

**ACTIVITIES OF RETAIL UNITS AS AN ELEMENT OF BUSINESS  
MODEL CREATION****Kita P., Čvirik M., Maciejewski G., Žambochová M., Kitová Mazalánová V.\***

**Abstract:** Changes in the social paradigm, technological and digital trends, as well as the negative impacts of the macro environment are also reflected in changes in retail business models, which are becoming a multi-channel means of value creation. The aim of the present paper is to identify and examine the implementation of selected retail activities as a value carrier for retail establishment model identification, and subsequent segmentation and profiling of retail establishments. The paper is supported by primary research on a sample of 246 retail outlet managers using inquiry (semi-structured interviews) in Bratislava. The collected data were processed using descriptive and inductive statistics as well as higher statistical methods (EFA, CA). The results suggest five key areas in business model design, namely supply chain; online or digital world; communication and price; geo-marketing and customer satisfaction. Based on the above factors, three homogeneous groups of retail outlets can be identified.

**Key words:** business models; retail; retail chains; key areas in business model

DOI: 10.17512/pjms.2023.27.1.08

*Article history:*

*Received* February 11, 2023; *Revised* April 09, 2023; *Accepted* April 20, 2023

**Introduction**

This Retail 4.0, as part of the fourth industrial revolution (Industry 4.0), is a new phase in the evolution of retail maturity characterised by the use of digital technologies and explains the development trends in the global retail sector to improve integration between virtual (online) and physical (offline) points of sale and simplify distribution. It is often referred to as digital or smart and is leading to changing business model (BM) for retail store formats, bringing innovation to omni-

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\* **Pavol Kita**, Prof. Ph.D., Comenius University in Bratislava, Bratislava, Slovak Republic, Country; ✉ email: pavol.kita@uniba.sk,  
ORCID: 0000-0001-5870-9328.

**Marián Čvirik**, Ph.D., Scientific title, University of Economics in Bratislava – Department of marketing, Bratislava, Slovak Republic; ✉ email: marian.cvirik@euba.sk,  
ORCID: 0000-0003-4701-1543.

**Grzegorz Maciejewski**, Prof. post Ph.D., University of Economics in Katowice, Poland; ✉ email: grzegorz.maciejewski@ue.katowice.pl,  
ORCID: 0000-0002-1318-0747.

**Marta Žambochová**, Assoc. prof. Ph.D., Purkyně University, Ústí nad Labem, Czech Republic; ✉ email: marta.zambochova@ujep.cz,  
ORCID: 0000-0001-7893-272X.

**Veronika Kitová Mazalánová**, Ph.D., Comenius University in Bratislava, Bratislava, Slovak Republic, Country; ✉ email: veronika.mazalanova@uniba.sk,  
ORCID: 0000-0003-0495-9203.

channel customer experiences and rethinking the role of commerce in the ways retail unit formats interact with customers. Brynjolfsson et al. (2013) argued that this is reflected, for example, in the fact that as the retailing industry evolves towards a seamless omnichannel experience, the distinctions between physical and online will vanish, turning the world into a showroom without walls (Simone and Sabbadin, 2017; Cai, Lo 2020). This implies that incumbent companies in a given market are introducing new business models that focus only on a particular step of the value chain (Schweizer 2005). In this way, according to Zott and Amit (2010) transform the current BM by designing a new activity system or modifying the firm's extant system (Do Vale et al. 2021). In other words, the path to take in challenging economic conditions is through innovation. Business model innovation is the assembling of a firm's key resources and processes in harmony and in a completely different way from competitors, in order to create value for itself and its customers. Similarly, Baden-Fuller and Mangematin (2013) introduce that a BM can be considered as a set of cognitive instruments that embody important understandings of causal links between traditional elements in the firm and those outside. As a result of such thinking, BM innovation is therefore the best and most effective way to cope with periods of crisis and recession in order to increase market share and make a profit (Scridon et al., 2019), particularly in the food market. The context of the paper focuses precisely on identifying the specific elements that grocery store managers believe add value in their BMs. The present study focuses on the topic of process models in retail, with the emphasis on the day-to-day activities in a retail operation. In this context, Foss and Saebi (2017) stated BMI as proposed, novel and non-trivial changes to key elements of a firm's BM and/or the architecture connecting these elements (Foss, Saebi, 2017, see also Do Vale et al. 2021).

