ISSN : 2350-0743

www.ijramr.com

International Journal of Recent Advances in Multidisciplinary Research
Vol. 07, Issue 01, pp. 5539-5545, January, 2020

RESEARCH ARTICLE

THE ROLE OF SMART MANAGEMENT IN ACHIEVING COMPETITIVE ADVANTAGE IN A COMPLEX COMPETITIVE ENVIRONMENT IN EGYPT

***Reem Mohamed Elshawarby**

Department of Management, Faculty of Commerce, Port Said University

ARTICLE INFO

Article History:
Received 24th October, 2019
Received in revised form
17th November, 2019
Accepted 05th December, 2019
Published online 31st January, 2020

Keywords:
Smart Management,
Competitive Advantage and
Competitive Environment.

ABSTRACT

The smart management has continually been a source of achieving competitive advantage in most developing countries. This study examined the relationship between smart management and achieving competitive advantage in Egypt using secondary data obtained from the annual reports of companies. However, the study noted that the smart management, tend to have a positive effect on achieving competitive advantage. Organizations need to take advantage of smart management techniques to achieve quality standards The products of improving the clients' mental image and providing services That satisfy their desires, meet their needs quickly and easily, and keep their money And their secrecy, and other aspects of caring for them.

INTRODUCTION

With the emergence of the major changes that have appeared in the world of business such as globalization and technological advancement, which have evolved from time to time we have coincided with it the global sustainability has emerged, which has been an integral part of the organizations strategy to preserve their competitive capabilities in the environment of dynamic business, As these organizations tended to understand how to manage these contemporary technological ingredients in terms of the sustainable strategy.
And one of the most important of these constituents is the use of comprehensive and permanent strategic methods that have the ability to adapt, which is the sustainable strategy and the accompanying new aspects and laws that radically changed many administrative concepts, In addition to the principles outlined by the information technology revolution, they have contributed greatly to the consolidation of the work of this strategy. As it has become the basis for achieving competitive advantage, specifically in the environment of commodity and service organizations, led by a type of strategy that enables organizations to move towards the era of competition with sustainability through to building an organization that is able to adapt all of its resources, Until these organizations reach their reality and their contemporary capabilities with natural and abnormal changes. The organizations' inability to maintain their sustainability without achieving environmental-economic (social) balance in order to obtain the current resources, but without prejudice to the capabilities of future generations.

Corresponding author:* **Reem Mohamed Elshawarby,
Department of Management, Faculty of Commerce, Port Said University.

Problem of study: Contemporary organizations strive for success and excellence in a strong competitive environment, where they search for ways to succeed and excel at all levels. By reviewing administrative literature, we find that the achieving competitive advantage process was the most important elements that explain the success of organizations in their work, but recently, new strategies have emerged to increase the ability of organizations to adapt to their environments, most notably: Strategic Intelligence, where it is associated with a distinct type of mental capacity that the manager needs , Or the leader and strategic thinker, which enables him to think holistically about the future of the organization and confront instances of uncertainty, scarcity and limited information. Strategic intelligence helps the organization achieve its long-term goals, and enables leaders to seize opportunities and adapt to changes. In order of the foregoing, the success of the organizations depends greatly on the success of their decisions in dealing with environmental conditions of opportunities and threats, and the effectiveness of each of the decisions and other administrative functions depends largely on the level of strategic intelligence that guides the organization's decisions; to deal with environmental data successfully, so this comes The study to try to analyze the effect of smart management on achieving competitive advantage, as the researcher will try to provide a theoretical review of the most important literature that dealt with the study variables. Smart management improves the quality of organizations' performance through the use of modern electronic methods characterized by high efficiency, effectiveness, speed and ability to keep pace with and eliminate traditional management problems.

The study problem can be summarized in the following question:

Is there a role for smart management in achieving competitive advantage in a complex competitive environment?

Objectives of study:

The main objective of study is that "identify the role for smart management in improving decision-making processes in a complex competitive environment. A set of sub-goals can be reached:

- Learn what smart management is?
- Determine the role of smart management in achieving competitive advantage.
- Reaching the relationship between smart management and the organization's success in competing in the market.

