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Technology Management

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***Abstract*—This paper addresses the question why an organization has to focus on the technology management to improve production. The paper completely focuses on the general concept of technology management. Technology management is the combination of technology and management practice. It is continues process which helps an organization to overcome many problems of production. Adopting a better technology does not give complete benefits to an organization; it also needs to know how to utilize it in a proper way to receive complete benefit. Technology management is focused on both innovation of new technology and applying it to business environment. It also helps in determining the best alternatives to produce a product in less time and in cheaper way with less wastage.**

I. Introduction

Technology is one of the crucial and dominating factors of production and economic growth. Technology management is a tool that can make a country self-reliant, strong and economically developed by focusing on national defense and national development. Countries/companies with obsolete production facility and technology may not develop in today's competitive world.

Technology management can be defined as "the set of management policies that allow organizations to develop the technological capability to achieve the operational goals and objectives of an organization (which includes planning, controlling and organizing) to create competitive advantage and generate wealth". It is the combination of art, science and engineering. Technology management focused on the intersection of technology and business. Technology management has emerged in such a way that the companies should engage with technology for a better business strategies and operations. It increased the standards of production and process in less time with less wastage.
Technological change is a combination of two activities

- Invention.(creating a new product or technology which does not exist)
- Innovation.(developing the existing one)

II. Need of Technology Management

- Creation of wealth.
- Economic development.
- Increase the standard of living.
- National growth.
- Monitor current and future requirement of technology.

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III. CONCEPTS OF TECHNOLOGY MANAGEMENT

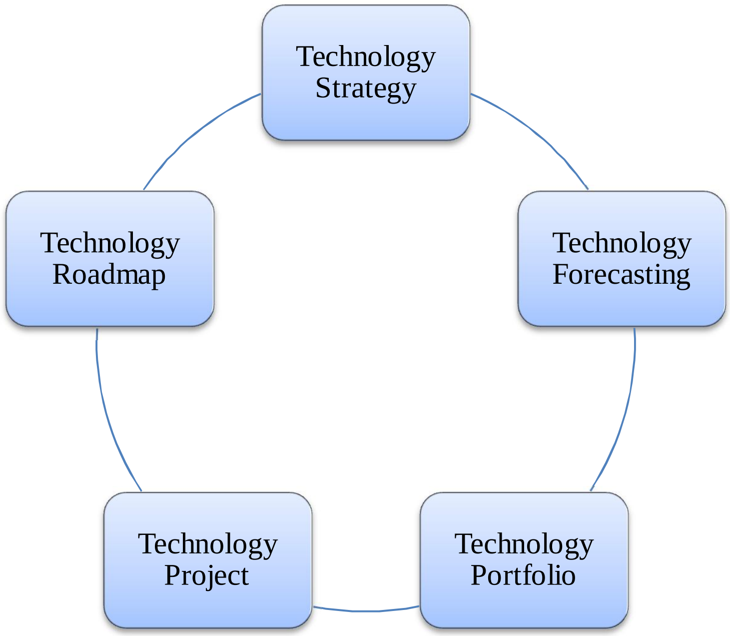

Figure 1 Concepts of Technology Management

The concepts help to analysis the current and future technological changes and allow a better utilization of technology *(Figure 1)*. These concepts can also analysis the capability of certain technology in the organization. Continuous monitoring and development of technology is required as long as the firm exist.

