INNOVATIONS IN RETAIL SECTOR AND THEIR INFLUENCE ON THE MARKET

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Abstract

In the article the main points of Schumpeterian view on innovation are presented as well as its development presented by W. J. Abernathy and K.B. Clark in their article *Innovation Mapping the Winds of Creative Destruction.* Then the idea of retail innovations and their classification are proposed. Thus along with disruptive innovation and both technological and non-technological innovations in retailing, the architectural, niche creation, regular and revolutionary innovations are identified and their influence on the market – established system of production and marketing – is shown. By such an approach the J. Schumpeterian theory of innovations is expanded and implemented to the retail sector. The focus is on retail changes on meso level.

1. Introduction

In modern economy which is also called the knowledge based economy a lot of attention is paid to innovations, as one of its main drives. They are usually associated with the tech and telecom industries which take the leading position on The Boston Consulting Group Survey of the most innovative industries (BCG). Yet it should be mentioned that they have also played the crucial role in the retail sector development, raising the productivity of retail enterprises and by the same token the whole economy. In the article the wide spectrum of retail innovations is presented. The special attention is paid to their relations to existing competences and market influence.

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2. The role of innovations in the development of market structures

According to J. Schumpeter innovation is "doing things differently in the realm of economic live" (Sweezy, 1943, p. 93). He considered innovation as a cause of economic development which is impulsive change of existing circular movement, which in irreversible way modifies the preexisting balance (Schumpeter, 1960, p. 101). This process is called creative destruction due to the fact that the old knowledge is destroyed and the new one is necessary to operate in the new environment. It takes some time to get the new economics balance but the progress is achieved.

In Schumpeter view innovation is the "outstanding fact in the economic history of capitalism society (Bostaph, 2014, p. 429)" that changes the production function and "that requires new plants or the rebuilding of old plants and New Firms" (Bostaph, 2014, p. 430).

The crucial role in innovations' introduction is given to the entrepreneur who takes the risk but also expects supernormal profits as the reward. In Schumpeterian theory he (or the business) plays an active role whereas the role of consumers is rather passive – they are often reluctant to changes and should be convinced to accept them.

Taking this view W. J. Abernathy and K.B. Clark have developed the following definition of innovation: "An innovation is the initial market introduction of a new product or process whose design departs radically from the past practices. It is derived from the advances in science and its introduction makes existing knowledge in that application absolete. It creates new markets, supports freshly articulated user's needs in the function it offers and in practice demands new channels of distribution and aftermarket support. In its wake it leaves absolete firms, practices and factors of production, while creating a new industry" (Abernathy & Clark, 1985, p. 6).

It should be pointed out that although the Schumpeterian view is still very important in innovation analysis not all innovations could be considered as radical – some of them have the other nature, what was noticed inter alia by W. J. Abernathy and K.B. Clark who also developed the framework for analyzing the competitive implication of innovations presented later in this paper. They also stressed the role of the consumer which sometimes is very important. On the threshold of these assumptions they distinguished: architectural, niche phase, regular and revolutionary innovations.

Architectural innovation is the new technology that departs from established systems of production and opens up new linkages to markets thus users. The most important phenomenon is

that development of this innovation is rather stimulated by market needs not by science. Architectural innovations could create new industries as well as reform the old ones.

The idea of niche phase innovation is to open new market opportunities through the use of existing technology. As technology is generally defined – there are only small changes in it - the established technical competences are sufficient. The examples of niche phase innovation include new product introduction with new features like shapes, colors, functions which could provide the company implementing them competitive advantage and encourage competitors to copy these ideas and in this way change the patters of competition. In case of regular innovation the established technical and production competences are applied to existing markets and consumers.

Revolutionary innovation disturbs and renders established technological and production competences whereas it is applied to existing markets and customers. It is incremental change in process technology which raises productivity and increases the process capacity which results in economies of scale but also requirements for the capital necessary to compete.

3. The characteristics of retail innovations

When trying the define retail innovations the specificity and function of retail sector in the economy should be taken into account. The innovation in retailing could be defined as a change in the way the retail functions (being the intermediate in exchange) is fulfilled which is accepted by the consumers which operate the criterion "value for money" (Tallman & Blomstrom, 1962). B. Kucharska indicates some characteristics of retail innovations which include, that (Kucharska, 2014, p. 23):

- Changes are related to the different aspects of the ways of doing things and thinking about the enterprise, supply chain, market, which means changing the previous routine and they are introduced intentionally, consciously and often long lasting.
- Generally solutions implemented by other enterprises (in other sectors) are copied.
- Due to the fact that a successful solution could not be prevented by patents it is often copied; only technological and capital requirements could constitute barriers.
- They are beneficial for consumers, retail companies, retail sector and the whole economy.
- Often research and development are not necessary to be innovative; knowledge, capabilities and experiences of managers, employees, suppliers, competitors could be the source of innovation.

- Innovations could be risky and expensive, especially if they are radical.

- In the retail companies there is not an utterly integrated system of innovation management like in the case of industry companies.