Therefore, the aim of this paper is to investigate the implementation of selected retailer activities as a carrier of value to identify a BM of activities that will be used to segment and profile retail stores. The article builds on previous theoretical and empirical studies related to domains such as concepts and designing BM, operating process, omni-channel management (e.g. Cai and Lo 2020; Chatterjee, 2013; Meyer et al., 2023; Ode and Louch, 2022; Simone and Sabbadin 2017; Sorescu, et al. 2011; etc.) in order to bring insight so that the management of the retail firm is able to adapt their BM with the evolving characteristics of their environment. In the context of theoretical knowledge, it fills the gaps in the theoretical body of knowledge on the activities of retail stores, bringing a systematization of activities at the micro-economic level. In terms of practical benefits, it can be said to be a simple tool that helps retail store managers to better orient themselves, to organize activities of the retail chain in order to confirm positive consumer experience as consumers are becoming more sophisticated buyers than ever before in the extremely competitive food market. This paper contributes to research on the retail network from the point of view of the structural transformation surveyed (Bilková et al., 2017; Kita and Grossmanová, 2014; Križan et al., 2016).

## Literature Review

Managers use a lot of modelling techniques for business processes (Šperka and Halaška, 2017), while emphasis must be placed on current trends and activities (Sharifpour et al., 2022). In an increasingly competitive global market, companies have steadily increased their production, logistics, and innovation capacities. The ability to develop competitive advantages afforded by technology is becoming increasingly important. In the paradigm where competition and the speed of technological development grow exponentially, companies must be able to obtain a competitive advantage through the adoption of technologies that would allow them to improve their products, services, or sales strategies (Saura et al., 2022). The environment in which an enterprise conducts its economic activities is subject to turbulent changes. These changes are reflected in the value proposition by the speed and adaptation of the product and BMs to customer requirements (Scridon et al., 2019; Kita et al., 2022). Demil and Lecocq (2010) view the BM in two levels, namely static and dynamic. It is the dynamic approach that is key in the rapidly changing market conditions that can be observed even in today's times. In this context, responding to the market using entrepreneurial activities and its implementation is key. Differently of them, Chesbrough and Rosenbloom (2002) define a BM as a concept that takes inputs and transforms them into economic outputs that deliver value based on market processes. It is the creation of value (Björkdahl et al., 2022; Johnson, 2010) and its commercialisation (Ostenwalder et al., 2005) that is closely related to the creation of a BM. Sorescu et al. (2011) emphasize that the retail BM needs to be examined in a context leading to competitive advantage, which inevitably requires market awareness and acceptance. In this sense, the examination and evaluation of the activities of the retail unit is crucial. Schweizer (2005) points out in his study on BM concepts that there is no common notion of what a BM should contain. An important element that manifests the result of the adaptation of business models can be identified as innovation with an emphasis on the need for a strategic and managerial approach (Gil-Gomez et al., 2020), while it is important to distinguish between business strategy and business model (Slávik and Zagoršek, 2016).

In addition, when combining the concept/idea BM with the issue of deconstruction, it is necessary to consider how individual firms are changing as they define their role in the industry value chain system (Schweizer 2005). It is in the retail sector that this phenomenon undoubtedly creates a new context for business. The business of retailing has a very strong local context, but this is not an insurmountable obstacle. As a consequence, globalisation can also be observed at the micro level in the retail sector. At the same time, this phenomenon affects both businesses wishing to enter new markets and local businesses competing with international companies. It can be concluded that the BM in the retail sector consists of one or more formats as well as the activities and governance mechanisms supporting the format and the interdependencies between these elements. Multi-channel distributors may have more than one format, but all these formats must be integrated into a cohesive BM

that protects and develops the retailer's brand. Coherence between formats, operations and management is of paramount importance. Understanding how these elements are connected to form an integrated system ensures that changing any one of them helps the synergy they collectively create. For example, if market conditions or technological advances trigger a change in distribution management, the first step in redesigning the BM is to examine the linkages of that change to the store format and activities to optimize value creation under the conditions. It follows that the BM is made up of interdependencies between elements, i.e., it is not the simple sum of its elements, but their interplay as a necessary condition for its successful implementation in conditions of dynamic market development.

### Research Methodology

As already said, the aim of the paper is to identify and examine the implementation of selected retail activities as a value carrier for the identification of a model of retail outlets and the subsequent segmentation and profiling of retail outlets.

Based on the above objective, we have formulated research questions that will help us to fulfil the objective comprehensively:

RQ1: How can the frequency of the investigated activities be characterized in the context of the business model of retail stores?

RQ2: How can generic activity areas be characterized in the context of the retail model?

RQ3: How can individual retail operations be characterized based on the presented model of retail operations' activities?