The importance of study: The importance of this research is due to from the application of smart management in Egypt and the developments and challenges facing this in Egypt, so we find the importance of the topic coincided with the state's efforts to improve the performance of companies, whether at the level of private sector companies or companies in the public business sector to achieve sustainable development at the state level In Egypt, although we find that Arab studies in general and Egyptian in particular are still few and limited, then we hope that this research provides an addition to the Arab and Egyptian library in this field so that the desired scientific integration occurs between the branches of knowledge. This research contributes to identifying the problems and challenges that the private companies sector in Egypt have, as well as identifying the obstacles that negatively affect them and which hinder the achievement of achieving competitive advantage in this sector, by identifying the role of smart management in improving performance and its reflection on achieving competitive advantage.

Literature review and hypotheses development

Previous studies: The study by (Yun Bai , 2017) show that with Intelligent manufacturing is based on software that relies mainly on computers, storage, and network resources. The SDN is a new network infrastructure in China. Whereas, the separation between the networks controls level and the data forwarding network The network and the realization of programmable control is the concept of designing the private digital network (SDN). This study analyzes the characteristics and meaning of smart manufacturing systems, and the reasons that lead to problems facing the smart manufacturing system, and then identify the advantages and benefits they achieve (SDN) that work on smart manufacturing problems through a combination of smart manufacturing systems using the concept model (SDN). This study undertook deep research on intelligent manufacturing in terms of technical significance, equipment model, etc. The study by (Anna Baczynska, 2017) show that with Relationships of analytical, practical, and emotional intelligence with behavioral dimensions of performance of top managers, The behavioral dimensions of leadership, initiative, goal orientation, attitude towards change, and employee development were linked to analytical intelligence and business intelligence, but not to These results make unique contributions to understanding the relationships between types of intelligence and managerial behavioral dimensions. A study (Markus J. Thanhuber, 2017) introduced a new approach for Knowledge Management: Managing Organizational Intelligence and Knowledge in Autopoietic Process Management Systems – Ten Years Into Industrial Application, Accordingly, a new process management system was developed and today the system supports day to day engineering fields on three continents. It stimulates organizational behavior by simulating intelligence and the acquisition of knowledge, using both deriving appropriate processes. This study reports on the lessons learned from knowledge management and may shed light on future developments of knowledge-based manufacturing systems.

This study (Goh, 2016)aimed to assess the level of capabilities of the contracting sector companies in Singapore, which reflects that they are smart organizations, by making comparisons with the same companies in a group of countries such as Denmark, Sweden, Finland and the North region as a whole. The study population and its sample consisted of (411) companies operating in the contracting sector in Singapore specializing in the fields of administration, engineering, quantitative surveying, real estate development, building and construction and the last manufacture of products and supplies. After distributing the questionnaires to the study sample, a total of 41 companies responded. The position of companies in the study reached many results most notably that the adoption of information technology and the construction sector enables companies to become smart organizations and through an evaluation. It turned out that there are six directions for the contracting industry in Singapore and all over the world, namely: taking advantage of the communication infrastructure, working within a legal and regulatory framework, implementing ERP systems to achieve integration between databases and applications, investing in building the capabilities of workers 'intelligence, practicing re-engineering Business operations, focus on individuals and their technology needs and the ability to manage change in medium and small-sized companies. The study (2005Finkelstein and Jackson) aimed to describe smart organization, specifically smart leadership, where smart leadership, smart process and smart strategy were considered the three main pillars of smart organization. The study relied on the findings of a previous six-year study by Finkelstein and Jackson that compared organizational patterns and revealed the main differences between companies that were successful and then subjected to failure and other very successful companies that were able to maintain their survival and their ability to continue to succeed and dominate The market, which is what he called "smart management." The two authors pointed out that these organizations are distinguished by working on follow-up and systematic improvement of the three pillars that constitute the pillars of them: smart leadership, smart strategy, and smart practical. The rustles of (Prashant Ahire, 2017) show that of smart management using authentication and authorization, the Industrial management systems in India today face the problems of loss and these problems lead to increased administrative costs, loss of administrative time and follow-up of administrative resources. In these systems, this problem is remembered. Using smart management systems, these problems that are faced by employee status can be overcome by increasing the speed of work and providing dynamic reports It clarifies the wages and salaries of workers. At the present time, we must attach importance to smart management systems.