Innovations could be classified in different ways, according to the adopted criterion. So, depending on their impact on the market, one could distinguish radical (disruptive) and incremental innovations. Radical innovations have significant impact on the market and on the economics activity of the companies operating on it whereas the incremental innovations only upgrade or enhance an existing product, process or service. In J. Schumpeter's view the most important are the radical innovations which create disruptive changes; the incremental innovations only advance the process of changes.

In case of retailing development of new retail forms, e.g. department store in the mid of nineteenth century, then mail order (end of nineteenth century), chains stores (1912) and supermarkets (after the II World War) constituted radical innovations. Their changed the market structure due to the fact that close competitors that did not adjust to new methods of doing business were eliminated from the market. They also forced changes in the behavior of suppliers and consumers. For example, development of department store caused many bankruptcies of concept stores, organized delivery directly from producers which had to provide storage for goods whereas clients had to get used to new methods of selling products. The new forms of retailing (which also include discount stores, hypermarkets and then e-commerce which appeared on the market scene later) have been in the words of J. Schumpeter the main competitive force which determined the direction of changes of market structure and the ways profits have been distributed (Schumpeter, 1947, p. 85). It was due to the fact that economics of scale was not very important as it started to be in the end of the twentieth century when the information technologies (IT) allowed to monitor and control the spread activities of retail chains even in the global scale.

The incremental innovation in case of retail forms are all changes which have taken place in the way they operated, and allowed e.g. some of department store companies survive. They include implementation of some promotional tools or addition of food into assortment.

Innovations could be also divided according to their nature into: technological one and non technological. Technological group includes innovations in product and processes caused by the involvement of new technology, non technological – important changes in the marketing and organization of the enterprise.

There are two main processes which effectiveness is core for the success of a retail company – the supply and selling process. Introducing innovations in these processes has been stimulated by the development of information and communication technologies (ICT). It has started by implementing in retail business the invention of bar code, which then became crucial for development of other technologies increasing the productivity of logistics and selling processes. In logistics processes there are such technologies as Electronic Data Interchange (EDI), Quick Response (QR), Efficient Consumer Response (ECR). In spite of some weaknesses and development of Internet technology they are still widely used in retailing. Their implementation not only reduces costs but also improves the level of consumers service due to the fact that assortment better fits their needs. Scanning system has also directly influenced selling processes by the improvement of checkout.

Product in retail is new retail form (wide meaning) as well as the new product in assortment (narrow meaning). New retail forms as innovations has already been discussed. As far as the new product in assortment is concerned the opportunities to be innovative came together with the idea of own brands. Some of them created the assortment which distinguished the retailer from competitors' and influences the whole market structure when copied[3].

Parallel to technological innovations the non technological innovations involving marketing activities and organization of enterprises have been introduced. Marketing innovation concerns all elements of marketing mix but mainly promotion. They evinced in assortment policy – scrambling merchandising policy (e.g. assortment of department stores was enriched with food whereas the assortment of supermarkets with household chemicals), location policy (malls outside the city centres), pricing policy (odd prices – e.g. $1.99), merchandising (new ways of displaying products), and promotional policy (loss leaders, stamps). They were very easy to copy so as a result many of them very fast became standards in mass merchandisers policies.

Organizational innovation could involve the changes in organizational structures. Since 1912 when the first chain was founded this structure has started to evolve. Later, due to development of ICT different networks have appeared – the most important has been the franchise system which could provide the same benefits as chains without investing a lot of capital in founding own stores. The other important retail structure is the shopping centre which

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[3] The examples include Ikea which changed the market for furniture by offering the wooden piece of furniture sold not in sets and Benetton with its colorful and comfortable clothing.

is a type of cluster, which follows the idea of shopping streets, but is generally located outside the city and offers the clients many services beside shopping.

In the second part of the twentieth century, as far as the new forms of retailing are concerned, discount stores and hypermarkets were founded and they turned out to be radical innovations. It could be noticed that Wal-Mart which was the follower of the first discounters is now the biggest retailer in the world whereas Carrefour which was first to introduce the hypermarket concept for many years occupied second position (in 2014 it was the fourth) (Baranowska-Skimina). Their success would not have been possible if this innovation had not been fostered by ICT technologies and non technological innovation. It is due to the fact that this period was also the era of technological innovations introduced in logistics and selling processes, development of new own brand products as well as non technological innovation – marketing and organizational ones. Many of them could be considered as radical innovation as they have dramatically changed the market structure and become standards.

The twenty-first century started as the era of Internet which stimulated the development of e-commerce and development of networks. It has been creating new rules of competition which challenges the old structures based on physical assets with new ones rich with knowledge – virtual networks, logistics and selling processes as well as marketing activities. The prevailing trend is virtualization of all retail activities. The question arises how it could change the retail market?

Sometimes product development into other industries is viewed as innovation for the company due to the fact that there is quite a new activity and there is some risk connected with implementing such a strategy. Retailers innovate in this way where they start to offer financial, ctering or other services as it was e.g. the case of M&S company.

