

## The analyses of marketing strategies for innovations

V. Kharchuk<sup>1</sup>, I. Kendzor<sup>2</sup>, N. Petryshyn<sup>3</sup>

<sup>1</sup> Department of management and international business, Lviv Polytechnic National University

<sup>2</sup> Department of Business, Furtwangen University

<sup>3</sup> Department of foreign economic and customs activity, Lviv Polytechnic National University

79013, Lviv, Bandery st. 12

E-mail: viktoria-online@mail.ru

*Received January 26.2014: accepted February 20.2014*

**Abstract.** Nowadays, innovations are necessary conditions for enterprise sustainable development. Moreover marketing strategy is the crucial element of ensures diffusion of innovation. The purpose of marketing strategy is to conduct market analyze, segment the market, develop marketing approach, right product portfolio and finally marketing plan. This article highlights the comprehensive role of marketing strategies for innovations. The results show, that marketing analyze for marketing strategy enables enterprises to go beyond the solely understanding of customer needs, thus enabling them to develop unexpected innovations. Marketing strategies also help companies to overcome barriers, associated with innovation commercialization. At the same time innovations can be a trigger for new marketing methods and instruments.

**Key words:** innovations, marketing strategy.

### INTRODUCTION

The economic growth of most of the developed countries heavily relies on new technologies and innovations. According to McKinsey Global Survey [1], 84% of executives, say that innovations are extremely or very important to their company's growth strategies. However as the result of vanishing market borders, market internationalization, shorter product life cycles and more sophisticated customer demands, innovation products and services must be commercialized in much shorter time frames, than before. [2] The only possible solution to this dilemma is to develop effective marketing strategy, which is able at the shorter time frame to bring innovation to the market.

The role of marketing for the development and successful implementation of innovation products and

services is high. According to Aron and Liem [3] entrepreneurial orientation, market orientation, marketing capability and innovation capability are the prerequisites for higher competitive advantage and higher marketplace performance. Firms apply innovation capabilities to create innovations and market capabilities to be able to sell innovations effectively. In fact the alignment of both capabilities enables firm to develop high competitive marketing strategy for innovations and thus is giving firm a higher competitive advantages. The key characteristics of marketing strategy for innovations are: becoming market orientated, determining distinctive capabilities, matching customer's value requirements to capabilities and achieving superior performance. [4] Marketing strategies play dubious role for innovations. Firstly marketing analyze enables companies to look closer for the market demand and thus identify the customer desirable products and services. At the same time such factor as demand together with openness, public research, and entrepreneurship, access to finance, competition and skills is one of the main sources for innovations.[5] The analysis of demand can bring interesting insights about consumer preferences, market features and market trends. This information can be taken in consideration while developing the innovations. Here we can state, that during the process of doing marketing analysis for marketing strategies unexpected innovations can appear. Secondly, well developed marketing strategies enable companies to overcome market barriers associated with innovations. Innovations are characterized as unexpected random events which

are not always immediately accepted by customers, even if they show higher superior performance. For some innovations, as radio or automobile it took decades to be mass customized. The problem of such constraints is the wrong marketing approach to innovation commercialization. The right approach to the development of marketing strategy can considerably facilitate the process of innovation penetration to market and it wide acceptance by customers. Thirdly innovation products and services also can give a rise to innovative marketing approaches. According to Eurostat [6], in Germany around 50% of all innovative companies apply also innovation marketing methods. In this case innovations can influence the development of marketing strategies.

This article is designed as follow. Firstly we will analyze the influence of marketing analysis regarding the development of innovations. We will highlight the main theoretical models, which underlie marketing research techniques, which can predict or contribute to innovation development. Then we will look closer to the main barriers, which constraint innovation commercialization. In this part we will also highlight the characteristics of marketing strategies, which can overcome these barriers. Finally we will stress the impact of innovations for innovative marketing methods. In conclusion we will summarize our results and put all main findings together.

