



# PRODUCTION ENGINEERING ARCHIVES

 ISSN 2353-5156 (print)  
 ISSN 2353-7779 (online)

 Exist since 4<sup>th</sup> quarter 2013  
 Available online at www.pea-journal.eu

## Imitation and innovation in business environment

 Michał Wierzbicki<sup>1</sup>, Paweł Nowodziński<sup>2</sup>
<sup>1</sup> SIM FACTOR Sp. z o.o., Wielgolas Duchnowski 71 05-074 Halinów, Poland, ORCID ID: 0000-0002-6009-8826,  
 e-mail: Michal.wierzbicki83@gmail.com

<sup>2</sup> Czestochowa University of Technology, ORCID ID: 0000-0001-8706-9219

### Article history

 Received 10.03.2019  
 Accepted 25.03.2019  
 Available online 15.04.2019

### Keywords

 innovation  
 imitation  
 strategy of innovation  
 technological diffusion

### Abstract

The main aim of this article is to demonstrate that in a dynamically changing business environment, an organization should focus on embracing imitation strategies such as a safer form of building up its market position. The author addresses issues of innovation and imitation, provides definitions and defines realistic conditions and advantages of imitation strategies. Innovation does not guarantee a company's market success. The research conducted has shown that imitation is not only a commonly used strategy of creating competitiveness, but it is also the foundation of many firms' success stories. Innovative imitation, technological diffusion, creative imitation should be treated equally as innovation – as another development strategy, different form of strategy implementation, assuming less risk and wider market access with less risk and cost.

DOI: 10.30657/pea.2019.22.07

JEL: O32, M11

## 1. Introduction

After the accession of Poland to the European Union, it has become widely known in literature and in business practice that innovation or innovation processes are at the heart of the economic success of any business. However, such a view can be called circular reasoning, more aptly, a social myth. The illusory perception of innovation, according to the author, has a minor relevance to real economic processes, and, above all, to the facts of research and statistics (Fichman, et. al. 1999; Cieślak, 2014).

The myth of innovation and its salutary influence on the company has also been appropriately exposed by S. Shane, a leading American entrepreneurial researcher, in his monograph, „*The Illusions of Entrepreneurship: The Costly Myths That Entrepreneurs, Investors, and Policy Makers Live By*” (Shane, 2008). The author clearly indicates that the pursuit of innovation, based on decisions made by emotions or in relation to limited knowledge, is a trap for many entrepreneurs. Other authors have a similar way of thinking (Shane, 2008; Howcroft, 2001; Peppard et. al 2011).

The aim of the article is to reveal the myth of innovation, especially in terms of business strategy and its development. The author emphasizes the risk involved in the implementation of innovation by the company. In business practice, companies often choose strategic pathways that do not focus on innovation but rarely on imitation due to risk mitigation and maximization of potential benefits. Undoubtedly, the risk of

innovation is very difficult to measure, no one publishes data showing how many micro-enterprises, start-ups, or even experienced, many years of large corporations lost their position or went bankrupt as a result of investment decisions in innovation. Such a situation could be caused by the implementation of a strategy based on conviction about beneficial effect of innovation.

## 2. Innovation and imitation

The definition of innovation is changing and evolving, but it constantly refers to its early Latin origin, „*innovatio*”, or renewal. Innovation is a series of activities leading to the creation of new or improved products, new technological processes or organizational systems. However, there is no single commonly accepted definition of innovation. (Baregheh et al., 2009; Gopalakrishnan et al., 1997). J.A. Schumpeter introduced this term to economics, pointing out five instances of innovation (Schumpeter, 1960; Wiśniewska, 2013):

- introduction of new goods that consumers have not yet had to deal with,
- introduction of a new method of production that has not yet been tested in the industry,
- the opening of a new market, i.e. one in which a given type of domestic industry has not yet functioned, whether or not it existed before,

- acquisition of a new source of raw materials or semi-finished products, regardless of whether the source already existed or had to be created,
- implementation of a new organization of some industry.