The first step was to define the population. The population of our research consists of retail stores in Bratislava. The reason for defining the location is crucial, as each geographical area has its own specificities (Lévy and Lussault, 2003), be they natural, cultural, legislative, demographic and/or economic. Once the population has been characterized, the sample on which the survey will be conducted needs to be addressed, with an emphasis on representativeness. Representativeness is based on the sampling methodology. In our case, it is a random sample. It can therefore be concluded that this is a representative sample of retail units in the Bratislava area. From the above context, the results can be generalized using statistical methods, but only to the population. The original sample consisted of 250 retail outlets, but 4 retail units had to be excluded due to incomplete responses and identification of anamnestic data. Based on the above, it can be concluded that the primary survey base consisted of 246 store managers.

The next step of the work was to identify the elements that influence the model. There are a number of studies that have addressed the elements of BMs (e.g., Demil and Jacocq, 2010; Gołębiowski et al., 2008; Hamel, 2000; Lehmann-Ortega et al., 2017; Mandli and Taoufik, 2019; Sławińska, 2010; Šimberová and Kita, 2020; Verstraete et al., 2012; Volle et al., 2008; and others). Based on the above literature and semi-structured interviews with experts, we identified key elements. Since the focus of this paper is on activities, we eliminated elements that do not represent the

activity of retailing. At the same time, we subjected the activities to a reliability estimation analysis. As a result, we work with twenty activities in the model. Based on the above (secondary and primary qualitative research), potential elements in the context of activities were identified for the creation of a new BM.

The primary research was conducted in the form of inquiry (semi-structured interviews), with respondents (responsible managers of business operations) responding to twenty (20) selected activities on a dichotomic scale. The dichotomic scale contained two poles - doing and/or not doing the activity. Based on the activities, we will try to identify the key factors for developing a model of retail operations in the context of market advantage.

In this paper, we use a number of statistical methods; we use elements of descriptive statistics as well as higher statistical methods. These are mainly exploratory factor analysis (EFA) and cluster analysis (CA). It should be noted that the elements under study were dichotomous (binary) in nature, which should be considered in EFA (Linden and Hambleton, 1997; Revuelta et al., 2020). Statistical software packages do not offer this option in their packages by default. We therefore exploit EFA using R software (The R Project for Statistical Computing) in this paper. Within the R software, we use a number of libraries (mainly polycor) and a number of functions (hetcor) (Starkweather, 2014). Based on EFA, we arrive at latent factors, which we further explore in cluster analysis, to identify clusters of businesses with the same activity preferences that act on their retail model. For the purpose of cluster analysis, we will use SPSS software, in which we will apply the “Two-step cluster analysis” method, which takes advantage in both hierarchical and non-hierarchical methods, and thus yields comprehensive results.

### **Research Results**

The expansion of the scope of a retailer’s activities is manifested by crossing industry boundaries, especially into the service sector, also given that retailing is part of the tertiary sector, as the sale of goods is considered an essential business service. Sales are accompanied by other ancillary services, the importance of which is variable: transport of the product, offering a range of products, reception of the customer, information and advice, after-sales service, etc. The service structure is never the same. However, the offer of goods, customer acceptance, and customer service have an identical effect.

RQ1: How can the frequency of the investigated activities be characterized in the context of the business model of retail stores?

The twenty activities selected for investigation were constructed on the basis of literature and consultations with practitioners, which are directly or indirectly related to the BM used by the retail unit. The frequency of each activity was recorded in Table 1.

Table 1. Frequency table of surveyed activities

Activity	CODE	The activity is carried out by firm (in %)	The activity is not carried out by firm (in %)
We offer e-delivery of goods to your home	Q1	35.0	65.0
Online ordering and in-store pickup	Q2	11.0	89.0
We carry out promotions (events) for customers	Q3	76.0	24.0
Evaluate consumer purchasing trends for future pricing purposes	Q4	98.8	1.2
We gain customer trust through pricing	Q5	96.3	3.7
Influence the size of the packaging of goods on sales	Q6	78.9	21.1
We use new technologies in logistics and supplier relations	Q7	79.7	20.3
We strive to win the favour of local consumers through our activities	Q8	97.2	2.8
We involve consumers in the creation of the slogan, brand, etc.	Q9	1.6	98.4
We expand purchasing from local suppliers	Q10	89.8	10.2
We share information and customer experiences on the internet	Q11	15.9	84.1
Implement customer loyalty programmes	Q12	69.9	30.1
We pay attention to cybersecurity of processed data	Q13	89.8	10.2
We improve our current online offer	Q14	71.5	28.5
We eliminate sources of customer dissatisfaction	Q15	97.6	2.4
We leverage shopping via mobile apps	Q16	11.0	89.0
We are moving new product sales to social networks and social media	Q17	10.6	89.4
We use a consumer geolocation system	Q18	42.3	57.7
The cost of digital technology is limiting us	Q19	96.7	3.3
We are introducing new technologies to optimize inventory	Q20	80.5	19.5

**Source:** Own processing in R.

As Table 1 shows, activities are fairly strongly represented in their frequency of implementation among retail units. It is important to note that a high percentage of activity realization may represent some standard activity in a retail store. It is the activity that is represented at a lower rate (e.g., Q2; Q9; Q11; Q16; Q17) that may represent a significant source of differentiation, assuming market acceptance. This differentiation can serve as a basis for creating a competitive advantage in the market.