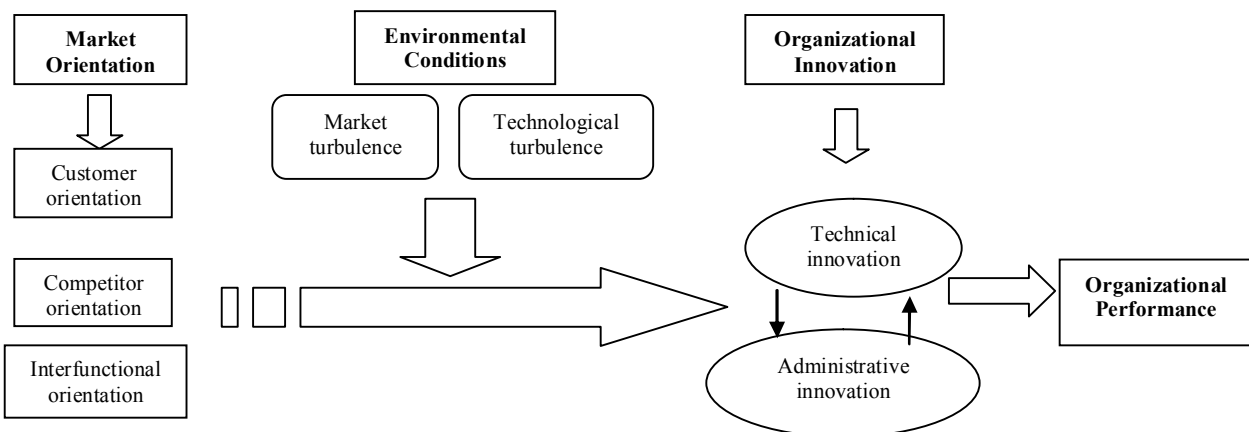
**MARKET ORIENTATION, AS A PREREQUISITE FOR INNOVATION CREATION**

According to Piercy and Cravens [4], market orientation is one of the main elements of marketing strategy. Market orientation is comprehensive function of marketing department, which also has a positive impact on firm's performance.[7] Market orientation consists of three main elements: consumer, competitor and interfunctional orientation.[8] All three elements are important for collecting market relevant information and thus are the prerequisites for innovation creation. In particular, Gatignon and Xuereb [9] states, that competitor orientation is important, when firm wish to

develop innovation with lower costs and thus to create superior competitive advantages. On the other hand consumer orientation is useful when market demand is relatively uncertain. But how can marketing analysis develop innovations? It can be done through marketing analysis instruments, which include: days on shop floor, bespoke client interaction, market sensing and customer feedback (NESTA).[10] They give firm a certain kind of marketing intelligence [11], which includes not only the research of customers needs, but also the identification of factors, which underlie their needs: governmental regulations, social changes, technological advances, socio-cultural relationships. Thus going beyond the only understanding of customer needs enables organization to contribute to innovations.[12] Figure 1. presents in details the market orientation – innovation – performance relationship.

Especially marketing analysis is powerful source of innovations in so known *proliferation* phase.[13] “Proliferation phase is the time when projects are put to the test on the market and undergo changes, with customers adding on elements that research never had in mind.”[13] During this phase innovations can blossom in many different directions.

The evidence of the high importance of market driven factors for innovation creation is also strongly supported by data of Europeans enterprises. In Sweden, the share of all innovative companies making the high use of sources for innovation from information received from customers during 1998-2000 was 48,34%, in Germany and France this number was 34,58% and 34,18% respectively.[13] Such standpoint, that marketing is the element of innovation development can bring some controversies to the traditional view, that innovations are solely responsibility of research and development department. Neither R&D and of course not the marketing department can separately achieve high innovation results. To achieve full innovation capabilities it is important to have the cooperation between two departments. [14]



**Fig. 1.** Market orientation – innovation – performance relationship [12]

## INNOVATION COMMERCIALIZATION. BARRIERS AND SOLUTION

The process of innovation commercialization is characterized as long and resource consuming processes with the high risk of final customer rejection. The adoption of innovation or innovation diffusion may last for several years or even decades, before it can be finally accepted by customers. For flash memory, the pre-diffusion period lasted for 13 years – from its invention in 1988, till it achieved its mass customization in 2001. For the industry of mobile telephony it took 37 years (from 1946 to 1983). The time of innovation adoption depends directly on the extent of customer resistance to purchase innovation.[15] Customer resistance in turn is directly caused by barriers, which innovations create. Ram et al.[15] identifies between two main groups of innovation barriers: functional and psychological. The list of all functional and psychological barriers is presented in Table 1.