IV. LEVELS OF TECHNOLOGY MANAGEMENT

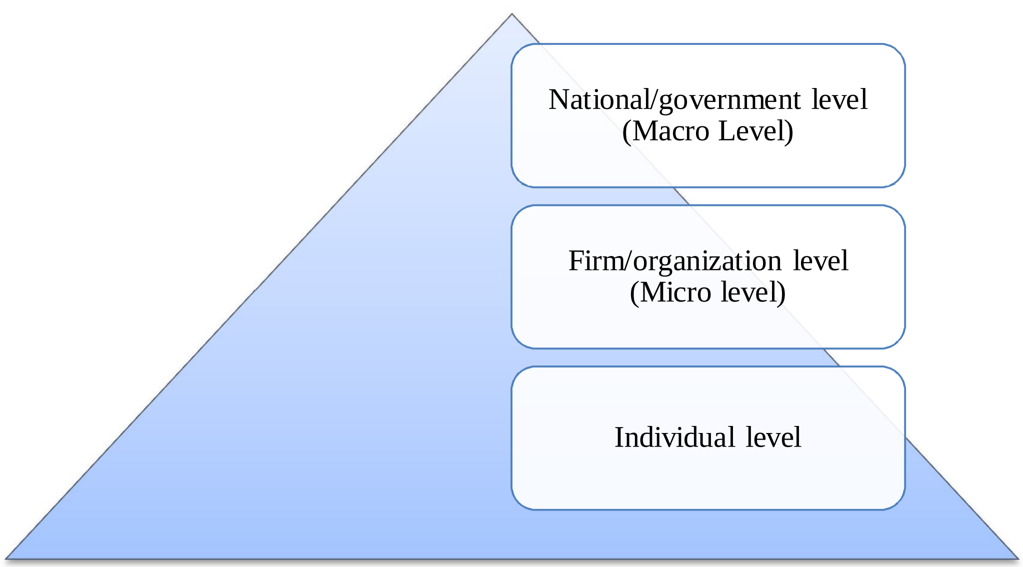

Figure 2 Levels of Technology Management

Technology management is a tool for the development of nation and economic growth. There are three levels where the technology management is mostly required *(figure 2)*.

V. Three 'P' of Technology Management

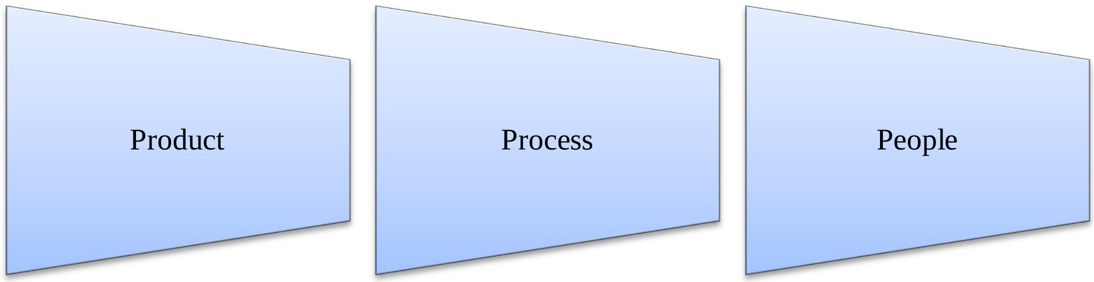

Figure 3 Three 'P' of Technology Management

There are three P's in technology management they are product, process and place (*Figure 3*). This three are also the determinants of a technology in an organization. First 'P' determines different types Product producing in the company. Second 'P' determines the Process of production. And the third 'P' determines the no. of people (staff, labour) working for the production.

VI. Activities of Technology Management

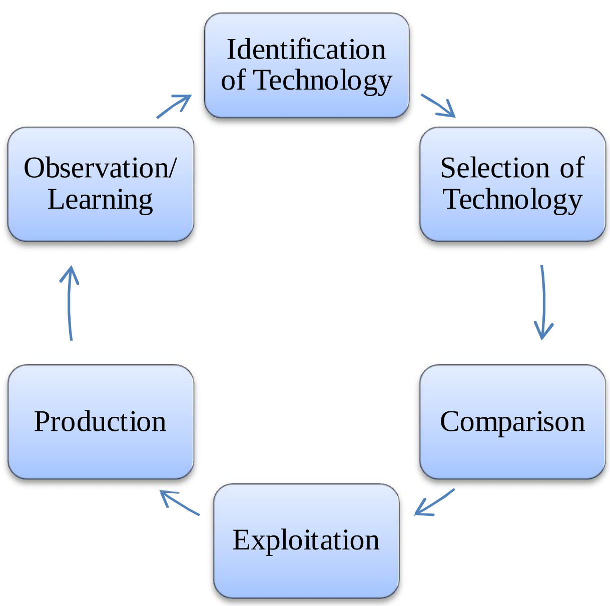

Figure 4 Activities of Technology

VII. Advantages of Technology Management

- Increases the standard of production
- Increases organization communication.
- New product and new market creation.
- Save time and effort.
- Improved customer service.
- Increases worker mobility.

- Increase worker efficiency.
- Improves hiring and recruiting.
- Reorganized administrative operations.
- Increase worker productivity.

VIII. Negative Aspects of Technology Management

- Automation.
- Inadequate knowledge and skills.
- Difficult to manage because of the constant change in technology.
- Very expensive process.

IX. Conclusion

Technology is the dominating factor in the growing competition of business. The life cycle of a product and the technology is also shortened which is influenced by technology management. So, the organizations should always monitor the technology to get adequate position in the market and it has to be managed effectively to generate wealth. There is always a need for new ideas and solutions to face modern competition. This may effect in rapid development on the study of technology management.