RQ2: How can generic activity areas be characterised in the context of the retail model?

Since the data is dichotomic in nature, it is not possible to use standard procedures to identify latent variables. For this reason, we use the software R. We have compiled the key results of the factor analysis into Table 2.

**Table 2. Result of factor analysis**

Code	Uniquenesses	Factor1	Factor2	Factor3	Factor4	Factor5
Q1	0.203		0.770			
Q2	0.110		0.827			
Q3	0.164			0.522		
Q4	0.006			0.672		
Q5	0.150			0.793		
Q6	0.120	0.684				
Q7	0.005	0.947				
Q8	0.109					-0.759
Q9	0.005			0.888		
Q10	0.150			0.709		
Q11	0.195		0.879			
Q12	0.095	0.789				
Q13	0.058	0.902				
Q14	0.005		0.617			
Q15	0.005					0.865
Q16	0.067		0.602			
Q17	0.086		0.948			
Q18	0.005				0.931	
Q19	0.207	0.733				
Q20	0.012	0.898				
SS loadings		5.541	5.338	3.243	2.197	1.931
Proportion Var		0.277	0.267	0.162	0.110	0.097
Cumulative Var		0.277	0.544	0.706	0.816	0.912

**Source:** Own processing in R.

A number of EFAs were performed, looking for optimization in the membership of each factor. As the results of the factor analysis suggest (see Table 2), there are five latent factors. Within Table 2, we have “Uniquenesses” as the first key output. Uniquenesses ranges from 0 to 1. Our results are very close to zero, indicating low uniquenesses and high communality. These results confirm the quality of EFA and the appropriateness of linking the items in the context of the factors. In the following section of Table 2, we have loadings (correlation for a single statement with an identified factor) for the individual factors and statements. The values are again high (>0.500), indicating a strong association to the identified factors. Given the loadings presented, a clear categorization of individual statements can be noted. The last part of the output focuses on the summary of the individual factors identified. In terms of

the quality assessment, the interpretation of the Cumulative Var, which tells the cumulative proportion of the explained variance, is key, so that these numbers range from 0 to 1. Our resulting value is 0.912, which can be interpreted as high quality. We can also observe a high level (>1.00) of SS loadings.

In terms of the individual statements, there was ambiguity in the loadings of Q14 and Q16. However, the differences in loadings were very small. However, it is necessary to consider not only the estimators but also the substantive significance of the analysis. In the context of the semantic analysis of the individual statements and their belonging to the factors, the individual factors can be named as follows:

1. Factor - Supply\_chain (Q6; Q7; Q12; Q13; Q19; Q20)
2. Factor - Online (or digital) (Q1; Q2; Q11; Q14; Q16; Q17);
3. Factor - Communication\_price (Q3; Q4; Q5; Q9; Q10);
4. Factor - Geomarketing (Q18);
5. Factor - Customer satisfaction (Q8; Q15).

These five factors can be considered as the key factors in the activities that make up the activity model of retail operations.

RQ3: How can individual retail operations be characterized based on the presented model of retail operations activities?

In order to examine individual retail outlets in the context of the identified (five) key factors, we decided to use cluster analysis (Two-Step Cluster method). Given the nature of the data, we used the distance measure - log-likelihood and the clustering criterion Schwarz's Bayesian Criterion (BIC). The generic parameters of the initial cluster analysis output indicated poor model quality (BIC = 0.3), offering two clusters that were not significantly different in the context of the factors under study. In the depth analysis, the analysis was found to achieve low quality for a low number of clusters. Therefore, the procedures were re-evaluated. We used the Two-Step algorithm, using the EFA results (five factors) as the basis for cluster formation. Based on the above, three clusters were formed.

In the context of size, Cluster 1 contains 42.7% (n = 105) of the studied retail outlets, Cluster 2 contains 33.7% (n = 83) of the retail outlets, and Cluster 3 contains 23.6% (n = 58) of the retail outlets. The quality of the clusters was assessed using Silhouette measure of cohesion and reparation and the result shows acceptable results.