Essential changes in industry have generated a new commercial environment in which business processes cross traditional company boundaries and combine across industrial sectors. This means that innovation develops in a new direction, requiring rethinking of the current concepts underlying innovation (Berkhout et. al. 2006).

In turn, „innovation is a special tool for entrepreneurs, by means of which they make an opportunity to undertake new business or to provide new services.”(Drucker, 1992). In his opinion, „innovation does not have to be technical, it does not have to be anything material.” Yet another definition of innovation can be found in the Operational Program Innovative Economy, where innovation is understood as the introduction of to practice in a company a new or significantly improved solution for a product (product or service), process, marketing or organization. Once again, innovation can be distinguished at the enterprise level, at the level of the economy, but also at the world level, putting increasing demands on the one on which the change is new. Therefore, the essence of innovation is very broad and difficult to define.

Innovative phenomena are dynamic ones. The innovation development starts with product and process innovations, but it also consists of organizational innovations. Some attempts to judge or clarify such technologies are innovative while others are not, which is a bit contrary to the fundamental idea of innovation established on a basic rule according to which innovation is related to a change. One common foundation related to all the definitions of innovation is that it is a business activity in the area of introducing novelty (new solutions) in different areas of the firm's activity.

When identifying innovation according to the above definitions, it should be emphasized that imitation it is also an expression of entrepreneurship (Vyas, 2005).

However, the imitation is perceived negatively. And yet, as a word, it is marked negatively with quite a strong association with backwardness and even acts outside the law. In the opinion of some managers - it does not allow to create future value and impose other conditions of the market game. This kind of assessment is typical of Western cultural circle, and the inhabitants of the Far East have repeatedly proven that imitations are not negative, but produce positive economic results and can even be publicized because they create new value (Zhou, 2006; Bolton, 1993, Posen et. al, 2013; Xie et. al, 2006).

Imitation should not be perceived as an exceptionally original creative act, but smart use of what has already been invented or already exists/was designed to achieve new market or organizational value. Imitation or creative diffusion can be defined as a search for better use of existing potential of the company. It is related to different resources: work, knowledge and capital, etc. Imitation should also be seen as an alternative to innovation, but less risky, safer and usually less costly to an entrepreneur who can achieve business goals. Sometimes imitation may not provide technological leadership in a given

market, but the mere strategy of imitation in its intentions pursues it, only with far less risk and cost than innovative strategies chosen by the leaders.

### 3. Innovative imitation

The risk of innovation can also be seen as a strategic business activity that seeks innovation opportunities, but, because of cost and technological risk, it does not want to take on the burden of being a pioneer. In order not to fall into the trap of traditional imitation as creative diffusion, creative imitation can be called “*Imovation*”, a strategy of imitation innovation. Innovation models are widely used in strategic management of business. In the course of time, a movement from linear to more complex models can be observed. Any enterprise can choose the most suitable model, according to its work specifics. The attitude of entrepreneurs towards withholding intellectual property is changing: open innovations are gaining popularity as the aim is to commercialize the developments which are not used by the enterprise or are not considered a commercial secret. The use of imitation is becoming more popular and common (Shenkar, 2010; Lindemanis, 2013; Krzakiewicz, 2016). The possible approach is, that organization would be able to assimilate innovative technology which was developed by others. Then, the organization given is able to implement own original solutions on such a basis, simultaneously. The authors present numerous advantages of imitation enterprise development strategies (Yong-gang, 2004; Shenkar, 2010).

In this day and age, technological development is progressing so rapidly that the traditional protection of intellectual property is being lost, or at least its effectiveness decreases. Time and costs associated with patent procedures become a huge barrier for entrepreneurs. In addition, it is worth pointing out that international legal regulations, patent and copyright law are relatively easy to evade, which, in turn, enables the emergence of substitutes (Porter, 1989). Even the most unique and innovative product, after a few months, is available from many manufacturers, often with very aggressive price competition. In addition, free strategic complements can raise a firm's profits, while free strategic substitutes can lower profits for potential competitors (Parker, et al, 2000).