The ways of operating business which are well known in well developed countries could be innovation in the less developed ones. A good example is Poland, where since the mid of the nineties foreign companies have developed new forms which have not been present in Polish market like: discount stores, hypermarkets, category killer, concept stores, direct selling as well as new forms of retail organization: chains, shopping centers; new marketing tools: loss leaders, loyalty programs, odd pricing. They have changed the market structure destroying the former system and creating the new one with the new rules of competition. Yet new retail structure does not completely reflect retail system in well developed countries because it has been developed in quite different circumstances.

4. The competitive implication of retail innovations. The case of Poland

For the analyzing the competitive implication of retail innovations the concept presented by W. J. Abernathy and K.B. Clark has been adopted and proposed by them division into four groups: architectural, niche phase, regular and revolutionary innovations.

Good examples of architectural innovations in retailing are new forms, which implement new ways of selling goods as well as new ways of supplying them e. g discounts stores and supermarkets discussed before. To be successful they have to be visible on the market and their existence depends on consumer preferences. They have been very durable –some of the department stores still exist, mainly in U.S. due to the fact that they have reacted to changes in consumer behavior, implementing new marketing tools and technologies. Architectural innovations change consumer behavior as well as whole market structure.

It was visible in Poland when retailers (mostly foreign companies) started to develop chains of hypermarkets, discount stores, supermarkets, category killers in the mid of the nineties. They have changed:

- consumer behavior (shopping during week-ends, expectations of sales promotions and price reductions),
- market position of wholesalers who have started to develop franchise systems to survive,
- market position of small shops – some of them have tried to implement the techniques used by big competitors like e.g. self service, some have gone bankrupt, some have joined franchise systems, others have been looking for market niches,
- market position of suppliers who have had to negotiate contracts and often have turned not to be very satisfactory for them.

Thus new retail forms being the architectural innovations in retailing have changed radically the retail market in Poland. The niche phase innovation in retailing is, for example, introducing new assortment for new market segments – like clothing for overweight people – by using the same technology. The other example could be the assortment of organic products – offering such kind of assortment is stimulated by the growing trend for a healthy life style. Organic food is offered not only in the specialty stores but also hypermarket chains such as Carrefour and Tesco, which have decided to widen their assortment. This decision was supported by the set of promotional activities which are necessary to reach a market niche. In 2007 Carrefour signed a contract with the producers (affiliated by the Association of Polish Ecology)

to supply food without chemicals; the range of products bearing the Carrefour Quality label. Tesco's own brand 'Organic' products have typical packaging features and labels so that customers can easily recognize them. The sign of organic farming is displayed on labels.

Niche creation as well as architectural innovations should be visible to the customers whereas other kinds of innovations (revolutionary and regular) are almost invisible although it could have an important effect on product costs and performance. The examples of regular innovation in retail include the changes which take place in the interior of the stores, technology enhancement, introducing innovations in assortment and other marketing tools to stay competitive and strengthen the linkages to the market. They are often easy to be copied so they cannot assure long term competitiveness and must be continuously refreshed. They fit the retailer's policy so they are not very visible to consumers yet without them the company could lose the market position. Due to the intensive competition in Polish retail market companies operating here are forced to introduce such innovations.

The revolutionary innovation increases economics of scale and rises productivity. New technologies like scanning when applied to retailing improved logistics processes as well as the processes of consumer services. They do rather not affect the existing consumer preferences but companies needed new competencies (technical competencies) to apply systems based on this technology into practice. There was also the need for capital and economics of scale when the retailer wanted to develop new technologies based on scanning like EDI, QR, ECR. So these new technologies affected the way the companies operated and competed, but not directly, consumer preferences. Although EDI was first implemented by Wal-Mart to cooperate with Procter and Gamble long time ago and still companies operated in Poland use this technology in spite of its drawbacks. The examples include foreign retailers as well as Polish retailers like Topaz, the chain of FMCG which introduced it in 2012 (INFINITE).

5. Final remarks

In the paper different aspect of retail innovations are presented. It has been found that theory of innovations, although developed for production sector, could be also applied to retailing. The process of introducing important innovations, which have decided in its nowadays structure started in the mid of XIX by introducing the department store. It was followed by the other new forms as well some incremental innovations (scrambling merchandising, promotional techniques). In retailing it is also possible to distinguish technological (new product, ITC) and

non technological (marketing and organizational) innovations. New technologies since 60. last century have been played an important very important role in rising productivity but also marketing innovations become very popular tools for encourage clients to make purchases and keep them as loyal customers. As far as the visibility for the consumers and need for the new competences are concerned four group of innovations could be identified. Revolutionary and regular innovations could not be very visible. Revolutionary affect the internal processes of the retailers like supply chain management and new competencies are needed whereas regular could affect internal as well external processes and there is no need for new competencies because they involve small changes. Niche phase and architectural innovations are visible for the consumers. Niche phase, like for example developing assortment for the new, small market segment do not need new competencies. Contrary is in the case of architectural innovations, like development of the new forms which haven't exist on the market before.

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