The factor (1) Online had the highest importance, followed by (2) Supply chain, (3) Geomarketing, (4) Communication and price and the lowest importance was (5) Customer satisfaction. If we think deeper about the importance, it is logical that it is important in the context of differentiation. In this case, it is therefore logical that customer satisfaction, although ranked lowest in terms of differentiation, is one of the most important elements of the model. Of course, as each establishment has identified this priority, this factor does not represent an important differentiating element.



**Cluster 1**

Cluster one represents retail establishments that focus heavily on the online dimension. They score lower than the other clusters in terms of supply chain. They also make less use of the marketing communication and price elements. More than 85 % of the retail outlets in that cluster are customer-oriented to the maximum extent. Geomarketing activities are used at an above average level. In the context of the available identifiers and characteristics, it can be concluded that these are mostly small establishments, mainly with food products (so-called groceries).

**Cluster 2**

Cluster two does not use elements of the online dimension. The operations orient their activities as much as possible within the supplier customer chain, price and communication, and also customer satisfaction. A significant element is the complete disregard of geomarketing activities (100 % of the operations do not use geomarketing). In the context of business identifiers, these are medium (400m<sup>2</sup>) and large food chains (700m<sup>2</sup>), offering both food and non-food ranges. These are largely multinational retail chains.

**Cluster 3**

Cluster three represents the smallest group of retail establishments. In the context of the dimensions examined, it can be noted that it devotes only a small part of its activities to online activities. The key characteristics of this cluster are a high focus on the supply-chain dimension, geomarketing and customer satisfaction, with all operations scoring maximum in these dimensions. Communication and pricing activities are also significant. In the context of the available characteristics of retail outlets, these are medium and large retail outlets that are local/regional in nature.

**Discussion**

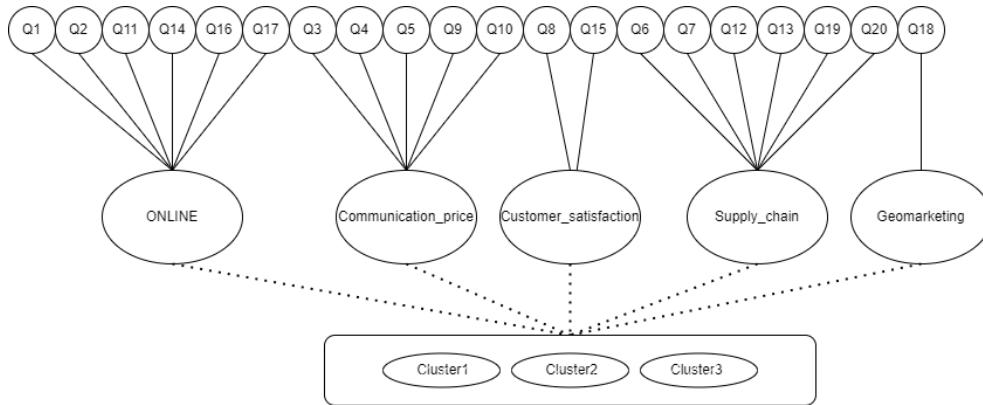
The present paper examines the activities of retail outlets in the context of managerial perceptions. Based on the identification of activities identified in the literature and semi-structured interviews with experts, we examined the activities of retail food outlets in Bratislava.

This model is used to understand the key areas of activities of retail food outlets. It also serves to profile individual retail outlets, bringing a new understanding of the differentiation and segmentation of retail units to the knowledge base. In the context of differentiation, the model can also serve as a resource for identifying competitive advantage in the study area on an activity-based basis.

In this paper, we examine twenty retail-unit activities that were constructed based on the literature and consultations with practitioners. As Bridgeland, Zahavi (2009) state, the BM would be formed and visualized in the context of the process. We have recorded the visualization of the model in Figure 1. However, the research results bring a decomposition of the current activities in identifying the BM elements of established firms as it is in similar researches e.g., Berends et al, (2016); Ode and Louche (2022); Laszczuk and Mayer (2020). However, the presented model offers a

view of activities that can give a retailer a competitive advantage based on activities that create value for end-customers.

We complement micro-level research by focusing on the managerial perspective on BM in established firms, such as research from Baden-Furall and Mangematin (2013), Do Vale et al. (2021), and Ode and Louche (2022).



**Figure 1: Visualisation of the business model**

**Source:** own processing

As the model shows (Figure 1), we have identified five key activity areas within the activities studied in Bratislava using EFA which form the activity model: online, communication price, customer satisfaction, supply chain, geomarketing. This model was the basis for segmenting individual retail outlets in Bratislava using cluster analysis. The results indicate the existence of three segments. Logically, the model takes in its form the intensity of realization of each factor. In order to identify the individual retail outlet segments, we have used both the presented activity model and the characteristics of individual retail outlets, which completes the overall picture of the BM of established retailers. The identification of individual elements points to causality explaining managerial thinking and subsequent BM innovation similar to the study by Baden-Furall and Mangematin (2013).

