

Review & Critical Discussion on  
**Innovation Concepts,  
Theories & Tools**



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RESEARCH

- LEADERSHIP
- TEAMWORK
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**INNOVATION**

Prepared by:  
*Chamila Dissanayake (105501)*



- IMPROVEMENT
  - DEVELOPMENT
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- MANAGEMENT



**Assignment 1**

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## **Introduction**

Innovation can be termed as generating new products or services or performing further process improvements; innovation terminology may differ from person to person, but in the business world, innovation is generally termed as the transformation of an idea into a valuable commercial product. Innovation is built on invention plus commercialization, whereas various strategies, concepts, methodologies, and tools back business innovation. Often businesses are facing turbulent situations due to the revolutionization of information technology, innovation, ever-changing customer requirements, and economic, political, and social structures, to combat these everchanging requirements certain innovative strategies are supported by tools, theories, and techniques. The purpose of this study is to identify innovation concepts, innovation theories, and innovation tools which are in practice and their usefulness, applicability, and characteristics using previous studies conducted by various scholars.

## **Innovation Concepts**

Innovation concepts are the framework and the typical ideology which govern the level of innovation which organizations practice and its competitiveness in the business world (Ricarda B. Bouncken, Viktor Fredrich, Paavo Ritala, Sascha Kraus, 2017). Innovative culture will be determined by technology, market, and innovation and several innovation concepts exist, and, in this study, incremental innovation concepts and radical innovation concepts will be discussed in detail.

## **Incremental Innovation Concept**

The incremental innovation concept refers to organizations that are sustained by undertaking minor developments and changes to organizations existing strategies, product and service offerings, and business processors and staying relevant to their current offerings. This concept mainly focuses on product lifecycle changes according to each stage of its life cycle irrespective of products or services. (Ricarda B. Bouncken, Viktor Fredrich, Paavo Ritala, Sascha Kraus, 2017).

In this process organizations will not focus on bringing in new technology to the market or groundbreaking customer requirements by bringing in new services or products to the market but

a gradual increase of product or service offerings which enable the organization to play and sustain its desired market structure (Yu-Shan Chen, Ching-Hsun Chang, Yu-Hsien Lin, 2014). Possible changes would be changes in market segments by expanding its segment to slighter new market while offering extended product or service offerings (Francisco Szekely, Heidi Strebel, 2013).

Practicing this concept requires moderate technological and process improvements and the organization's continuous contribution from all the parties including research and development, marketing, finance, operation, supply chain, strategic/ middle management, and ground-level employees, based on its existing contribution, resource, and knowledge base (Ricarda B. Bouncken, Viktor Fredrich, Paavo Ritala, Sascha Kraus, 2017). This concept enables organizations long-term sustainability while staying relevant and connected to the market needs with continuous improvements in technology with enhanced features (Francisco Szekely, Heidi Strebel, 2013). Gillet introduced various razors and blades, Coca-Cola introduced different taste products, and Cadbury introduced different flavored chocolates are a few examples of incremental innovation concepts which are practiced. The incremental innovation concept allows the organization to face less risk and market pressure while creating improved value for existing products and services according to the article difficulty in change identification, unique value creation, and competitors following the same trend are cons of this theory (Ricarda B. Bouncken, Viktor Fredrich, Paavo Ritala, Sascha Kraus, 2017).

### **Radical Innovation Concept**

Radical Innovation concept refers to a drastic change in the existing process by introducing massive technological change or product, or service introduction to the market which can be to the existing market or new market (Ricarda B. Bouncken, Viktor Fredrich, Paavo Ritala, Sascha Kraus, 2017).

Organizations will purely focus on disrupting the existing market through technological innovation enabling complex process interdependencies and creating greater uncertainty (Ricarda B. Bouncken, Viktor Fredrich, Paavo Ritala, Sascha Kraus, 2017). Radical innovation could be in the form of new product or service development, new market development, support service development, process innovation, or changes in sources of supply which will result in total change

in the existing offerings and create a new value proposition to the market (L.A.G. Oerlemans, J. Knobens, M.W. Pretorius, 2013).

