

Free essay about applied science and technology

[Technology](#), [Innovation](#)



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Question 1

Technologically, a fundamental difference exists between innovation and invention. Invention refers to the act of generating a product or presenting a process, idea or tool for the very first time. In an invention, there are no previous authors who may have presented such an idea in the past.

Innovation on the other hand refers to the process of continuously refining existing ideas or products in order to make substantial improvements to them. Technology is transferred from invention to innovation (Inzelt & Hilton, 1999). A good example of a technology invention is the Walkman which is a device that was able to play music and could be carried around to any place and users were able to listen to music from anywhere at any time of their convenience. The iPod, on the other hand, is a classic example of innovation in which its innovators were able to build on Walkman's concept and combined sleek design and ease of use as well making available thousands of songs to its users at any given time. Another example of technology invention was the mobile early mobile phone. This technology was later refined to smartphones. Innovation continues to date and has given rise to iPhones tablets with enhanced features after the improved concept of

smartphones (Giusto, 2012). Computer Science combined with various fields have revamped information technology in the 21st century which is the foundation for constant innovation (Blumenthal, Mitchell & Inouye, 2003).

Question 2

Evidently, technology becomes obsolete or less useful over time. In other words, innovation always surpasses invention (Kuczumski, 2011). As such, it is critical to continuously identify new ways to adapt to technology. The most important factor to consider in evaluating alternative applications for existing technologies is whether the alternative applications are affiliated to the core objectives and model of the business. Any alternative strategy should serve to provide a competitive advantage for an organization as well as satisfy the customer needs who are bound to interact with the alternative solutions. Organizational proficiencies lay the basis for competitive advantage in innovation (Rosenbloom & Spencer, 1996). Therefore, before embarking on alternative solutions, an organization should identify and quantify the resources necessary to start the process, the risks involved and their impact on the future of the business, and the market environment sustainability for such innovation (Grasty, 2012). The process should kick off once the performance of an organization remains stagnant for a long period of time or starts to decline over time. Similar organizations in the same industry can serve as a bench mark to determine whether the company is on the right track or needs to redefine itself in the wake of new technology.

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