The retail activity model as presented has several theoretical and practical benefits. Within the framework of the identified key activity drivers examined, we have developed a segmentation model for profiling retail outlets in the Bratislava area. The results suggest the existence of three clusters. The first cluster can be termed “online innovators” as their characteristic feature within the activities is precisely the activities in the online environment. It is these outlets that can be pioneers in online innovation. The second cluster represents the “international retail chains”, which focus their activity on the supply chain. It is the international experience and multiplicity that can bring innovative innovations and high efficiency in supply chain activities. The last cluster can be termed “regional chains”, which largely focus on

efficiency in supply-chain activities. As these are regional players, proper targeting of customers is important, which can be seen in the high use of geomarketing activity. These companies are characterised by a high percentage of domestic products on offer, which they also use in their communication and thus try to bring value to their customers.

### Conclusion

It's hard not to agree that, the global economy and an unstable business environment affect the need for sophisticated strategic actions aimed at introducing innovations and sustaining a long-term competitive position (Kuczevska and Tomaszewski, 2022).

The explicative potential of BMs on the basis of their elements characterizes the behaviour of the enterprise in the market. This is manifested in changes in the way individual core and support functions of the value chain are performed and in the relationships between them are reflected in BMs. The BM elements identified in the research undertaken highlight the changing role of retail units, which is symptomatic of a larger change brought about by technology: the erosion of boundaries throughout the business system. In this context, the results show that it is possible to notice how domestic retail chains will have to adopt some elements of BM of foreign retail chains and include them in their core activities. This represents the contribution of the paper to current management practice on how to achieve competitive advantage in the grocery market. The theoretical contribution can be considered as the methodological apparatus used to find out the state of how managers understand the problem of value creation of BM of established enterprises in the food market. In this context, the paper helps to improve managers' capabilities in creating their own processes and organization under conditions of sustainability and deepening digitalization. Given the high dynamics of change in the studied industry, the main determinants of the emergence of possible new business solutions in the retail industry have been identified.

In the context of the activities, we examine the activity or inactivity of the retail outlets under study in Bratislava. The concept of dichometrics can be considered as one of the possible limitations of the work. In the future, it would be more appropriate to investigate the extent of these activities, or their frequency, to obtain more accurate data. In the future, it would also be appropriate to investigate more activities and characteristics of retail establishments as possible influences on their operations. The thesis focuses on the location of Bratislava (the capital city of Slovakia). In the future, it would be appropriate to investigate other locations as well. In the context of the methodology, it should be noted that "the vast majority of attempts at factor analysis do not yield clear-cut results" (Johnson and Wicherns, 2007). In this context, not only maximising the potential of loadings, but also factual and expert interpretation must be considered.

## Acknowledgements

The paper was supported by VEGA 1/0012/22 “Innovative business models of retail outlets based on geo-marketing data and their influence on the creation of the value base offer and food retail chains in the digital period”.