Smart management systems can be defined by informational control and operational data. The smart management system is used to defend the army, programs and devices, computer companies in the public sector and the private sector. This study (2017 Khuntia, Swasti; Rueda Torres, Jose)discusses ways to improve forecasting of future maintenance operations in the Netherlands to make smart decisions, which is when and where maintenance operations are carried out in the light of electricity facilities and benefits, which are represented in the availability of a large amount of data, but it is difficult to take advantage of them because of the sheer volume of this data in addition to a relationship of uncertainty with it And the condition of controlling the assets is that a lot of daily information is collected about them, and the question that comes to mind is how information can be extracted from all this amount of data, and the concept of data richness and information poverty represents a challenge represented in the analysis of this huge amount of m Data is in addition to modern information technology technologies such as the Internet, and analyzes the vast amount of data plays a role for the benefits of electricity, and the goal is to make the current assets smarter than others and this work gives more descriptions of the administrative environment.

This paper (Jose Moura and others, 2015) provides the details of the answer to the following question, which is how Intelligent Management and Efficient Operation of Big Data can be used and implemented in networks and infrastructure computing. In particular, this process addresses three main aspects: the timely acquisition of relevant knowledge from large, often unorganized, heterogeneous data sources; improving the performance of processing infrastructure and (cloud) networks which are the most essential pillars for data applications or services Large systems; and new ways to efficiently manage network infrastructure through integrated high-level policies to support the transfer of large amounts of data with distinct requirements (video versus video). A case study involves intelligent management solution to direct traffic with various requirements in a wide area, an Internet exchange point is presented, discussed in the context of big data, and evaluated. The study (Liang, 2004) aimed to try to build a theoretical framework that constitutes the important features of the organization's intelligence strategy, based on the fact that the smart organization theory deals mainly with understanding and creating smart human systems for better adaptation in the era of focused knowledge, and that the key to success lies in the organization or structure around intelligence. And that organizations in general, such as intelligent beings, deal with their own organizational mind, group intelligence, and other elements that are affected by the level of intelligence such as complexity, adaptation, and self-organization, and there is a twofold view; the first relates to the organizational mind.

He pointed out that organizations need a process of transformation in the areas of management, organization and leadership thought in them as they live the current business environment and the era of focused knowledge in which attention has shifted from tangible assets to moral assets, and the focus has become on human thinking systems that are the source of the emergence of the essence of global intelligence.
The study concluded that collective intelligence will be the new choice for organizations, which is the result in favor of institutional organization that focuses on information and knowledge, as well as on linking human thinker systems.

The study also showed that organizations need to be smart enough to remain and continue in this new environment, and therefore the first work that you must do is to possess what the study has called the organizational mind; the brain with high collective intelligence resulting from the improvement of their industrial intelligence, collective intelligence, and self-intelligence. It is clear from the foregoing that these previous studies did not address the effect of applying smart management to raise the efficiency of performance in order to achieve Competitive advantage and therefore this study is an attempt by the researcher to demonstrate this relationship through the theoretical and field study of the research problem.
As mentioned above, there is no specific study that has been directly achieved in the Relationship between the smart management to raise the efficiency of performance in order to achieve Competitive advantage. Thus, this study claims that the relationship between the various elements of smart management and Competitive advantage are positive. This is because a strong smart management is a prerequisite for the competitive advantage as described in the

Previous studies mentioned above. Accordingly, it can be hypothesized that:

H1: There is a positive relationship between smart management, and achieve Competitive advantage.

The concept of smart management: The term smart business management refers to applications and technologies used to collect data and information about a company's operations, and provide access to and analysis. Smart business management systems can provide ways to help companies gain a greater knowledge of the factors affecting their business activities, such as sales, production, and internal operations and thus help organizations make better decisions. The importance of smart business management in achieving success is evident when we look at what is today's competitive corporate economy. Although many companies have made significant investments in infrastructure for this type of management, few employees of these companies benefit from the powerful tools available to them. This is because technology is only part of the successful strategy for smart business management. Among the rest of the success factors: executive support, analytical culture, strong partnership between business administration and information technology, and cooperation between all departments of the company.