The radical concept requires strong research and development capability, management and process involvement, strong technical compatibility, diversified team support, organization capacity in both financial and non-financial aspects, and ability to combat competitive offerings (Stanley F. Slater, Jakki J. Mohr, Sanjit Sengupta, 2014). Salesforce offers its customer relationship platform differently, Netflix entertains individuals, and Amazon dashboard button offering reordering households are a few examples of radical innovation concepts. Radical innovation more often faces high risk, complex market and customer adaptation processes, complex innovation structure, and diversified skill requirements while assuring achievement of this concept will break through the market, technology, economy, and society (Coccia, 2016). According to the article radical innovation will initiate mainly through key stakeholders approaching a top-down management structure where decisions will be made at the top of the hierarchy and processors will be followed by the middle and ground-level managers and employees. This will be a costly and risky approach and failure such as Web Van will create an adverse impact on stakeholders.

### **Innovation Theories**

The innovation process of an organization depends on factors such as concepts, ideologies, frameworks, and models to which the organization practice and adheres it will be termed Innovation Theories. These theories will govern the firm's innovation process which determines the success or failure of its desired goals and objectives. Different theories can be applied to diverse organizations which express their innovative efforts.

### **Stage-Gate Model**

According to the stage gate model, the innovation process comprises different stages and each gate needs to pass sequentially or cross-functionally to successfully achieve its target outcome (Cooper, 1994). These stages may vary from organization and industry levels depending on the requirements while having main stages or gates on idea generation, product and service development, marketing, and sales.

The stage gate model was revolutionized through different stages and the initial phase was used by NASA and US Military forces for their product developments, this model become more commercialized enabling second and third development phases which were practiced by firms such as Proctor & Gamble (Cooper, 1994). In the earlier stage, it was practiced as the Go-Kill version, by making sure of completion of the initial stage before moving into the next stage, and later it was practiced as a matrix structure by making sure each department act responsibly on complementary activities (Cooper, 1994). Current model act upon 6F's namely flexible, fuzzy, fluidity, focus, facilitation, and forever green where the first 3F's are more flexible and overlapping in nature, while fluidity, focus, and forever green focus on continuous development by focusing on each gate objectives precisely (Cooper, 1994).

Every gate including results from the previous gate, decision on Go-Kill-Hold-Recycle, while assuring whether the technological milestone is met, is according to budget, time, end objective, and whether it meets predefined objectives (Sharlene Biswas, Chris Akroyd, 2016). Most product development projects, Software development projects adhere to the stage gate method (Oliver Gassmann, Ellen Enkel, Henry Chesbrough, 2010). Efficient allocation of resources, fewer errors, and inclusion of whole organization representation are key pros of this method while high bureaucracy, gatekeeping level issues, time consumption, high payback period, and high expectations are a few of the cons of this model (Johan Grönlund, David Rönnerberg Sjödin, Johan Frishammar, 2010).

### **Innovation Diffusion Theory**

According to the innovation diffusion strategy, information and ideas will be spread and accepted in society by adopting various beliefs, required benefits from technological innovations, and feasibility of use over a period resulting in achieving the perceived expectation of accepting new business innovative products, processes, ideas, and technology. (Waleed Mugahed Al-Rahmi, Noraffandy Yahaya, Mahdi M. Alamri, Ibrahim Youssef Alyoussef, Ali Mugahed Al-Rahmi, Yusri Bin Kamin, 2019) (Morteza Akbari, Maryam Khodayari, Armin Khaleghi, Mozhgan Danesh, Hamid Padash, 2020).

Adaptation to new innovative phenomena will depend on the easiness and usefulness of the ideology in practice. Adoption will differ in many stages as innovators, early majority, late majority, and laggards based on the interest to innovate and trialability, complexity, observability, relative advantage, computability, and enjoyment (Waleed Mugahed Al-Rahmi, Noraffandy Yahaya, Mahdi M. Alamri, Ibrahim Youssef Alyoussef, Ali Mugahed Al-Rahmi, Yusri Bin Kamin, 2019)

Social fields, public health, justice and peace, agriculture, marketing, communication, and many more fields use the diffusion strategy of innovation successfully to attract society and the public to new technological initiatives (Morteza Akbari, Maryam Khodayari, Armin Khaleghi, Mozghan Danesh, Hamid Padash, 2020). On contrary, this theory will be a success in an environment in which adaptation is accepted and if prevention or termination is practiced the level of adoptions will be questioned. High time consumption opportunity cost also needs to be considered in evaluation (Thomas W Valente, Everette M. Roggers, 1995).