Until customer is not fully aware of all advantageous and disadvantageous of certain innovation he will be not ready to purchase it. The development of successful marketing strategy for innovation products and services requires identification and overcoming of all aforementioned barriers. However the important aspect is also to identify the time of innovation adoption by customers. Innovations have a propensity to appear unexpectedly, randomly and not always at right time. Several examples at the beginning of this chapter signalized, that some innovations were introduced too earlier and customer were not ready to purchase them or they didn't understand their full potential. For most of the radical innovations, such as steam engine, radio, computers, genetic food it took decades, before their full benefits became evident. For marketing it is extremely important to identify the time of innovation diffusion to develop relevant marketing strategies. Marketing is "perfectly applicable when there are products to manage and markets to analyze, but soon reveals its limitations when product definition is still rather hazy and the market too young".[13, 3] So far it was impossible to accurately foresee the innovation behavior on the market, mainly because of the lack of data, however partly it is possible to solve by using the diffusion models. "The objective of diffusion model is to represent the level of spread of innovation among a given set of prospective adopters in terms of a simple mathematical function of time that has elapsed since the introduction of innovation".[17] Diffusion theory focuses on the spread of new ideas, technologies and practices within social system or in other words how fast innovation can be diffused in specific environment. The most acknowledged diffusion models where developed by: Bass [18], L.A. Fourt and J.W. Woodlock [19, 363], Mansfield [20]. Diffusion models are the fundament of modern marketing analysis and can significantly influence the success of marketing strategy for innovations.

Innovation barriers however vary between different social and cultural groups. For the development of marketing strategies for innovations it also important to identify which customers will be willing to purchase innovation earlier than other and which later. This right identification of such customer groups is the precondition for the efficient marketing segmentation for innovations. Bohlen and Beal [21] identifies between next groups of customers: early adopters, early majority, majority and laggards (or non-adopters). Customers from the group of early majority are ready to undertake risks and purchase innovation relatively earlier than other groups. In contrast non adopters have the strongest resistance for innovations. The result of Bohlen and Beal research was the innovation adoption life cycle, which has a form of parabolic curve, where all aforementioned groups of customers are situated from the left to the right, starting from early adopters and ending with non-adopters. The innovation adoption life cycle enables to see which group of customers starts to adopt innovation at the moment. For example such innovation technologies such as iPhone or Vimeo, are only adopted by early majority nowadays. From the innovation adoption life cycle it is visible, that company can achieve the highest sales, when innovation is adopted by late majority. Important point of this model is stage called "Chasm" – a stage between early adopters and early majority. The success of marketing strategy depends on the ability of innovation to overcome the "Chasm" stage.

The aforementioned factors suggest that innovations require specific approach of strategic marketing. Marketing should develop special strategies, which are aimed to overcome existing innovation barriers, predict time of innovation penetration, do market segmentation and finally to commercialize innovation efficiently. The effective framework of marketing strategies for innovations was presented by Ram and Sheth [15]. The whole framework is presented in Table 2.

The examples of aforementioned marketing strategies are visible in everyday life. Most of firms in IT industry always use free trial marketing strategies to push their technological innovations, by offering customers a certain new products for free. Thus they are able to overcome the risk barrier, associated with the unknown features of new products or services. The success of several disruptive innovations, developed by Apple, such as iPhone or iPod is due to the well known brand name of the company, which is associated by customers with a high degree of reliability. Well developed marketing strategies play an important role for innovation commercialization. According to McKinsey global survey [1] on innovation and commercialization, 50% of companies, said that they have a lot of good ideas, but only few of them are commercialized successfully. Marketing strategies for innovations should foresee all risk and challenges, which innovation bear, in order to successfully introduce innovation on markets.