It's worth pointing out that the benefits of imitation enterprise development are not limited to relatively lower imitation costs compared to the cost of creating original, pioneering innovations and their implementation. The follower has the ability to observe the response of the audience to a new market offer, analyses the mistakes in the process of launching a new product, give it a chance to offer a new version of a new product, or develop a more effective marketing strategy (Cieślak, 2014). Imitators mostly benefit from the company's previous effects and efforts, including changes in attitudes and needs of consumers, or from the leaders in material and technical infrastructure (Janssen, et al. 2001).

For example, at present, almost no one remembers that the pioneer in the introduction of payment cards was the Diners Club, which still exists as a company itself, however its market share is marginal. The Diners Club has made a tremendous

effort to convince buyers to use the card and sellers to accept it. They also introduced card readers and an international system of document flow and payment. More companies in this industry could benefit fully from the effects of these innovative ideas and investments (Leblebici, 2012; Cieřlik, 2014; Staykova, 2015).

#### 4. Strategy of imitation

As far as a proper definition of an enterprise strategy in which the driving force and development becomes imitation is concerned, it is still a problematic one. Such a strategy can be described as imitation of the activities of competing companies in terms of product selection, price level, the use of similar distribution channels, and the promotion-mix instruments. This strategy is cost effective especially in marketing research (Witek, et al, 2008). An entrepreneur who engages such a strategy uses the market leader's experience as well as the demand he has generated to gain a strong competitive position in the emerging market.

The company, whose strategy is predominantly based on imitations, focuses on streamlining the product lead and improving its marketing efforts (Wanasika et. al, 2011). According to J. Adamczyk, who points out a number of variations of the imitation strategy, among which one should distinguish the strategy of flexible imitation, it is based not only on the use of technology or the leader's product but also on the better recognition of the market. The strategy of flexible imitation is to adapt the quality of the newly introduced product accordingly to the requirements of chosen market segment. It could be used in the growth phase or maturity phase of the product life cycle. The firm avoids the risk of securing the demand for a new product and then disseminating innovation. In addition, there is a place to make such changes and improvements that will increase a product's chances of success and will make the substitute more recognizable and, as a result, the substitute may become more successful than the original product (Rivkin, 2000; Adamczyk, 2008).

Taking into account the maturity of the company, W. Janasz characterized two different type of possible strategy: imitation strategy and advance strategy. An enterprise must choose a pattern to imitate, i.e., own development or industrial development of another entity. The imitation strategy comes down to choosing the already proven path of enterprise development, but under certain conditions it may be a prerequisite for the transition to a pre-emptive strategy (Janasz, 2011). It is characterized by great creativity and is usually associated with large investment expenditures. Advance can be achieved by diffusion of already existing technology, innovation, to achieve better market position or new channel to reach the market. Diffusion of imitation with advanced strategies can significantly reduce risk and, thus, cost (Lee, et al. 2012).

It's worth raising a common issue related with a lot of failures related to the company's innovative actions. There are a lot of examples in the field of innovative clusters (Mazur et al, 2016). In general, there is a lack of serious public debate on the importance of innovation in the Polish economy. The second problem is a negative valuation of imitation, which is

generally associated with backwardness, which can have a direct impact on decision makers in the area of enterprise management strategy. However, one can say that the pursuit of innovation is the only recommended method of obtaining technological leadership in a given market. Meanwhile, research into the development of Polish enterprises shows that the fast growing ones, the so-called „Gazele Biznesu” implement an imitative strategy based on already available technologies and organizational solutions (Gorynia, et al 2005; Sipa, et al, 2015).

As smart companies use imitations to gain strategic advantage, from the strategic point of view and from whole enterprise perspective, the imitation strategy should not be perceived as a worse type of strategy. Most of all, utilization of such a strategy could be safer, it involves less financial expenses, and can even provide greater market success (Chang, et al, 2003; Cieřlik, 2015).