(Richards, Brett, 2002)The world is witnessing rapid changes that have become pressures on business organizations to rethink the way they do their business and the way to add value to those with interests. Intellectual money and social capital are the most valuable to them, and information, knowledge and intelligence have turned into capital assets that drive economic wealth, and in response to that many business organizations, especially the leading ones, have focused since the mid-seventies of the twentieth century To act intelligently ((Smart Acting in order to improve the results of its operations and achieve its objectives.(Liang, T.Y. 2004). Therefore, traditional administrative patterns have become unsuitable for contemporary organizations that operate according to the characteristics of the business environment in the second decade of the twenty-first century, and there is a need for a kind of smart management that is able to adapt to the environment by providing an ideal work environment and the ability to create an organizational learning environment An

actor, as well as responding in a proactive manner to rapid changes in the environment, future management and the development of human and intellectual capital, and this in itself constitutes a strong research impetus in particular in the scarcity of Arab studies in the field of smart management. The importance of smart business management in achieving success appears when we look at what the present economy is based on competition between companies. This is due to the fact that technology is only part of the successful strategy for smart business management. Among the rest of the success factors: executive support, analytical culture, strong partnership between business administration and information technology, and cooperation between all departments of the company.

The roots of smart management did not go back to a distant historical era, but rather go back to the year 1960 AD. The first to introduce and develop this concept quickly in organizations are the Japanese, then I move to German companies and then to organizations in the United States of America.(Jens Stief,2000). According to Haysen, the intelligent and gifted individual has the ability to listen, listen and understand, unlike the usual individuals, for they are: they respond to one command, that is, if they listen, they do not listen and do not understand, and if they understand, they do not listen and do not listen, and so on . In other words, the ordinary individuals do not activate all their capabilities and their senses that one but rather suffices with what they get it easily and easily from the environment around them or from the education system (Marion, 2003). (Prof. Dr. Scheer, 2007)also sees smart and talented individuals: they are the serious, persistent, watchful, and self-sacrificing individuals in order to present (creative) ideas or new businesses (innovations) and put them into practice in the organizations in which they work and are the basis for the success of the promised smart management system. Also, smart and talented individuals are the key to solving any problem and they are seeking to reach the goal that they wish to achieve.

As stated in the previous two definitions, smart management is that management that connects knowledge with the mind ... and thought with behavior, so smart management has placed at the top of its interests smart and talented individuals because they have multiple capabilities, not only in what they discover, invent, or invent, but in the process of transferring it or Its inclusion in other fields such as administrative, medical, engineering, physical and other natural sciences or other human sciences and even religious sciences. It should be noted here that smart management is not limited to the manager of that activity or the individuals working in it separately(Liang, T.Y., 2004)but also includes the activity in its strategic outlook that focuses on its organization and management from the point of administrative intelligence, and that this administration works to improve intelligence and methods to enhance the application of its principles of amendment The coordinator of the organization's systems, strategies and skill groups therein, incentives and administrative support for its application, as well as improving the collective work of its individuals who possess the intellectual and behavioral skills and trends and providing the appropriate tools and environment in the organization, Which in turn reflects on the performance of the organization.(Matheson and others,2001).
From the above, the dimensions of the concept of "smart management" can be presented as the ability of the organization to take and implement good strategic decisions to invest opportunities in generating value in order to achieve a high level of performance. The ability to grow and continue to make it more dominant in the market. Such an organization learns and adapts to the environment and constantly develops new organizational forms and practices to offer superior products and services at prices that drive value leadership. Accordingly, "smart management" can be defined as: "the organization that takes strategic decisions of quality and implements them effectively to invest the best opportunities to create value, to remain high-performance, capable of growing, continuing to succeed and dominating the market.