**Table 1.** Classification of environmental forces, functional and psychological barriers of innovation adoption \*

Type of Barrier	Explanation	Example
<b>Environmental forces barriers:</b>		
<b>Political barrier</b>	Emerges as the result of government regulations, international agreements, political situation	Decision of Ukrainian government about the direction of political development in 2013 (EU versus custom union)
<b>Economic barrier</b>	Macroeconomic factors (inflation, unemployment, exchange rate, business activity), specific factors of country innovativeness	General decrease of world business activity in 2008-2009
<b>Behavioral barrier</b>	Administrative and managerial styles, personal attitude to changes	Company inclination to pay dividends or to invest into commercialization of innovations
<b>Social barrier</b>	Cultural features, social inequality	Inclination of some/specific social groups to accept innovations
<b>Technological barrier</b>	Technological ability to provide mass production of inventions	Most of scientific results Ukrainian scientist technically cannot be implemented by Ukrainian companies
<b>Functional barriers:</b>		
<b>Usage barrier</b>	Appears because of the incompatibility of innovation with the already existing customer's workflows, practices or habits.	Steam engine, automotive industry, airspace technologies, web shopping
<b>Value barrier</b>	Associated with the lower value of innovation in comparison to other existing products or services	Automatic teller machine (ATM), first PC, almost all "green technologies"
<b>Risk barrier</b>	Associated with a certain financial, physical or psychological risk of innovation	First innovations in automotive industries, video cameras, genetic food
<b>Psychological barriers:</b>		
<b>Traditional barrier</b>	Associated with the cultural change, which can be created by innovation	Social networks, certain popular food and drinks
<b>Image barrier</b>	Associated with unwillingness to adopt innovation, because of the negative image, which is linked to it	Medicines or machine equipment from not developed countries
<b>Loyalty barrier</b>	Associated with customer unacceptance of product changes	Customer habit to use things for certain purposes

\* developed by [15,16]

**Table 2.** Classification of marketing strategies for innovations \*

Marketing Strategy Source of Barrier	Product strategy	Communication Strategy	Pricing Strategy	Market Strategy	Coping Strategy
<b>Environmental forces barriers</b>		Company transparency about its manufacturing facilities			Respect country ecological norms
<b>Usage Barrier</b>	Develop a system perspective (packaging). Integrate innovation with preceding activity			Mandate usage	
<b>Value Barrier</b>	Improve product performance and positioning		Reduce price by lowering costs		
<b>Risk Barrier</b>	Use a well known brand name	Elicit endorsements and testimonials		Increase market exposure. Facilitate trial	
<b>Tradition Barrier</b>		Educate customers. Use change agents			Understand and respect traditions
<b>Image Barrier</b>	Borrow a good brand (image)	Create a positive image of innovation			

\* developed by Ram &amp; Sheth [15]

## NEW WAYS OF MARKETING. MARKETING INNOVATIONS

While introducing new products and services, companies usually face with a need to develop innovative marketing methods. The challenges of nowadays marketing, such as: globalization, oversaturated markets, interchangeable and diverse services force business to make a choice, either to put more efforts and use already existing marketing instruments, which will result in lower output or to use innovation marketing strategies.[2] In most of the cases innovative enterprises try to connect innovative marketing strategies together with their innovative products and services. According to Eurostat [6] 51,4% of innovative enterprises in Germany introduced significant (new) changes to aesthetic design or packaging, 53,5 introduced new media or techniques for product promotion, 53,0% introduced new methods for product placements; 38,9 introduced new methods for pricing goods and services. It can be also seen in the changes of marketing budgets. According to research done by Belz [2] the biggest fraction of marketing budget is spend on personal sales, market and customer information systems (databases), customer relationship management, internet and media, marketing research and marketing projects. Here we can make the conclusion that innovative technologies, such as internet and media communications also shape the nowadays marketing.

