

Management of innovation

Student's Name

Institution's Name

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Management of innovation refers to both organizational and product innovation. By definition, innovation is the creation of a commercialized product from invention. Innovation management includes tools that enable engineers and managers to cooperate with a common understanding of goals and processes. Further, the concept allows companies to respond to internal and external opportunities as well as use its creativity to introduce new ideas, products or processes (Bradley et al., 2008). It is not relegated to R&D and involves individuals at all levels within the business framework contributing creatively to the development of the organization's product, manufacturing, and marketing. Through utilization of innovation management tools such as virtual prototyping and product lifecycle management, a company's management can trigger and deploy creative capabilities of its workforce for constant development (Bradley et al., 2008). To sustain or lead in innovation managers require concentrating on innovation networks which need profound and clear comprehension of its complexities. As such, innovation management can be viewed as a process of integrating, technology, organization, and market by iterating several activities such as searching, selecting, implementing and capturing the invented idea. Therefore it will be imperative to discuss commercialization of aeolipile from Greece and how the development of new product and services contributes to building and economy, help corporations stay in business and server an opportunity for individual success.

### **Commercialization of Aeolipile from Greece**

One of the things that would have been required in early Greece to commercialize aeolipile is the availability of innovators. After the invention of the 'steam engine' by Heron Alexandria, it did not go another level because Greece lacked innovators at the time. The engine did not revolutionize because there was no one to figure out how to mass produce it at an

affordable price (Bradley et al., 2008). The contract monitors were not so perceptive at the time. Therefore, Greece lacked innovators that would have made key technical development on some of the engine parts such as piston and condenser which would have permitted successful commercialization. Moreover, it was hard to use the machine to lower the wage bill because slaves were used as workers (Bradley et al., 2008). There were no applications where the Romans would have required the steam engine as it would have produce lack mechanical labor while consuming a significant amount of scarce resources.

Also, education and application of technology would have been required for successful commercialization of the engine. There was a need to develop complete technology before real impact of idea could be seen. However, development of the technologies that would have advanced the efficiency of the engine would have cost real money. Often product development costs much money than research (Bradley et al., 2008). Further, during the time, Greece society did not have mature technologies that could have been used to predict this cost and likelihood of success of the project. As such, it was difficult to make a good business case to develop a product out of the aeolipile that the market needed. Therefore, the society that existed in 50 AD would not have done much for Heron's steam engine.

### **Steam Turbine and Global Economy**

If the system has been used and there had been entrepreneurial people to introduce it to the economies of the time, there would be much successful global economy right now. This is because the engine would have enabled advancement in transportation and trade by empowering locomotive and steamships that would then be used to carry goods and people across transnational borders (Bradley et al., 2008). This would have helped the world to expand its economy as well as allow countries to engage in the long-distance movement of products and

people. Also, countries that are currently less developed would be more developed economically as the engine would have allowed people to move to the cities instead of working on the farms. Subsequently, it would have impacted businesses as it would have boosted production of natural resources and created new jobs thereby making countries less independent on a few industries such as agricultural and textile (Bradley et al., 2008). Moreover, the turbine engine would have been centered more on mass production which would have paved way for a global economy that is more successful than it is today. It would have provided greater turning point early that would have promoted business outlook globally than today.

### **How Innovation contributes to building the Economy**

Innovation is important for substantial development and growth of a country's economy as it is crucial for the creation of value and employment. Specifically, this occurs when it happens at regional, enterprise and national level because it leads to the development of new businesses and results in increased competitiveness gained through the transfer of technology (Cainelli, Evangelista & Savona, 2004). It serves as a key to taking into consideration equalization of traditional competitive factors such as the cost of production. Additionally, innovation comes with new technologies and products that assist in addressing the economic challenges facing a country. At the same time, it brings new ways of producing and delivering goods and services thus boosting productivity and creating new jobs (Cainelli, Evangelista & Savona, 2004). In connection to this, innovation helps to create an economy by addressing the issue of unemployment.

### **How Innovation help corporation Stay in Business**

From an organizational perspective, management may encourage innovation due to the value that it creates in return. It boosts productivity among employees by helping to develop new

processes that increase competitiveness and provide a meaningful differentiation (Smirti, 2014). Further, it allows organizations to become well adapted to the external environment. This enables them to react quickly and effectively to any risks and capture opportunities. This is because innovation helps to replace or improve the business process to increase efficiency and enable expansion of the range of the existing product or services which meet the changing customer needs and demands (Smirti, 2014). Additional value to the product and services allow the organization to differentiate their business from those of their competitors by enhancing perceived value of what is offered in the market. Also, a company that promotes innovation often has employees that are motive and fully involved in the business operations. Similarly, introducing innovation in a company help to reduce costs, build value for the brand, establish fundamental relationships and new partnerships and increase turnover as well as improve profitability (Abazi-Alili, Ramadani & Gerguri-Rashiti, 2014).

### **Innovation as Opportunity for Individual Success**

During the present economic condition, jobs are harder to find. However, some people lose their position. There is high competition in the current job market. Therefore, innovative individual stands a better chance of getting a job because organizations are looking for people who can contribute to the success of the company more (Autio et al., 2014). Such candidates are more likely to take up an opportunity they present itself in the market because they set themselves apart from the majority.

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