

# Reflection of Innovation in Emerging Technologies for Sustainable Business Growth

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**Abstract :** Innovation is a choice that can be made by any organisation, but what mostly motivates companies to innovate is the profits, stability and growth and the risks involved. As part of the innovation companies may move towards new technologies to support their organization, and it will allow to have competitive advantage towards the innovative companies. This review will cover the reasons of why the companies move towards innovating in new technologies, what motivates them, what risks are associated with this decision, how a companies' strategies are taken into account, and how will it finally affect the daily operation of the organization. This report will help to analyse and evaluate the methods and the reasons why companies need to innovate.

**Keywords :** Incremental Innovation, Energy Efficiency, Emerging technology, Organizations.

## 1. INTRODUCTION

Innovation is the process and outcome of creating something new, which is also of value, in many organizations today, innovation covers the large part in their regular activities. The reason why organizations innovate, is to make certain stability in the business, and ensure that the business succeeds and helps you to adapt and grow in marketplace. This paper is to evaluate the reason and technique that motivates any organization to innovate, the 2nd part of this paper will critically asses the role of technology in EE's operations, and evaluate the advantages and drawbacks that EE's organization may run into by incorporating innovation in their business.

## 2. RESEARCH METHODOLOGY

There are several reasons that companies innovate, innovation is a choice that is made by any organization to work on their new ideas and improve their business, according to (Palmer, D. & Kaplan, S., 2015) there are many ways that organizations are motivated to innovate and improve their business. But why do companies need to innovate? In the past, many organizations have been able to survive even with very limited amounts of innovation. They focus on providing quality products and simply update them to a level that maintains their competitiveness in the market. This method still applies to some products with long lifecycles and few opportunities for innovation.

In any organization, when the innovation process is on their mind, there will be two ways to achieve success in expanding and emerging markets, first way refers to the term disruptive technologies and second way refers to sustainable technologies, in following paragraph explanation and reflection on how these two ways will help to motivate organizations innovating for both the terms is provided.

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According to Margaret Rouse (2015), a disruptive technology is one that change and innovate the current industry. Furthermore, it also creates a completely new innovated industry. Disruptive innovation basically is like basis of new technologies, products or services in an effort to promote and boost competitive advantage. In this context, the word disruptive does not means to interrupt or cause disorder, it means to replace.

As (Margaret Rouse, 2015) mentioned in the same article, in the enterprise, disruptive innovation is little risky, and the main reason because it requires employees to use and wrap different kind of approach towards product development or else marketing. Product which is unique also successful in in terms of ability to create new market opportunities and promote continuous innovation. An examples of disruptive innovation consists of the development of mobile phones, digital cameras, PDAs and e-book readers.

As mentioned in pervious paragraphs, they are two ways to achieve success in expanding and emerging markets, the first way was discussed in pervious paragraph, in this paragraph the sustainable technologies is discussed, According to (Sustainable technologies) the environmental professionals at Sustainable Technologies progress to the sustainable energy solutions by sharing the common goals for both agricultural and industrial applications. According to (Frank Boons) Innovation is very important for organizations, however, what is more important for organizations is being able to innovate sustainably. Sustainable innovation refers to exploring the current technologies and services, by trying to expand them and provide solutions and ways to solve the problems, with that technologies and be able to improve the key areas of the business which mainly refers to the products. The best way to be sustainable in this competitive market is by expanding without having to impact on the business and boarder impacts which refers to the environment and consumers.

According to (SSPP, 2015), Figure 1 illustrates, the sustainable economy framework focuses mainly on the economic and environmental pillars discussed above. A sustainable economy also provides additional social benefits such as job creation, poverty alleviation, and improved environmental conditions. In particular, the focus on sustainable agriculture and transportation, as well as more coefficient manufacturing, will result in improvements in all three pillars.