The results of analyzing 1000 innovation companies [25,26] showed that all innovations strategies can be divided into three types:

- 1) need seekers are concentrated on involvement of customers to product development;
- 2) market readers implement incremental changes into the product;
- 3) technology drivers are concentrated on implementation of quantum changes into the products.

Arnold [23] distinguishes between next important shifts in marketing nowadays. Firstly it is the overall increase of digital marketing strategies, which include the application of the wide range of innovative devices. Digital marketing begins from E-communication marketing strategies and ends with the usage of digital strategies orientated on customer online buying services, such as mobile marketing or smart finance. Digital marketing is also associated with the hardware and software appliances, which support marketing database, such as cloud marketing, which became increasingly popular nowadays. Cloud marketing technology is also a good example of innovative marketing method which originated from innovation technology. In our case cloud marketing was born by cloud computing technologies. Secondly it is the increase of personal marketing in contrast to mass marketing. This approach includes also the so known evangelism and referee marketing strategies. Final membership diversity which stress the importance of firms to pursue the intercultural

approach of leading business. In the light of fast globalization, borders between countries have literally been vanished and most of the developed countries nowadays inhabit representatives from different cultural groups. That's why modern marketing should also be concerned with the grasping of wide range of customers, without discriminating any of them.

In the light of the recent environmental problems a lot of companies and organizations proclaimed their intentions to move towards the sustainability. This resulted into the number of green innovative technologies as well as new ecological products and services. In this perspective Leonidou, Katsikeas, and Morgan [24] emphasize on the increasing role of green marketing nowadays. Authors show the positive impact of green products and services on firm's performance and its return of assets. In this perspective organizations started to develop innovative marketing approaches to promote their sustainability actions among customers. New green marketing approaches resulted into innovative ways of marketing, such as elaborating of firm's sustainability reports, distribution of products and services through more eco-orientated distributors, adjusting firm's value chain to the one which is more sustainable orientated.

As the result of marketing strategies for innovations and innovation strategy the requirements for market tools were elaborated:

- 1) coverage of large numbers of consumers;
- 2) speedy and timely dissemination of information about innovation;
- 3) provision of feedback;
- 4) easiness of understanding advantages of innovations for the customers.

Proposed requirement permit to overcome the barriers presented above.

## CONCLUSIONS

In the light of tremendous social and economic changes innovations play the important role for acquiring stability and higher competitive advantages for companies nowadays. Innovations are the main elements of firm's portfolio and very often determine long term strategies for companies. On the other hand innovations are associated with high consumer barriers and long time of market penetration. The successful commercialization of innovations depends on formalized decision processes and effective marketing strategies. In this article we analyzed the important role of strategic marketing towards the development and commercialization of innovations. Marketing strategies enables companies to gain a certain kind of market intelligence, and thus look behind the primary customer needs and finally develop innovations. Marketing strategies also enables companies foresee the time of innovation adoption by mass market and to identify customer groups which are willing to buy innovation first. And finally marketing strategies enable

companies to overcome customers barriers, associated with innovations.

Another importing finding of this article is the reverse influence of innovations on marketing strategies. The latest marketing trends and advancing of information technologies gave rise to non-traditional marketing methods and strategies, such as green or internet marketing.

The developed requirements for market tools assist a better understanding marketing strategy development process for innovation. It may be viewed as theoretical basis for facilitation of innovation commercialization. In addition the results of our research can serve as practical guidelines for the developers of innovation market strategies.