#### 5. Imitation as a source of success

The knowledge and information-based modern economy requires a company to continually improve its competitiveness in order to achieve a greater profitability and, thus, a better market position (Tarapata, 2014). In traditional perception, the factor that guarantees this advantage is innovation. Innovation is undoubtedly a tremendous driving force for modern economies, demonstrating the development and maturity of businesses, and, therefore, playing a key role in building a management strategy for both the company and the economy. There is a common opinion that, due to innovative activities within the company, the innovative strategy will be the remedy for all the wrongs and could be seen as a panacea for increasing the value of an enterprise. There are a lot of publications which clearly show that high-tech companies, such as Apple, Google, or Microsoft have achieved their spectacular success owing to breakthrough innovations, and, that it is innovation which made the transformation from a “garage” stage to a global corporation stage possible.

As far as Apple Corporation is concerned, it should be mentioned as a curiosity for ground-breaking innovations. Also, the history of the Xerox Star computer and the operating system developed by Xerox PARC (Palo Alto Research Center) are worth mentioning as they became an inspiration both for Apple and Microsoft Corp. “The inspiration” was related to the operating system with graphical interface as well as design and architecture of personal computer. Apple not only copied the whole idea to build its first computer and operating system, but also tried to patent the idea of a graphical interface of the operating system as its own. Microsoft and Hewlett-Packard wanted to do the same. The patents were intended to cover not only the software itself, but the idea that the user interface could be controlled by a computer mouse that was discovered at the turn of the 1970s and 1980s. The whole conflict between the three major high-tech companies ended in court. Apple Computer, Inc. sued Microsoft for copyright infringement and wanted to prohibit Microsoft and Hewlett-Packard from using a graphical operating system, as well. In the opinion of Apple's lawyers it was too similar to Apple's

Lisa (Macintosh operating system). The court dismissed Apple and Xerox. Interestingly, neither Apple nor Microsoft were able to prove the originality of their technology in court, and the court's capital and technology connections have further reduced their credibility and led to a more defensive approach to innovation (Barney, 1995).

The above story is a quite proper example that innovation is not necessarily the heart of the success of today's world leading IT companies, despite their very spectacular business history. On the other hand, there is interesting research conducted by A. Bhidé. He surveyed 500's rated companies (including ones that are 8 or more years old and achieved sales growth in four consecutive years at a minimum rate of 55% per year) and the result of this research is that innovation is not a dominant factor of market success (Bhidé, 1999). This research confirms that companies which achieved respectable financial results did not build their position on the basis of innovation. Their strategy was based on a fast verification of a proven business /often based on imitation strategy/ and minor adaptation of a product or service already available on the market.

As far as the impact of innovation on company's success is discussed, there are a lot of opinions, that the global innovation sector is not so giant as it seems to be and it is mainly concentrated in not in a very large number of countries (e.g. USA, Japan, Germany, France and Italy). The rest of the world is copying the inventions. As a conclusion, due to literature review, the strategy of "smart" imitation should be seen as a one of strategy scenario for contemporary companies (Robinson, et. al. 2002; Lee, et. al, 2012; Brondoni 2014; Stodolak, 2017).

## 6. Summary and conclusion

In the world of low margins and very turbulent environment, with the challenges of high-speed scientific and technical progress and with huge global competition the effective strategy is the only possible option. According to the literature overview, efficient and effective strategy or even project or program design and then effective imitation implementation within the organization is:

- less risky than marketing innovation,
- less expensive than pioneer technology or product,
- faster to implement,
- more viable to maintain.

Creative imitation gives the management board a better chance of success than risking a challenge in the area of classic innovation.

As part of the research conducted, the information gathered allows to emphasize that the experience of many companies show a characteristic phenomenon: market success does not always relate to companies that have been prepared (during the time consuming process) for innovation. Such a companies operate on a high level of risk and on a high level of expenditures. However, those companies that are inspired by innovation, by observing a „pioneer „, could prepare a “smart” competitive and effective imitation. Moreover, it has to be said

that very often the work on the preparation and implementation of imitation leads itself to the creation of spontaneous innovations such as improvements making imitation a solution, a product better than an innovation introduced with a high cost by a company that acts as an innovator.

