, the developers have invented the knowledge Management Systems (KMS) which is a class of information system. These systems are IT-based and their goal is supporting the processes of creation, storage, transfer and re-use of knowledge in an organization for performance improving¹⁴.

3. ENTERPRISE RESOURCE PLANNING (ERP)

Enterprise resource planning (ERP) is an integrated software application which includes the majority of business functions into a single system. Although ERP implementation process is complex whether in technology aspect or change management. There is huge demand for ERP system in the market, Companies are aiming to increase the efficiency and effectiveness by obtaining the latest innovations to face the market's expanding and matching customer's expectations¹⁵.

3.3. KNOWLEDGE MANAGEMENT FROM ERP PERSPECTIVE

The need of IT experts to know more about the specific business processes pushed business process experts to deliver their knowledge about the IT systems in place in their organization. We could say that the advantage of enterprise system implementation is the knowledge converges and organizational information across different divisions and departments on an organization-wide scope. End users of enterprise systems is required to have knowledge of the organization then compare it to the traditional legacy systems which adopted automation of process only at that time they will notice the new changes. Enterprise systems implementing change the employee's view from the task focus to the process focus. Also the employees need to know how their tasks should be done in business areas like production accounting or marketing. In the other hand the IT experts need to know more about the requirements in areas' of adaptation to operate perfectly. The organizational view of knowledge

regarding the tasks and processes that are conducted in the organization tends to converge by the use of the enterprise system. Knowledge sharing among enterprise system users have different lines of interaction. Finally we can say that the integration of all systems to achieve the main goals of the corporation is important^{13,14}.

3.4. IMPORTANCE OF KNOWLEDGE MANAGEMENT (KM) FOR ERP IMPLEMENTATION

In the knowledge management point of view ERP is not just an information system implementation only, it is a process of creation, storage, transfer and utilization of knowledge. For example before ERP package implementation the enterprise needs to know about the specification and functional modules to measure the system fitting and to gain experience from other similar organizations, at this point role of KM comes as knowledge hub to cover the enterprise demand for knowledge during ERP implementation. Adopting ERP packages didn't mean that it's just software systems to be installed in the organization, but it has effect on organizational strategy as well as logic of the company and also how people work in the enterprise. According to KM, the knowledge which have created during ERP implementation stages it can be identified, captured, transferred and applied knowledge practically and systematically to help the ERP implementation succeed^{11,12}. After ERP package is chosen, enterprises usually tried to adapt the ERP standard instead of reengineering business process. It means they change their old processes to match the ERP systems. In case of Incomplete knowledge about business processes (about how the processes are done) in the organization, so there is need to tacit knowledge from managers, employees and users in the middle of ERP implementation with considering the changing requirements for enterprises. Finally we can say that, it is better for managers, decision-makers and knowledgeable employees whom have enough knowledge about business processes to use the KM to determine the requirement of ERP implementation so that will decrease the factors of failure¹³.

4. CONCLUSION

This study aimed to give overview of Enterprise Resource Planning concept. The study comes out with simplified picture of Knowledge Management from Enterprise Resource Planning perspective as well as Importance of Knowledge management for ERP implementation. In the other hand the study attached knowledge Management along with overview of main concept of knowledge like data, information and knowledge. The study displayed the importance and types of knowledge. Also the study presented a brief summary of knowledge management dimensions and knowledge management system.

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