



A Review of the Management of Technology-Oriented Companies by Emphasizing on the Machinery Level and Software Information of Technology

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Abstract: Awareness of the existent state of any system and processes is the first step in decision making and goal setting to achieve the best management of that system. This study aims at identifying technology dimension level of any one of centers for producing and distributing energy carriers in Tractor Manufacturing Industrial Group based on the Technology Atlas Method. After being aware of technology level, it will be possible to decide on its weak points. This is a field study in which by preparing and distributing questionnaires and collecting data and analyzing them using inferential statistics and mean descriptive statistics, the acceptance or rejection of theories were proven. Calculating technology coefficient, the technology level of energy carriers was specified. In this study the statistical sampling is done through specialists and knowledgeable people in each one of the production and distribution centers of energy carriers. Considering the calculation and specification of figures of technology level it became clear that: The operation level of all 4 axes (technoware, humanware, orgaware and infoware) of all 3 technologies of the centers of production and distribution of heating steam, compressed air and electricity for the companies of Tractor Industrial Group and the total level of this technology is an appropriate level and the combination of the level of elements of technologies are of appropriate value. But in order to reach the desired level, the promotion of technology elements level is necessary considering the figure of help intensity (β) in technologies technoware axes, the cut in the level of technoware in these technologies will be lower compared to other axes of technology and little changes in the cut of the figure of technologies technoware level can dramatically decrease technology level. In this case technology life cycle in abolishment step will decrease total efficiency and added value. Keeping in mind that the duty of ITIS Company is the continuous production and distribution of energy carriers so any deficiency or shortcoming in technoware axle will cause harms to the Tractor Manufacturing Group. In order to prevent any damage, an appropriate pattern for managing production and distribution of energy carriers for the consumptions in Iran Tractor Manufacturing Companies was offered.

[Abbas Jafarpour, Naser Feghhi Farahmand, Alireza Bafandeh. **A Review of the Management of Technology-Oriented Companies by Emphasizing on the Machinery Level and Software Information of Technology.** *Rep Opinion* 2021;13(6):91-95]. ISSN 1553-9873 (print); ISSN 2375-7205 (online). <http://www.sciencepub.net/report>. 6. doi:[10.7537/marsroj130621.06](https://doi.org/10.7537/marsroj130621.06).

Key words: Technology, Technology Coefficient, Technoware, Humanware, Infoware, Orgaware, Energy Carriers, Appropriateness

1. Introduction

In this study, technology is a means to operationalize the theoretical basis; the concept of four-axis machine tools in technology, people, software, hardware and the software information is defined as follows.

Technology embodied in the various objects used in the production of goods and services, such as tools, machinery, facilities, physical facilities, hardware of these technologies are called hardware.

Technology embodied in human beings, such as laborers, clerks, technicians, engineers, scientists in the development, compilation, use and development of technology used and the experiences, skills, creativity, mental aspects of the way people say the application.

Technology embodied in the data, documents in various documents required for the application of technology in the production of goods and services such as process descriptions, procedures,

opinions, observations, instructions and suites of this software, called software information.

It includes methods and systems management, organizational leadership and motivation, improving decision making, accountability and commitment to the organizational goals. Technology embodied in institutions ranging from workshops laboratories, facilities, and ... To complete the development, application and development of the technology used. And all methods, operations, organization and management, organizational frameworks, systems and methods for managing other institutions involved in technological activities can be placed within it. In fact, it is coordinating with other components (Nasser Fegghi, pp. 87 and 86 N. 2004).

Management of cross-disciplinary scientific technology itself is. At least two well-established areas of knowledge include:

- 1) Organization and management
- 2) Natural sciences and engineering, plus a variety of other disciplines such as social sciences, engineering and information technology industries come to some kind of assistance or technology management (Syed Kamran Bagheri et al, 2008, p 17)

Characteristics and challenges include:

- Complexities, risks and uncertainties of Markets, technologies, and rules vary greatly
- Competition, markets Limited resources, high expectations tight schedule with additional emphasis on the delivery date the total project life cycle considerations
- Organizations and complex relationships Joint venture, alliances and partnerships and the need to interact with different organizational cultures and values.
- Complex work processes and stakeholders
- The need to improve, enhance and strengthen ongoing.
- Require complex interpersonal skills, ability to deal with conflict, power and politics Organizations, markets and virtual support systems.