The difference between smart management and smart organization: The concept of smart organization has been linked to the organization's ability to adapt and learn. With the great difficulty in converting information into useful knowledge in decision-making, the smart organization learns and adapts to its working environment, and learns to be smart by linking all elements related to information management and learning. (Richards, Brett; winter 2002). This was also confirmed by Richards, who distinguished in his research between organizational intelligence, thinking and knowledge, as he emphasized the concept of organizational intelligence with the organization's ability to adapt and learn, and pointed out that these terms as a whole represent the organization's ability to adapt, respond and create. He also stressed that organizational intelligence is "the ability to learn from experience and adapt to changing environments." In order for the smart organization to achieve continuity and longevity, it must work within four characteristics: sensitivity to the environment, coherence, decentralization and tolerance, and be conservative in financing and operate according to long-term strategies, as the difference between "the intelligence of organizations is near-term" and "long-term" It is that long-term strategies lead to long-term continuity.(Vickers and others. 2000).

In sum, concepts, the concept of "smart management" and the concept of "smart organization" express a state of continuous and sustainable success for the organization, and that this success is represented by the organization's ability to learn and adapt. When looking at the matter from another angle, he notes that there is a difference between the two concepts, which is that the concept of smart organization focused on the administrative entrance that applies technology and new service models in facing the challenge to develop work performance.(Quinn, James Brain; 2005). The concept of smart management has focused on making good strategic decisions that generate the best opportunities for creating value, and that smart management is more effective than others in making decisions. And that smart management can be reached if the nine principles, indicated in Figure 1, that provide the environment or the organizational context that facilitates the application of best practice in the organization and good decisions are applied. The nine principles as a whole are a prerequisite for routine, high-quality strategic decision-making. The greater the commitment of the organization to these principles, the more able, and more systematically, to make good strategic decisions. Each principle also represents a coherent theory, or a standard that regulates a specific set of beliefs of individuals that shape their behavior. Therefore, the nine principles determine whether individuals are enthusiastic or refusing to adopt new best practices. The study (Matheson & Matheson, 2001) have identified nine principles for accessing smart management and have grouped these

principles into three important groups: the set of functions that help the organization achieve and "achieve the goals" it seeks, and the set of functions that help it "understand the environment" that works With it, the set of functions that make it possible for the organization to mobilize and "transfer resources". Here are the principles:

- Reaching the goal
- Understanding the environment
- Transfer of resources

Hence it became necessary for the organizations to make the transformation with the intention of forming "smart management" as a new generation of business organizations through a set of intellectual transfers represented in applying the principles of smart management and conducting a coordinated amendment of the organization's systems and strategies and skill sets in them and incentives, administrative support for their implementation, as well as improving teamwork For its individuals who possess the skills, intellectual and behavioral attitudes and provide the appropriate tools and environment in the organization to improve the decision-making process, so that at some point it does not find itself unable to continue and survive.

The elements of smart management

•Intelligence and talents are the main source of innovation in organizations: and renewal means change for everything old that has become incompatible with the circumstances or conditions to be moved to and replaced by a new thing that changes or differs from it in form and content, such as changing plans, strategies and goals in organizations in the long and short term.
•Talents are responsible for development and redevelopment: for all technical means and equipment in the organizations and for very short periods, in addition to presenting ideas and proposals to the senior management and in any activity of the industrial and service organizations in which there are sections or branches of smart management.
•The permanent need for new cadres to replace employees who die or are referred to retirement or replace corrupt and criminals. These workers come from members of the smart management in the organization..
•The need for smart management personnel to occupy new jobs that suit their talents and abilities, and old cadres cannot occupy such jobs or jobs.
•The increasing demand for strong individuals who are able to take responsibility for leading companies is today at the forefront of their demands.
•Young, talented, highly trained and intelligent talents with rare scientific and mental competencies that can raise the profile of organizations and make them occupy a distinguished and prominent place in the local and global community.

The concept of Competitive advantage: The concept of competitive advantage: Porter defined the competitive advantage as: the ability of an organization to provide a good or a lower cost service, and a product distinct from that in the market with the possibility to keep this ability.

Competitive advantage objectives:

- Creating new marketing opportunities, as was Apple's case the first to create the personal computer.
- Breaking through a new competitive field, such as entering new markets, or dealing with a new quality customer, or a new quality product.
- Create a new vision for the future that the organization wants.
- Establishing alliances with suppliers to obtain their needs from them in ways more flexible, fast, efficient and cheaper.