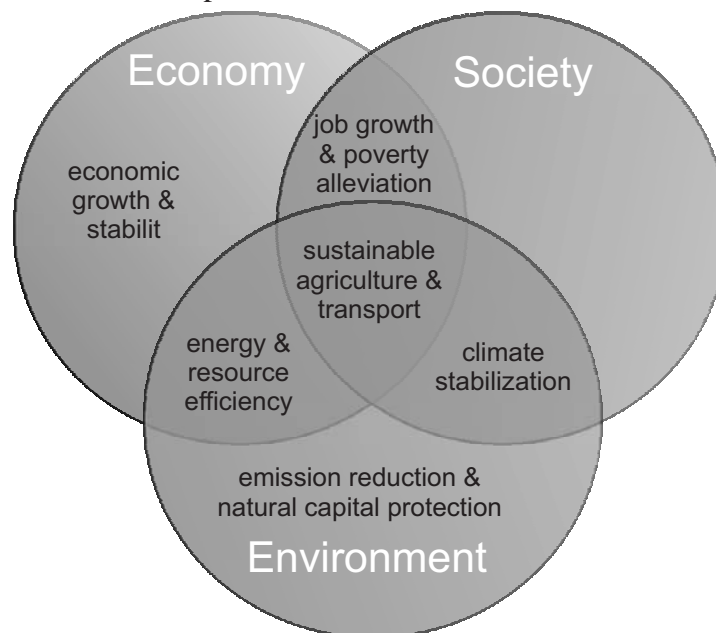


Figure 1: Sustainable Economy Framework

According to (Marc Heleven), there are 15 types of innovation, first one and the most important one that will be discussed only in this report is Incremental innovation, refers to seeking to improve the systems that already exist, making them better, faster and cheaper. . (Hoonsopon and Ruenrom) say that this type of innovation has diverse definitions. A lot of organizations, use the incremental innovation and (Gatignon and Xuereb) consider incremental innovation in relation to technology whereas (Govindaiajan

and Kopalle) state that they see it in terms of customer opinions. According to (Urbancova Hana, 2015), Companies innovate to stand above competing competitors to be able to top the industry, but they can only do this by getting aggressive benefits. When we refer to successful organizations like Apple company, apple usually develop new products by modifying the current products, to maintain their position and be the best in market, as the best phone company in the market, apple has regularly presented by the analysis and growth division, and by analysis and growth, means their technique to find what customer really wants, and how they find what the customer wants, well apple has always used the customer reviews very well and other reviews such as, client-to-peer conferences and other reviews are conducted with the current technology available. After all the information's needed are gathered by the analysis and growth division will include factors such as quality, costs, experience, design, personal image and being able to identify when a product is obsolete.

Companies can always utilize by using the existing knowledge and new information or idea in order to get innovation ball rolling. Companies use new information by combining it with its existing knowledge, however, the best method used to build-up new information is focus groups and interviews. For example, apple listen to what customers have to suggest and then based on the customer reviews and suggestions, they integrate with the information's they have on the next generation iPhone. Using the information and combining it with its existing knowledge is a type of knowledge management which is a key for companies to innovate in modern times.(Barjak et al) states that when you innovate, your whole business model changes. And according to (Urbancova Hana, 2015) companies need to innovate to stand above competing competitors, however, companies only focus on technologies which is already available in the market and try to integrate the new technologies by future strategy, instead of focusing on using IT strategies and older technology as emerging technology, meaning that producing IT strategies might be outdated in advance of its implementation. According to (Hazen, 2013), so overall there is a tremendous risk about the business so taking a look at emerging technology when writing in the IT strategy and helping to avoid the problem. After the emerging technology is been studied enough to identify if it could be used inside business strategy while another draft might be illustrated with a better assurance of not really being outdated for a while or short period of time.

### **3. TECHNOLOGY AND ITS ROLE IN EE OPERATION**

EE is a mobile phone network giant organization formed by collaboration of Orange and T-Mobile which both of these are also mobile networks. The important aim as a telecommunication company technology is to be successful in future business strategies.

Being able to have the largest coverage to provide 4G gave EE a big lead on the competitive edge over the competitors in term of being able to give customer what they need before other organizations can offer them better in the UK. As the research shows, 98% of UK Population is one of their rivals in 3G networks, as for Vodaphone managed to cover 80% which means EE provides better network for the buyers in mobile coverage at UK.

Meanwhile other organizations try to get the same coverage that is provided by EE in coverage of 3G networks. As for the quality of the 4G network, EE has considered to improve and expand, back in 2012, EE network has reached up to 85% of the customers and it was expanding in such a way of being ranked the UK best overall network by Root Merits, which gave their organization a good credit on their attraction towards the customers.