Increasing impact of information technology and e-commerce generally pay was demanding the following:

- Rapid response to market
- the rapid development
- Low cost
- Creativity, innovation and high performance

In 1987, the U.S. National Research Council said that scientific management, engineering technology, basic sciences and management sciences to link up with the planned development of the technology necessary to achieve the objectives of strategic and operational the shape of (seyyed Kamran Bagheri M. Rezapour, Seyed Hadi Kamali, 2008, p 18).

Aspects of technology management are defined as follows.

- Technology management, including management, engineering, natural sciences and social sciences.
- Management of Technology, Organization Science encompasses the need for planning, decision making, development and application of technology.
- Management of technology, the development of operational capabilities such as production, distribution and after-sales service centers.
- Technology management encompasses the processes, tools, methods of operation as well as those that do.
- Management of Technology, receiving guidance and leadership in the development of new products and services.
- Managing technology, the business strategy, organizational culture and their impact on business environment affected.
- Management of Technology in the field of trans-receptor components and integrate them into an overall system. This field includes the management system itself (Syed Kamran Bagheri, Morteza Rezapour, Seyed Hadi Kamali, 2008, p.19).

Perhaps globalization and technological factors affect business performance requirements. Together, these two categories are reciprocally connected. Companies using world-class technology, economies of scale and economic benefits of diversification benefit, but the technology cannot work at the international level. As a result of globalization and the globalization of technology spur technology. However, international trade flourished long before the computer age. Companies beginning of human civilization and the profit motive were stepped further into the realm of international activities. In the past, access to resources such as labor, raw materials, energy and knowledge was very limited. Furthermore, the coordination and integration of activities across the national borders was difficult and costly. Although these are still part of the main challenges, however, multinational trade agreements and technological advances (particularly computer

and information technology), business operations and business environment to transform the global economy has. Modern global economy for greater mobility of resources, skills, processes and technology, business services, knowledge and talents back to the new, new world trying to enter the market. For example, well-known companies such as Nokia, Harley Davidson, Vndyz, Brygzand Astrtvn atmosphere multinational operation and will enjoy the following benefits:

Penetrate new markets

Access to new and complementary knowledge and talents

Economic access to resources

Variety

Technology and resource sharing

Capacity

Partnerships and joint venture

Savings due to economies of scale and

This leads to benefits to achieve the objectives of the course "better faster cheaper" is fulfilled.

It means that:

1) Faster response to market

2) Costs less

3) More newer products and services with better quality, all of which have a positive impact on the overall performance of the company leave. Equipped with advanced technology companies, thanks to standardization, digitized, ratios Adjustable Weight - The size and prices online, you can take advantage of these benefits. So these companies to use the new e-commerce environment, forced to re-evaluate their approach to work (Syed Kamran Bagheri, Morteza Rezapour, Seyed Hadi Kamali, 2008, pp. 22-23).

2. Methodology and Data

Companies in every industry (computer industry ranging from retail and medical services), to be consistent with changes to the workspace, space solutions better, faster and cheaper calls. Many factors, such as globalization and the transparency of the Internet, have contributed to the creation of new space. But still the main factor is technology. Creating new products and services, improve existing products, to respond quickly to customer needs and market efficiency of scale, are all in the technology. If you do not use the new opportunities, others do it, and thus their influence on the market and their customers. Rapidly changing new technologies (such as computer and communication technologies), have to make their products available to improve the speed even more. In addition, the new electronic environment, many companies have been forced to take their business to base on the e-commerce

technology (Syed Kamran Bagheri, Morteza Rezapour, Seyed Hadi Kamali, 2008, p 34).