### **Innovation Tools**

Innovation tools are certain techniques and tools firms can use when executing innovative strategies. By using innovative tools organizations can identify opportunities, and threats that arise in the environment and possible strategies to overcome the same by responding to market needs efficiently and effectively. Potter's five forces and SWOT analysis will be discussed in detail as two innovative tools which will be used by many organizations.

### **SWOT Analysis**

An organization's strengths, weaknesses, opportunities, and threats are analyzed by SWOT analysis irrespective of the firm's size and industry in which it operates by focusing on both internal and external factors and it helps to identify what are firms good at and what strategies to excel, and what market opportunities and threats can arise (Leandro Pereira, Miguel Pinto, Renato Lopes da Costa, Álvaro Dias, Rui Gonçalves, 2021).

SWOT analysis is the most simple and clear tool which enables an organization to identify its internal capabilities and hidden blind spots of weaknesses and how it can excel in its inner capabilities to outbreak external threats and win opportunities in the market by positioning the firm in a unique value creation state (Peng Yuan, 2021).

According to the article simplicity, understandability, and organization-driven nature are identified pros of this tool, and the rapidly changing environmental factors, diverse innovations and inventions, organization's capability to fully analyze the situation and not following the organization's internal and external environment (PESTLE) are a certain drawback of this tool (Leandro Pereira, Miguel Pinto, Renato Lopes da Costa, Álvaro Dias, Rui Gonçalves, 2021).

### **Potter's Five Forces**

Potter's five forces is a tool developed by Michel Potter to identify the amount of industry rivalry among the firm and its competitive position. With an innovative, dynamic environment long-term sustainability and survival have become key to most organizations, and the 5 forces model helps to identify a firm's competitive position along with its opportunities and trends in the external market to identify suitable strategies to sustain in the long run (Lucia Kohnová, Nikola Salajová, 2023).

According to the article, a proper understanding of the current industry structure is key to a successful implementation of its strategic direction. The bargaining power of suppliers, and customers, the threat of new entrants, and substitute products are impacting firms' rivalry position in the industry. Changes in the 5 forces will determine the level of attractiveness to a firm from an investor perspective and a higher impact from the 5 forces will result in lower profitability making the industry less attractive to investors, and depend on the industry attractiveness may vary and the organization may adopt different strategies to overcome the profitability issue by studying the behavior of 5 forces. Apple and Paccar are a few companies that succeed in the market by successfully adopting the 5 forces model into practice (Lucia Kohnová, Nikola Salajová, 2023).

Based on the study in a rapidly changing environment these 5 forces will dramatically change and organizations should be able to adapt to changes quickly, failure will result in a strategic dilemma, on the other hand in the current context most organizations are welcoming partnerships and

alliances with backward and forward integration by minimizing the relevance of competitiveness and threat in the industry, and by applying relevant strategic and innovative initiatives firms can sustain in the market (Peng, 2021)

## **Conclusion**

This study focused on Incremental and radical innovation concepts the incremental concept focus on changes to the product lifecycle based on the stage in which it is operating and the whole organization needs to contribute effectively to become successful the second concept discussed was the radical innovation concept which demands disruptive change to existing market offerings or product basis while pushing a completely radical change to its existing offerings both concepts focuses on shareholder value creation in different approaches. Secondly, this study attempts to identify theories' contribution to business innovation, stage-gate theory and innovation diffusion theory were discussed in detail where stage-gate theory focuses on different stages in the process, and innovation diffusion theory attempts to understand how people will adapt to innovation based on their social behavior and acceptance through spread in the society. SWOT analysis and Porter 5 forces are discussed in detail to identify the different tools available to assess business innovation, both tools were simple and easy to understand while applicability within a quickly changing environment needs to be done with a careful strategic selection process as the environment in which business operates is very dynamic with various innovation and technological disruptions. Further study of external environmental analysis such as PESTLE should accompany the study to identify the deep nature of competitive external factors which affect business innovation.

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