# THE ROLE OF KNOWLEDGE DIFFUSION IN INNOVATIONS IN RETAIL CHAINS

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# Abstract

Knowledge diffusion is the basis for innovation processes in business. In Polish retail industry the expansion of foreign commercial chains has contributed to dynamic knowledge transfer in the sphere of management of buying and selling processes. The standards appropriate for global and international commercial chains have been introduced within several years as the result of integration, concentration and globalization. Retail trade is a sector of high capacity to implement innovations. In the paper the authors are planning to verify phenomena associated with knowledge diffusion on the example of retail chains and to characterise its role for their innovation processes. Therefore, the areas related to knowledge diffusion in retail chains on selected examples constitute the subject area of the paper. In the study selected commercial enterprises were research entities. Analyses included in the paper concern the years between 2009 and 2014 that were the period of unstable economy development (time range). Presented results of conducted analyses concern Poland (spatial range).

In the paper, the following goals of cognitive and descriptive character are assumed:

- 1. The cognitive goal of proposed paper is to identify the key stakeholders (external) who are the source of knowledge diffusion for retail chains.
- 2. Descriptive goal of the paper is to indicate innovations, applied by selected retail chains, based on knowledge diffusion coming from the customers, the competitors and the suppliers.

In the paper the assumption has been made that customers and suppliers as well as the providers of IT solutions are the main sources of knowledge diffusion that allow for implementation of innovations. Also competitors are an important knowledge source for innovation while using benchmarking procedures.

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The following research methods were applied for the purpose of implementation of assumed goals: critical analysis of the literature of the subject, results of own research method concerning the impact of knowledge diffusion on innovation processes in selected retail chains, and the case study method that showed the best marketing practices associated with developing innovations by retail chains on the grounds of knowledge diffusion.

### Keywords: retail chains, knowledge diffusion, key stakeholders

### **JEL Classification: L14**

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# 1. Knowledge diffusion as the basis for innovation in retail industry

Knowledge becomes a resource for commercial networks, which is compliant with resource theory of management and also refers to positional school while assuming that knowledge determines the source of competitive advantage for commercial networks.

Knowledge diffusion (knowledge transfer, knowledge sharing) is the key element of the process of knowledge management in an organisation/network. It consists in its dissemination within or outside the organisation. Knowledge transfer is a complex process because it concerns:

- knowledge found in human resources of an organisation as well as tools, tasks and their relationships (Argote, Ingram, 2000, pp. 150-169);
- a large amount of knowledge in an organisation is implicit or difficult to articulate (Nonaka, Takeuchi, 1995).

We can find opinions indicating a broad specification of knowledge management in commercial networks where diffusion proceeds from "a larger number of stakeholders" because of location of trade between suppliers/producers of goods and customers, and because of "only" intermediation in the flow of goods<sup>3</sup>.

There are several reasons developing innovation processes in retail sector:

1. Trade sector was first to be fully privatised between the years from 1990 to 1993.

<sup>&</sup>lt;sup>3</sup> See more at: Knowledge Management, Practice of Knowledge Management; Case Study of Wal-Mart Inc., http://seo-kisumu.hubpages.com/hub/KNOWLEDGE-MANAGEMENT-A-CASE-STUDY-OF-WALLMART.

- 2. Expansion of foreign commercial chains contributed to dynamic knowledge transfer from the sphere of management of the processes of buying and selling, the result of which is the affluence of formats and qualitative changes in channels of distribution as well as modernisation of commercial premises and the process of sale.
- 3. The standards of global and international commercial chains were introduced in Poland within several years as a result of integration, concentration and globalisation.
- 4. The pace of quantitative and qualitative changes between the years from 1990 to 2013, which are broadly described in literature, proves that it is the sector of a high capacity to adapt knowledge.

## 2. Innovations in commercial chains – specific character and sources

Innovations in retail trade enterprises concern the solutions that differ from existing methods of acting and are implemented by retailers deliberately, purposely and often also durably (Chwałek, 1992; Kucharska, 2014).

We can adopt general guidelines of EUROSTAT and OECD in the sphere of innovations in the case of retailers conducting activity within multi-branch companies, that is, commercial chains. They state that innovation concerns changes that are fundamental, significant, new or remarkably improved, developed for the first time, but also adopted from other enterprises. Innovations must be associated with uncertainty, they demand investments, they are related to transfer, and result in using new knowledge or new application, or in combining existing knowledge. Innovation ought to aim at improvement of efficiency of enterprise activity through acquisition of competitive advantage or maintenance of competitiveness thanks to moving the demand curve on the enterprise products or increase in the enterprise innovative capability (Oslo Handbook 2008).

Innovations in retail trade are rarely creative innovations. Original innovations are a result of work conduced almost exclusively by largest commercial enterprises that have appropriate research and development resources and that have resources that allow for implementation of innovative solutions. Predominant group of medium-sized and small enterprises take over, imitates and adapts solutions that can be applied in their activity. Technological barrier and high costs of implementation of changes, particularly in the case of crucial solutions for commercial trade are most frequently a barrier for imitation of solutions applied by retailers. Streamlining innovations (evolving, modifying) are typical of retail trade.

Diversity is characteristic of the sources of innovations in retail trade chains. The sources of innovations applied by retail trade chains most generally can be divided into internal and external. External sources of innovations include entities from market environment of the retailer (the so-called external market), commercial sources, sources of public sector and general sources of information. Among external sources of innovations those that are associated with such entities of retailers' environment as customers, competitors and suppliers, are particularly significant. As it is assumed in the article, they constitute fundamental points of reference in undertaking innovative activities in commercial chains.