## References

- Baden-Fuller, C., Mangematin, V., (2013). Business models: A challenging agenda. *Strategic Organization*, 11(4), 418–427.
- Berends, H., Smits, A., Reymen, I. and Podoyntsyna, K., (2016). Learning while (re)configuring: Business model innovation processes in established firms. *Strategic Organization*, 14(3), 181–219.
- Bilková, K., Križan, F., Horňák, M., Barlík, P. and Kita, P., (2017). Comparing two distance measures in the spatial mapping of food deserts: The case of Petržalka, Slovakia. *Moravian Geographical Reports*, 25(2), 95–103.
- Björkdahl, J., Fallahi, S. and Holmén, M., (2022). Explaining business model innovation processes: A problem formulation and problem solving perspective. *Industrial Marketing Management*, 105, 223–239.
- Bridgeland, D. M., Zahavi, R., (2009). *Business modeling: A practical guide to realizing business value*. Morgan Kaufmann. Elsevier.
- Brynjolfsson, E., Hu, Y. J. and Rahman, M.S., (2013). Competing in the Age of Omnichannel Retailing. MIT Sloan, *Magazine Summer 2013 Research Feature*. Retrieved from <https://sloanreview.mit.edu/article/competing-in-the-age-of-omnichannel-retailing/>
- Cai, Y.-J., Lo, C. K. Y., (2020). Omni-channel management in the new retailing era: A systematic review and future research agenda. *International Journal of Production Economics*, 229, 107729.
- Chatterjee, S., (2013). Simple Rules for Designing Business Models. *California Management Review*, 55(2), 97–124.
- Chesbrough, H., Rosenbloom, R. S., (2002). The role of the business model in capturing value from innovation: Evidence from Xerox Corporation’s technology spin-off companies. *Industrial and Corporate Change*, 11(3), 529–555.
- Demil, B., Lecocq, X., (2010). Business Model Evolution: In Search of Dynamic Consistency. *Long Range Planning*, 43(2–3), 227–246.
- Do Vale, G., Collin-Lachaud, I. and Lecocq, X., (2021). Micro-level practices of bricolage during business model innovation process: The case of digital transformation towards omni-channel retailing. *Scandinavian Journal of Management*, 37(2), 101154.
- Foss, N. J., Saebi, T., (2017). Fifteen Years of Research on Business Model Innovation: How Far Have We Come, and Where Should We Go? *Journal of Management*, 43(1), 200–227.
- Gil-Gomez, H., Guerola-Navarro, V., Oltra-Badenes, R. and Lozano-Quilis, J. A., (2020). Customer relationship management: Digital transformation and sustainable business model innovation. *Economic Research-Ekonomska Istraživanja*, 33(1), 2733–2750.
- Gołębiowski, T., Duszik, T. M., Lewandowska, M., and Witek-Hajduk, M., (2008). *Modele biznesu polskich przedsiębiorstw*. Oficyna Wydawnicza. Szkoła Główna Handlowa.
- Hamel, G., (2000). *Leading the revolution*. Harvard Business School Press.

- Johnson, M. W., (2010). *Seizing the white space: Business model innovation for growth and renewal*. Harvard Business Press.
- Johnson, R. A., Wichern, D. W., (2007). *Applied multivariate statistical analysis*. (6th ed). Pearson Prentice Hall.
- Kita, P., Grossmanová, M., (2014). Reflection of Bratislava Retail Network in Selected Aspects of Consumer Behaviour. *Verstas: teorija ir praktika*, 15(3), 279–284.
- Kita, P., Maciejewski, G., Čvirik, M. and Kitová Mazalánová, V., (2022). New factors of consumer behavior in the context of business models used in retailing during the COVID-19 era, *Forum Scientiae Oeconomia*, 10(3), 75-92.
- Križan, F., Bilková, K., Kita, P. and Siviček, T., (2016). Transformation of retailing in post-communist Slovakia in the context of globalization. *E+M Ekonomie a Management*, 19(1), 148–164.
- Kuczeska, J., Tomaszewski, T., (2022). Exploring potential drivers of innovation-related activities in Poland: evidence from Polish business clusters. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 17(3), 775–801.
- Laszczuk, A., Mayer, J. C., (2020). Unpacking Business Model Innovation Through an Attention-Based View. *M@n@gement*. 23(1), 38-60.
- Lehmann-Ortega, L., Musikas, H., & Schoettl, J.-M., (2017). *(Ré)inventez votre business model* (2e éd. avec 50 cas). Dunod.
- Lévy, J., Lussault, M., (2013). *Dictionnaire de la géographie et l'espace des sociétés (Nouvelle édition revue et augmentée)*. Belin.
- Linden, W. J. van der, Hambleton, R. K., (1997). *Handbook of modern item response theory*. Springer.
- Mandli, Y., Taoufik, D., (2019). The business model literature: literature review and research perspectives. *Revue Internationale des Sciences de Gestion*, 3, 677-698.
- Meyer, P., Roth, A. and Gutknecht, K., (2023). Service robots in organisational frontlines - A retail managers' perspective. *Journal of Retailing and Consumer Services*, 70, 103173.
- Ode, K. A., Louche, C., (2022). A business model pattern arrives ... and then? A translation perspective on business model innovation in established firms. *Strategic Organization*, 147612702210941.
- Osterwalder, A., Pigneur, Y. and Tucci, C. L., (2005). Clarifying Business Models: Origins, Present, and Future of the Concept. *Communications of the Association for Information Systems*, 16, 1-25.
- Revuelta, J., Maydeu-Olivares, A. and Ximénez, C., (2020). Factor Analysis for Nominal (First Choice) Data. *Structural Equation Modeling: A Multidisciplinary Journal*, 27(5), 781–797.
- Saura, J., R., Skare, M. and Riberio-Navarrete, S., (2022). How Does Technology Enable Competitive Advantage? Reviewing State of the Art and Outlining Future Directions. *Journal of Competitiveness*, 14(4), 172–188.
- Schweizer, L., (2005). Concept and Evolution of Business Models. *Journal of General Management*, 31(2), 37–56.
- Scridon, M. A., Achim, S. A., Pinteá, M. O. and Gavriletea, M. D., (2019). Risk and perceived value: Antecedents of customer satisfaction and loyalty in a sustainable business model. *Economic Research-Ekonomska Istraživanja*, 32(1), 909–924.
- Sharifpour, H., Ghaseminezhad, Y., Hashemi-Tabatabaei, M. and Amiri, M., (2022). Investigating cause-and-effect relationships between supply chain 4.0 technologies. *Engineering Management in Production and Services*, 14(4), 22-46.