EE is an individualistic network provider, a positive result of credit will come from Apple, Samsung, HTC and other phone companies that are mobile phone organizations, the names mentioned just now are the organizations that EE buys and sells from. The continues production of latest technologies by these technology experts made a massive benefit in getting the latest mobile technology that is published in the market every time, meaning after using the improved futures that is been available to the buyers, new technologies will be available for same price they use to pay. EE can depend on customers continue their subscription and renew every time.

#### **4. INNOVATIONS AT EE**

Fourth generation which is full form of 4G, 4G system of mobile telecommunication provide internet access at much higher speed than 3G, in 2013 EE innovated to double the speed of their 4G network and made it available for 10 cities in UK, the reason behind this innovation is that people love to browse, and the faster they can browse the happier they can be, and if the customers aren't happy with the network provider, they will be changing the network provider, so EE are innovating to ensure that they keep their current customers happy and make much more customers than all its competitors.

According to (EE Looking to 5G) article, EE'S researchers are driving forward the frontier of mobile network technology. It is stated that more than three million people relish the benediction of state of the art superfast 4G network which is known as the fastest net in the United Kingdom. Apart from that, EE is also committed to continue at the mobile technology cutting edge. Improvement has been done prior to the mobile technologies in terms of speeds and strength of 4G.

With the continuous improvement on the 4G mobile technology, the next network technology namely 5G newly introduced. Along with that, member of the 5G, EE massively keep themselves involves in research into new networking technologies. In the same article, is it mentioned there is a high possibilities to expect to a 5G network that can convey peak rates of tens, or even hundreds of gigabits per second speeds in 10 years of time.

According to (Rawiya Kameir, 2015), in 2013 EE has introduced fibre optic broadband as one of the main services, this allows customers to access very fast network in their residence and mobile phones, other packages were also provided by EE like, television services and so on. Which this helped EE to become the largest telecommunication company in UK.

#### **5. ADVANTAGES OF INNOVATION AT EE**

The main advantages of using innovation in business strategy is, innovation has helped EE company to expand and become one of the biggest Mobile network company in UK. The main aim of EE is to become new digital backbone of Britain. Another advantage of innovation that helped EE to expand quickly was, EE was among the first companies to provide 4G network to the country, and this shows EE has been able to successfully innovate, not only keep their customers satisfied, but even make a lot of new customers daily. Because innovation keeps people talking about the companies' and their good services, and ones people talk about it every day, more people will be interested to use the Services of EE and become a regular customer.

Apart from the mobile network, it is very important to innovate correctly, the another reason of EE's success of innovating correctly was, developing more products and services, such as EE TV Smart Box and Mobile apps, Mobile apps helped because customer of reviews or Likes and dislikes, to know what is really lacking and what customer needs, overall developing more products helped EE to increase profits and make a lot of new customers.

#### **6. INNOVATION CONCERNS AND ISSUES AT EE**

One of the issues EE experiencing is that they are many network providers with 4G service, such as like Apple Company. However, there is always solution for every issues being faced, and the solution as simple as being prepared for new innovations in order to keep leading in the competition and new technology ahead.

Cost plays important roles in preparing new innovative ideas and researches, for example if EE has an idea that does not conclude the way they expected, either by getting behind their competitors for any reason or their idea is no longer used because the competitors came up with better ideas and technology needed. Anyhow this will cost EE a huge amount of money and will affect their race in the competition and keep them behind in future emerging technologies.

In innovation there is always risks, according to (Simon Goodley 2010), two of the competitors of EE, mobile phone brands Orange and T-Mobile, is to cut about 1,200 jobs. The company said the cuts, amounting to 7.5% of its 16,000-strong workforce, were intended to strip out duplicated roles following the tie-up between Orange and T-Mobile in Britain this year. Overall this was an advantage for EE.

## 7. CONCLUSION

In conclusion, there are many reasons to innovate, and innovating has its own advantage and disadvantage that is been discussed in this report, anyhow innovation is needed for companies to move forward in market and catch up with their competitors. In this report innovating sustainably is also discussed because in market competitions, competitors like Samsung, EE and apple, each company is trying to be better than the other. All of them, boost competitive advantage by bringing forth sophisticated support and services to their customers. No matter how innovation is important, it's all about planning and decision making in emerging technology.

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