Managers of technology-based companies claim that their work environment is different and the environment, organizational structure, policies, and economic behaviors unique needs of individual interactions. To investigate this claim, researchers search for behavioral patterns and characteristics of the overall corporate management and technology-based companies focused on different levels. The scientists, led by models of organizational structures and systems, firms have tried to benefit from their role in creating the foundation for technology companies realize (Syed Kamran Bagheri, Morteza Rezapour, Seyed Hadi Kamali, 2008, p 36). Six distinct functional area of management of technology than other managers who are working - people - process - the tools and techniques of management - organizational culture - the business environment (Syed Kamran Bagheri, Morteza Rezapour, Seyed Hadi Kamali, 2008, p. , 39).

3. Results

Six major changes in today's business environment, management and space technology influenced the major changes in business practices have provided. For better management of technology-based organizations today must recognize these changes as well:

- The dynamic systems of linear processes. In the past, management was often based on linear models, models production lines, and the consequent development stage products, services and research exploring the effects were scheduled. But today's managers are forced to work in an environment much more dynamic and, interrelated and nonlinear processes in a rich environment in which it is difficult to describe.

- The dynamic management of business processes and the integration of linear systems
- The effectiveness efficiency
- Implementation of the project, the project management firm
- Full use of information technology to manage information
- Control, self-management and accountability
- As part of other specializing technology management, technology management, special skills as a professional position.

This dynamic environment, organizations are demanding more sophisticated management techniques, which rely heavily on group interaction, division of power and resources, personal

responsibility, respect, self-control. As a result, modern management, rather than strategies, policies and procedures, hierarchical and syntax-dependent, norms and performance evaluations depend members. While this change of paradigm shift in complexity, capabilities, applications and organizational cultures, but turn away from the heavy structure of traditional philosophy of management, motivation, leadership, and control the project. As a result, organizations and processes rather than rigid and inflexible to traditional networks are more flexible and agile, which are usually derived from a matrix organization. However, these networks boundaries, was better distribution of power and resources, and operational processes are.

- Change the effectiveness of performance. Many companies run efficiently on tasks and projects as in the past (through its emphasis on job skills, teamwork, communication, and optimizing the operational level resources) not persist and, in turn, are followed by organizational effectiveness. Because of this change in the mutual best practices and current projects with business goals and ensure that "doing things right" by the firm. For example, the use of project management as its core competency of project activities with other company departments (such as marketing, research, and strategic planning and support services) to the end. This change led to certain functions within the firm is worth position, while the overall level of liability is also made up of the parts (such as research and development) who earlier autonomous like's full partner firms operate within an integrated system (Syed Kamran Bagheri, Morteza Rezapour, Seyed Hadi Kamali, 2008, pp. 44-47).

4. Conclusion

Description of the process and technology management model:

According to the results of the study found that:

First, the level of technology, manufacturing and distribution centers energy, compressed air and electricity is an appropriate and acceptable level.

Second, the survey questionnaire, respondents made specific technologies and weaknesses focus on the improvement suggestions were offered.

Third, the coefficients of precision technologies and help extremely axes determined that technology-driven machinery other than MPG has three large reduction technology and a partial loss of any cause severe loss of axes machine tools and the overall level of technology.

Investigator for the proposed model on a priority focus on ways to improve these technologies

has driven machinery. So the researcher with regard to the three issues above, for examination based on an interview study of technology-driven machinery and equipment has been a major cause of technology that results in the two tables below compressed air technology each has. And also to maintain and upgrade the technology level of energy production and distribution is a good model to follow the researcher for the realization of this, the pattern of technology in the book of Page 65 doctor Farahmand Nasser jurisprudences, the results of the research, Results obtained through interviews with officials from centers of production and distribution of knowledge in the field of energy technology, energy production and distribution companies in Iran Tractor Industrial appropriate model management technologies in production and distribution of energy expenditure for Teraktorsazi industry groups Iran is as follows.

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6/24/2021