It is also justified in the economy history that existing innovation leaders such as Japan, South Korea, and Taiwan were mainly focused on industrial imitation during the post-war years. It was not until the turn of the 20th century, that large number of technology transfers and development of their own facilities allowed them to accumulate financial resources and, as a result, to rise rapidly. Imitation strategies in highly developed countries seem to be a natural milestone in the development of technology and products as well as an effective strategic management.

## Reference

- Adamczyk, J., 2008. *Marketing międzynarodowy*, Oficyna Wydawnicza Politechniki Rzeszowskiej, Rzeszów.
- Baregheh, A., Rowley, J., Sambrook, S., 2009. *Towards a Multidisciplinary Definition of Innovation*, Management Decision, 47(8).
- Barney, J.B., 1995. *Looking inside for competitive advantage*. Academy of Management Perspectives, 9(4).
- Berkhout, A. J., Hartmann D., Van Der Duin P., Ortt R., 2006. *Innovating the innovation process*, International Journal Of Technology Management, 34(3-4).
- Bhidé, A., 1999. *The Origin and Evolution of New Businesses*, The Oxford University Press, Oxford.
- Bolton, M.K., 1993. *Imitation Versus Innovation: Lessons To Be Learned From The Japanese*, Organizational Dynamics, 21(3).
- Brondoni, S.M., 2014. *Innovation and Imitation for Global Competitive Strategies. The Corporation Development Models of US, Japan, Korea, and Taiwan*. Symphonia. Emerging Issues in Management, (1).
- Chang, S.C., Yang, C.L., Cheng, H.C., Sheu, C., 2003. *Manufacturing Flexibility And Business Strategy: An Empirical Study Of Small And Medium Sized Firms*. International Journal of Production Economics, 83(1).
- Cieślak, J., 2015. *Imitacja nie jest zła*, Rzeczpospolita, 22.05.2015.
- Cieślak, J., 2014. *Iluzje innowacyjnej przedsiębiorczości*, Kwartalnik Nauk o Przedsiębiorstwie, vol. 3, Oficyna Wydawnicza SGH, Warszawa.
- Drucker, P.F., 1992. *Innowacja i przedsiębiorczość. Praktyka i zasady*, Państwowe Wydawnictwo Ekonomiczne, Warszawa.
- Fichman, R.G., Kemerer, C.F. 1999. *The illusory diffusion of innovation: An examination of assimilation gaps*. Information systems research, vol. 10(3).
- Gopalakrishnan, S., Damanpour, F., 1997. *A Review Of Innovation Research In Economics, Sociology And Technology Management*. Omega, 25(1).
- Gorynia, M., Jankowska, B., Owczarzak, R., 2005. *Co-Operation Strategies Of Polish Companies As A Response To Foreign Investors' Expansion Into The Polish Market*. The Poznań University of Economics Review, 5(2).
- Janasz, W., 2011. *Strategie organizacji innowacyjnych. Przedsiębiorstwo zorientowane na wiedzę*, Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania nr 21, Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin.
- Janssen, M.A., Jager, W., 2001. *Fashions, Habits And Changing Preferences: Simulation Of Psychological Factors Affecting Market Dynamics*. Journal Of Economic Psychology.
- Krzakiewicz, K., Cyfert, S., 2016. *Imovation In Shaping Dynamic Capabilities Of Organisations*, Management, 20(2).
- Lindemanis, P., 2013. *The Use of Innovation and Imitation Models in Strategic Business Management*, Starptautiskās Zinātniskās Konferences Rakstu Krājums: Daugavpils Universitātes 55, Latvia.
- Leblebici, H., 2012. *The Evolution Of Alternative Business Models And The Legitimization Of Universal Credit Card Industry: Exploring The Contested Terrain Where History And Strategy Meet*. In History and Strategy, Emerald Group Publishing Limited.