The competitive advantage dimensions

- Reduced cost: means the organization's ability to design, manufacture and market products with minimal costs compared to competitors, low costs provide opportunities to sell at prices Competitive.
- Creativity and innovation: It is the reconfiguration or remaking of new ideas To bring something new, and to do it through a solution to a problem, or an idea It is new and applied, and it is related to technology and quality, a valuable competitive advantage, which refers to the performance of things.
- Quality: properly performed to provide products that are tailored to customers' needs.
- Flexibility: It is the basis for achieving the competitive advantage of an organization by responding Rapid changes in product design that may be tailored to needs Laborers.

The role of smart management in achieving competitive advantage

The researcher believes that smart management plays an important role in achieving the competitive advantage of organizations through:

- Improving Productive Efficiency: where investment contributes to the application of smart management To increase the productive efficiency of organizations, by reducing costs and improving The level of quality also helps to meet the management needs of private information To the external environment.
- Contribute to achieving creativity at work: where the application of smart management contributes in developing new products, new services, and highly efficient methods in all operations, starting with the design phase and after sale.
- Building a positive image of organizations, their services, and their employees: where the application helps Smart management is aware of the importance of customers and the degree of satisfaction required by them, Preserving them by meeting their needs and desires, and providing them with the best service By the staff of the organization, taking into account the improvement of the quality of services and their development.

Indicators of achieving competitive advantage using smart management

Depending on the competitive advantages of dimensions and on the role of smart management in achieving them, the researcher used the following indicators:

- The smart management application helps increase the Competitive advantage.

- The smart management application helps increase the Competitive advantage market share.
- The smart management application of the organization helps in maintaining the existing clients and attracts new clients.
- The smart management application of the organization helps increase the degree of confidentiality and security in the bank.
- The smart management application of the organization helps reduce the costs of performing services and services.
- The application of the organization's smart management helps in achieving excellence in the services provided.
- The Smart Management application helps improve the quality of the services it provides.
- The application of organized smart management helps to improve the degree of customer satisfaction.

Research Results and recommendation

RESULTS

Based on the survey and testing the research hypotheses, the researcher reached The application of smart management in the organizations under study leads to an increase in its Competitive advantage , market share, and increases the ability of these organizations to retain existing customers and attract new customers, and helps them to achieve excellence in providing their services, and to reduce the cost of performing those services, and improve their quality level, management application Smart will help organizations to achieve customer satisfaction. The researcher concluded that there is a relationship between the application of smart management and each of the increase in the market share, the increase in the Competitive advantage, the increase in the ability to maintain existing clients and attract new clients, increase the degree of confidentiality and safety, reduce the cost of service performance, achieve excellence in the services provided, improve the quality of services, achieve customers satisfaction. Organizations need to take advantage of smart management techniques to achieve quality standards The products of improving the clients' mental image and providing services That satisfy their desires, meet their needs quickly and easily, and keep their money And their secrecy, and other aspects of caring for them.

Recommendations: The research recommendations are as follows

- Organizations need to continuously evaluate smart management applications, to be sure Ensure that it is implemented as planned, and to ensure its suitability and ability to promote Competitive advantage.
- The organization must use smart management techniques to produce and develop new products for its current and future markets, which contributes to achieving the flexibility required to meet the changing market demands, and allows the organization to increase its market share and enhance its competitive position.
- The ability to use smart management systems and methods to increase their productivity, increase the efficiency of operations and their integration, and cancel non-targeted routines, which reduces the cost of performing services, achieves price differentiation, and reflects positively on achieving the competitive advantage of the organization.

REFERENCES

Anna Baczy-nska, 2017. Relationships of analytical, practical, and emotional intelligence with behavioral dimensions of performance of top managers, ileyonlinelibrary.com/journal/ijsa, 25:171–182..,

B.H.GOH, 2006. Creating intelligent enterprises in the ":"Singapore construction industry to support a knowledge economy ,Building and Environment Volume 41, Issue 3, March Pages 367-379.