#### REFERENCES

1. McKinsey Global Survey, 2010, Innovation and Commercialization.
2. **Belz C. and Schögel M. and Tomczak T. 2007.** Innovation Driven Marketing: Vom Trend zur innovativen Marketinglösung. Gabler, Wiesbaden. (German)
3. **Aron, C. and Liem V, N. 2011.** Winning through innovation and marketing: Lessons from Australia and Vietnam, *Industrial Marketing Management*, Volume 40, Issue 8, 1319–1329. (USA)
4. **David W. and Cravens Nigel F. and Piercy 2009.** Strategic marketing, McGraw-Hill, Boston. (USA)
5. **Miles N. and Wilkinson C. and Edler J. and Bleada M. and Simmonds P. and Clark J. 2009.** The wider conditions for innovation in the UK, NESTA.
6. Eurostat, 2013. Science, technology and innovation in Europe.
7. **Liem V.N. and Aron O. 2012.** Performance implications of market orientation, marketing resources and marketing capabilities, *Journal of Marketing Management*, Vol. 28, Nos. 1–2, 173–187. (USA)
8. **Narver J. and Slater S. 1990.** The effect of a market orientation on business profitability. *Journal Of Marketing*, 54(4), 20-35.
9. **Gatignon H. and Xuereb J. 1997.** Strategic orientation of the firm and new product performance, *Journal of marketing research*, Vol. 34, 77-90. (USA)
10. The work foundation working paper, 2010. Demand and innovation, NESTA.
11. **Kohli A. K. and Jaworski B. J. 1990.** Market orientation: the construct, research propositions, and managerial implications, *Journal of Marketing*, Vol. 54, Issue 2, 1-18.
12. **Han J. K. and Kim N. and Srivastava R. K. 1998.** Market orientation and organizational performance: Is innovation a missing link? *Journal of Marketing*, 64(October), 30-45
13. **Miller P. 1999.** Marketing the unknown: developing market strategies for technical innovations, Wiley, New York. (USA)
14. **Dunn M. J. and M. Harden Boyd. 1975.** Interface of Marketing and R&D Personnel in the Product Innovation Stream, *Journal of the Academy of Marketing Science*, 3 (Winter), 20-33.
15. **Ram S. and Sheth N. J. 1989.** Consumer resistance to innovations: the marketing problem and its solutions. *The journal of consumer marketing*, Vol. 6, No. 2.
16. **Cooper L.G. 2000.** Strategic marketing planning for radically new products. *Journal of Marketing*; ; Vol. 64, 1-16.
17. **Mahajan V. and Muller E. 1979.** Innovation diffusion and new product growth models in marketing, *Journal of Marketing*, Vol. 43, 55-68.
18. **Bass, F. 1969.** A new product growth model for consumer durables, *Management Science* 15 (5), 215-227.
19. **Fourt, L. A. and Woodlock J. W. 1960.** Early Prediction of Market Success for New Grocery Products, *Journal of Marketing*, 25 (October), 31-38.
20. **Mansfield E. 1961.** Technical Change and the Rate of Imitation, *Econometrica*, 29 (October), 741-766.
21. **Bohlen J. M. and Beal G. M. 1957.** The Diffusion Process, Special Report No. 18, 1, 56-77.
22. **Jaruzelski B, Dehoff K. 2007.** The Customer Connection: Global Innovation 1000. The 2007 Booz Allen Hamilton Report, 4–5. Booz and Company Inc.: New York, NY. (USA)
23. **Arnold M. 2013.** Top marketing Trends, *Credit Union Management*, Vol. 36 Issue 9, 24-25.
24. **Leonidas, C, L, Constantine S, K & Neil A. M, 2013.** Greening the Marketing Mix: Do Firms Do It and Does It Pay Off? *Journal of the Academy of Marketing Science*, 41 (2), 151-70.
25. **Ramadani V. and Gerguri S. 2011.** Innovations: Principles and Strategies. *Strategic Change* 20: 101–110. Published online in Wiley Online Library (wileyonlinelibrary.com) DOI: 10.1002/jsc.888. (USA)
26. **Paranchuk S. and Korbutyak A. 2013.** Problems investment support innovative development of the national economy and solutions. *Econtechmod. An international quarterly journal. Poland, Lublin – Rzeszow - 2013. Vol. 02. No. 4. 53-61.*