These entities contribute to implementation of innovative solutions in retail trade in a different way:

- changes occurring in behaviours of entities in the environment inspire retailers to develop and implement new solutions. Observations of trends and megatrends in consumer behaviours that become the reason for implementation of many significant solutions (including comfort appreciated by the customers contributed, among others, to development of online trade) are an explicit example here;
- entities in the environment force the retailers to implement innovative changes for example suppliers expect more effective and efficient logistic solutions;
- retailers involve the customers and suppliers in the process of innovation, while engaging them in generation of new ideas, testing and assessment of prepared offers. Involvement of other entities in innovative activity of the enterprise is described with the notion of open innovation (Nambisan, Sawhney, 2008; Sawin, Rudolf, 2008).

Innovations in retail trade can also come from leaders – the largest commercial enterprises create innovative solutions that are copied by other enterprises or applied by them in the range that allows them to solve the problems of their customers or satisfy their needs.

Furthermore, depending on financial capabilities, commercial chains in different degree make use of commercial (paid) and public (often free) sources of innovations. The examples here are innovations associated with diffusion of knowledge of commercial chains. As it has been mentioned the elements of close environment of commercial chains are very important sources of knowledge acquisition.

### 3. Examples of application of various sources of innovations by commercial chains

In the case of customers constituting the point of reference for activities of marketingoriented enterprises, we can observe activities associated with dynamic acquisition of knowledge about customers where the customers are its important source. This knowledge is acquired for the need of construction of a particular commercial offer. Apart from such concepts as CCR (Customer Relationship Management) and CSR (Corporate Social Responsibility), CCR (Customer Centric Retailing) is gaining importance. CCR represents strong focus on customer's needs (consumer Goods and Retail Insights, 2011, p. 7). We can distinguish four degrees of retailer's involvement in creation of orientation focused on customers.

- Firstly, it is necessary to create a database of customers (initial stage retailers start to notice the importance of possessed information and apply it in the process of sale and offer creation).
- The second step in development of the concept is sorting out the information about customers, considering the criteria associated with transactions (by means of what channel the sale was conducted, whether the payment was made in cash or by card), demographic criterion and data associated with the customers' approach to purchase.
- In the third stage the data about customers is treated as an important hint concerning future sale, there occurs integration of knowledge about the customers with strategic profile of the retailer.
- In the last stage, we have to do with full integration of possessed knowledge about the customer, and retailer's strategy. On the grounds of acquired information decisions concerning applied channels of distribution, sold brands and policy in the sphere of Category Management are made (Smith, 2009).

Using the example of Tesco we can indicate segmentation procedures that allow for better recognition of target customers' needs and for stating that they are consistent with CCR concept (Consumer Centric Retailing) (Sonneck, Cirk Sören Ott, 2010, p. 190). Segmentation in Tesco takes place on the basis of "Club Card" Tesco database including the holders of loyalty cards. In the case of Great Britain the number of card holders is assessed to be 10,000.

In segmentation procedure economic criteria were adopted, and with reference to them, 6 market segments were distinguished: Finer Food, Healthy, Traditional, Mainstream, Convenience and Price sensitive. Specific brands satisfying customers' expectations, and providing them with value, were addressed with reference to these market segments. From the point of view of marketing innovations, implementation of new brands constitutes product innovation and additionally allows for implementation of CSR assumptions (fair trade brands).

Tesco chain is also an example of application of knowledge about customers and its implementation in the sphere of creation of hybrid distribution systems and application of social media in communication with customers. Tesco chain started e-shopping in Poland in 2012 and the dynamics of sale through this channel is still observing a growing tendency (WWW.tesco.pl, accessed 13.12.2013).

Recognised, changing consumer behaviours are the reason for implementation of new forms of communication between retailers and customers. The importance of Internet channel is growing; it is used both as a sales channel and as a communication channel. Applying FB in promotional activity is a very good example of formation of relations with customers through involving them in the chain activity. The customers become loyal proponents of a particular chain and often lobby in its favour while encouraging friends to like it (Fanpage Trends, June 2013, accessed 12.05.2014).

Retail chains apply new technologies in various areas related to management processes. The IT knowledge comes from IT providers (suppliers). Following technological solutions are most often applied:

- 1. ERP solutions serving management of enterprise resources.
- 2. Business Intelligence tools of business analytics and reporting.
- 3. CRM tools of management of relationships with customer.

Knowledge diffusion related to undertaking innovative activities, is strongly associated with the orientation of commercial chains on competitors. Solutions applied by Biedronka chain (www.biedronka.pl, accessed, 05.05.2015) that followed Lidl chain in many areas (www.lidl.pl, accessed, 05.05.2015) are very good examples here. The examples may include:

- Change in the selling area, the so-called remodelling of the selling area.
- Development of the category of non-food products and "upscale exclusive" products.
- Implementation of similar promotional activities (the so-called National Day, for example Selling Italian food).

#### 4. Summary and conclusions

Development and implementation of innovations in commercial chains becomes possible thanks to knowledge diffusion. Such entities in the retailers' environment as customers, competitors and IT providers are particularly important as its sources. Information concerning trends in consumers' behaviours and their current purchasing decisions allow for development of both innovative business models and new solutions in the sphere of currently applied form of activity. Key stakeholders can also inspire retailers to search for and implement their own, innovative solutions. Knowledge sources presented in the paper are varied and they make innovative changes in retail trade dynamic while overlapping and supplementing each other.

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