- Šimberová, I., Kita, P., (2020). New Business Models Based on Multiple Value Creation for the Customer: A Case Study in the Chemical Industry. *Sustainability*, 12(9), 3932.
- Simone, A., Sabbadin, E., (2017). The New Paradigm of the Omnichannel Retailing: Key Drivers, New Challenges and Potential Outcomes Resulting from the Adoption of an Omnichannel Approach. *International Journal of Business and Management*, 13(1), 85-109.
- Slavik, S., Zagorsek, B., (2016). Relationship between Business Strategy and Business Model Studied in a Sample of Service Companies. *Journal of Competitiveness*, 8(4), 72-84.
- Sławińska, M., (2010). *Modele biznesu w handlu detalicznym*. Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu.
- Sorescu, A., Frambach, R. T., Singh, J., Rangaswamy, A. and Bridges, C., (2011). Innovations in Retail Business Models. *Journal of Retailing*, 87, 3-16.
- Šperka, R., Halaška, M., (2017). The impact of sales service in MAREA trading simulation under changing environment circumstances. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 12(2), 355-371.
- Starkweather J., (2014). Factor Analysis with Binary items: A quick review with examples. *RSS Matters*. Retrieved from <http://web3.unt.edu/benchmarks/issues/2014/09/rss-matters>.
- Verstraete, T., Kremer, F. and Jouison-Laffitte, E., (2012). Le business model: Une théorie pour des pratiques. *Entreprendre & Innover*, 13(1), 7-26.
- Volle, P., Dion, D., Héliès-Hassid, M.-L. and Sabbah, S., (2008). Les business models dans la distribution. *Revue française de gestion*, 34(181), 123-144.

## DZIAŁALNOŚĆ PLACÓWEK HANDLU DETALICZNEGO JAKO ELEMENT TWORZENIA MODELU BIZNESOWEGO

**Streszczenie:** Zmiany paradygmatu społecznego, trendów technologicznych i cyfrowych, a także negatywny wpływ makrootoczenia znajdują odzwierciedlenie również w zmianach modeli biznesowych widocznych w handlu detalicznym, które stają się obecnie wielokanałowym środkiem tworzenia wartości. Celem niniejszego artykułu jest identyfikacja i zbadanie realizacji wybranych działań sprzedażowych jako nośnika wartości dla identyfikacji modeli placówek detalicznych, a następnie ich segmentacji i profilowania. Artykuł poparty jest badaniami pierwotnymi na próbie 246 menedżerów punktów sprzedaży detalicznej (wywiady częściowo ustrukturyzowane) w Bratysławie. Zebrane dane poddano analizie z wykorzystaniem statystyki opisowej i indukcyjnej oraz metod statystycznej analizy wielowymiarowej (EFA, CA). Wyniki sugerują pięć kluczowych obszarów projektowania modeli biznesowych, a mianowicie: łańcuch dostaw; świat online (cyfrowy); komunikacja i cena; geomarketing oraz satysfakcja klienta. Na podstawie zidentyfikowanych czynników można wyróżnić trzy jednorodne grupy punktów sprzedaży detalicznej.

**Słowa kluczowe:** modele biznesowe; sprzedaż detaliczna; sieci handlowe; kluczowe obszary w modelu biznesowym

## 零售单位的活动作为一个元素 商业模式创造

**摘要：** 社会范式的变化、技术和数字化趋势以及宏观环境的负面影响也反映在零售商业模式的变化上，零售商业模式正在成为多渠道的价值创造手段。 本文的目的是识别和检查选定零售活动的实施，作为零售机构模型识别的价值载体，以及随后的零售机构细分和分析。 该论文得到了对布拉迪斯拉发 246 名零售店经理使用调查（半结构化访谈）样本的初步研究的支持。 使用描述性和归纳性统计以及更高的统计方法（EFA, CA）处理收集的数据。 结果提出了商业模式设计的五个关键领域，即供应链；在线或数字世界；沟通和价格；地理营销和客户满意度。 基于以上因素，可以确定三个同质零售店组。

**关键词：** 商业模式；零售；零售连锁店；商业模式的关键领域