Finkelstein, Sydney and Jackson, Eric M., Sep/Oct 2005. Immunity from implosion: Building smart leadership. Ivey Business Journal; Vol. 70 Issue 1, p1-7. Cited on 24th May 2006. Available: EBSCO host. Html.

Issue 4, p203-211. Cited on 24th May 2006. Available: EBSCO host.Html.

Jens Stief Intelligentesn Management internationaler For schung sund Entwicklungskooperation: Entwurfeines Managmentkönzepts auf Basis von Organizational Intelligence.D-386 (diss. Unversität Kaiserlautern) Shaker verlag Achen 2000.

Jose Moura, Elsa cordsos, Fernando Batista, Luis Nunes, 2015. Intelligent Management and Ef□cient Operation of Big Data, A volume in the Advances in Data Mining andDatabase Management (ADMDM) Book Series.

Liang thowyick, "Intelligence Strategy: The Integrated 3C-OK Framework of Intelligent Human Organizations", Singapore management university, republic of Singapore,2004.

Liang, T.Y. 2004. Intelligence strategy: The integrated 3C-OK framework of intelligent human organizations. Human Systems Management; Vol. 23Issue 4, p203-211. Cited on 24th May 2006. Available: EBSCO host.Html.

Liang, T.Y. 2004. Intelligence strategy: The integrated 3C-OK framework of intelligent human organizations. Human Systems Management; Vol. 23.

Marion E. Haysen; Projekt-Management von der Ideebiszur Umsetzun, der Projektlebenszyklus".2 , aktualisierte Auflage, Frakfut/Wien: Ueberreuter 2003 Druk Himmer Augstburg in Germany,2003.

Markus J. Thannhuber, 2017. Knowledge Management: Managing Organizational Intelligence and Knowledge in Autopoietic Process Management Systems – Ten Years Into Industrial Application, Procedia CIRPVolume 63, Pages 384-389.

Matheson, David and Matheson, James E. Jul / Aug 2001. Smart Organizations Perform Better. Research-Technology Management; Vol. 44 Issue 4,pp49-54. Cited on 24th May 2006. Available: EBSCO host. Html.

Matheson, David and Matheson, James E. Jul / Aug 2001. Smart Organizations Perform Better. Research-Technology Management; Vol. 44 Issue 4, pp49-54. Cited on 24th May 2006. Available: EBSCO host. Html.

Prashant Ahire, 2017. Smart management using authentication and authorization, *International Journal of Engineering Applied Sciences and Technology*, Vol. 2, Issue 5, ISSN No. 2455-2143, Pages 30-32.

Prof. Dr. Scheer, IT 2007. Freelancer MagazinfürSelbständige und Existenzgründer in der Computerbranche 4 Jahrgang Heft 4/ Issn 1614-6425. www.it-free.info.

Quinn, James Brain; 2005. The Intelligent Enterprise a New Paradigm.Academy of Management Executive, Vol. 19, No. 4.

Richards, Brett; winter 2002. Rethink or Else…! Creating Intelligent Organizations. The Journal for Quality and Participation. Vol. 25, Issue 4, Pp 34-37. Cited on 24th May 2006. Available: EBSCO host. Html.

Richards, Brett; winter 2002. Rethink or Else…! Creating Intelligent Organizations. The Journal for Quality and Participation. Vol. 25, Issue4, Pp 34-37. Cited on 24th May 2006. Available: EBSCO host. Html.

Swasti R. Khuntia, Jose L. Rueda, Mart A.M.M. van der Meijden, 2017, Smart Asset Management for Electric Utilities: Big Data and Future,cornell university library.

Vickers, Margaret; Aug. 2000. Clever Versus Intelligent Organizations: Cases from Australia. Academy of Management Executive, Vol. 14, No.3. pp135 -136. Cited on 24th May 2006. Available: EBSCO host. Html.

Yun Bai, Modeling analysis of Intelligent Manufacturing System based on (SDN), wileyonlinelibrary.com/ journal/cpe, Concurrency Computat: Pract Exper.2017;e4270. https://doi.org/10.1002/cpe.4270.

****