- Lee, R.P., Zhou, K.Z., 2012. *Is Product Imitation Good For Firm Performance? An Examination Of Product Imitation Types And Contingency Factors*. Journal of International Marketing, 20(3).
- Mazur, V.V., Barmuta K.A., Demin S.S., Tikhomirov E.A., Bykovskiy M.A., 2016. *Innovation clusters: Advantages and disadvantages*. International Journal of Economics and Financial Issues, 6(1S).
- Parker, G., Van Alstyne M.W., 2000. Information complements, substitutes, and strategic product design. Substitutes, and Strategic Product Design.
- Peppard, J., Marston, L., 2011. *Avoiding the Traps of Information Technology Innovation*. Research Paper, IT Directors Forum.
- Porter, M.E., 1989. *How Competitive Forces Shape Strategy*. In *Readings In Strategic Management*, Palgrave, London.
- Posen, H.E., Lee, J., Yi, S., 2013. *The Power Of Imperfect Imitation*. Strategic Management Journal, 34(2).
- Rivkin, J.W., 2000. *Imitation of complex strategies*. Management Science, 46(6).
- Robinson, W.T., Chiang, J., 2002. *Product Development Strategies For Established Market Pioneers, Early Followers, And Late Entrants*. Strategic Management Journal, 23(9).
- Sipa, M., Skibiński, A., 2015. *Innovative Strategies of Small Enterprises in Poland*. Liberec Economic Forum.
- Staykova, K.S., Damsgaard, J., 2015. *The Race To Dominate The Mobile Payments Platform: Entry And Expansion Strategies*. Electronic Commerce Research and Applications, 14(5).
- Stodolak, S., 2017. *Obserwatorfinansowy.pl, Lepiej więcej inwestować w edukację niż w innowacje*.
- Schumpeter, J.A., 1960. *Teoria rozwoju gospodarczego*, PWE, Warszawa.
- Shane, S., 2008. *The Illusions of Entrepreneurship: The Costly Myths that Entrepreneurs, Investors and Policy Makers Live By*, Yale University Press, New Haven USA.
- Shenkar, O., 2010. *Copycats: How Smart Companies Use Imitation To Gain A Strategic Edge*, Harvard Business Press, Boston.
- Tarapata, J., 2014. *Innowacje jako kluczowy element budowania wartości przedsiębiorstwa*, Journal of Management and Finance Vol. 12(3)/1, Gdańsk.
- Wanasika, I., Conner S.L., 2011. *When Is Imitation The Best Strategy?*. Journal of Strategic Innovation and Sustainability, 7(2).
- Wiśniewska, S., 2013. *Skuteczność niekomercyjnych instytucji otoczenia biznesu we wspieraniu innowacji marketingowych małych i średnich przedsiębiorstw*. Uniwersytet Ekonomiczny, Kraków.
- Vyas, V., 2005. *Imitation, Incremental Innovation And Climb Down: A Strategy For Survival And Growth Of New Ventures*, The Journal of Entrepreneurship, 14(2).
- Xie, W., White S., 2006. *From Imitation To Creation: The Critical Yet Uncertain Transition For Chinese Firms*. Journal of Technology Management in China, 1(3).
- Yong-gang, L. I., 2004. *Strategy Choice of Industry Cluster between Creation and Imitation*, China Industrial Economy, vol. 12.
- Zhou, K.Z., 2006. *Innovation, Imitation, And New Product Performance: The Case Of China*, Industrial Marketing Management, 35(3).

---

## 商业环境中的模仿和创新

---

### 關鍵詞

革新  
仿制  
创新战略  
技术扩散

### 摘要

本文的主要目的是证明，在动态变化的商业环境中，组织应该专注于采用模仿策略，例如建立市场地位的更安全形式。作者论述了创新和模仿的问题，提供了定义，并定义了模仿策略的现实条件和优势。创新并不能保证公司的市场成功。所进行的研究表明，模仿不仅是创造竞争力的常用策略，而且也是许多公司成功故事的基础。创新的模仿，技术传播，创造性模仿应该被视为创新 - 作为另一种发展战略，不同形式的战略实施，假设风险更小，市场准入更广，风险和成本更低。

---