

IDENTIFYING CUSTOMERS VALUE IN CHAIN HYPERMARKETS: SMART MARKETS¹

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Abstract

All businesses want to use information about their customers to make smarter decisions. First of all, the marketer should know the individual identities of their customers. Then, in order to create better experiences in the market and to increase customer value, the company takes different marketing, sales, distribution and production decisions related to different customers. Smart Markets works with every level and every unit to provide a unique experience in the markets. The advantages of trading can be discovered by taking control of the strategy and through a boutique firm that delivers what is needed with maximum results. The essence of managing customer relationships is to treat different customers differently: The first requirement for any business to enter into such competition is that it recognizes a customer in a way that distinguishes it from the other. The main purpose of the modern-day marketing program should be to accumulate customer information by encouraging shoppers to introduce themselves. The main purpose of collecting customer information is, of course, the development of closer and more lucrative relations with individual customers. In order for these to happen, it is essential that the entity makes a reliable relationship with the customer and enables them to share their information easily. The purpose of this study is to reveal the role of intelligent markets in managing the relations with customers in chain hypermarkets. In this study, which is planned in this way, the road map which the enterprises will follow in order to have the ability to collect, edit,

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merge, integrate and distribute the customer information in real time to any individual or group within the scope of the operation is shown with examples. As a result, Chain Hypermarkets closely monitor their customers' every move, no matter if they pay by card or cash to be part of a loyalty plan.

Keywords: smart markets, chain hypermarkets, collecting customer information, customer value

INTRODUCTION

Hypermarkets have played an important role in food distribution since their existence. This distribution model has been widely accepted by both companies and consumers. The evolution of these stores in recent times has been quite dynamic based on good combination of supply, proximity and service (Aseminachin, 2022; Shili, and Sethom, 2022). Retailers are increasingly valued by consumers compared to other commercial formats (Mortimer, 2020), which has triggered the gradual disappearance of traditional markets. Consumers have different needs and they want to meet those needs. Maslow (1943) formulates a hierarchy of human needs and argues that when one's basic needs are met, one develops higher needs and wants. It finds a food need among these needs, and the importance of supermarkets and hypermarkets is great here. These stores cater to people's food needs, so their target audience includes the entire population. It is an extremely competitive market. In these modern times, different chains are using all sorts of strategies to increase their sales and the sales process is almost becoming a science. This is because the merchandising process involves psychology, science, and business studies that seek to gain insight into consumers' tastes, habits, needs, and ways of thinking (Mártinez, 1997). For this reason, and in these times of intense competition, using "smart market" applications (Mekruksavanich, 2019; Aseminachin, 2022) to try to gain an edge over other competitors can provide a great advantage and convenience.

Hypermarket chains have been one of the main topics of information systems (IS) research for the past three decades (Anzelia and Hasugian, 2020). The focus of this study is smart markets. This phenomenon is attracting considerable interdisciplinary interest from researchers in the marketing science, operations research, and economics communities. The idea of smart markets revolves around using theoretically supported computational tools to both understand the characteristics of complex trading

environments and help human decision makers make real-time decisions in these complex environments.

All Supermarkets and Hypermarkets use information about their customers to make smarter decisions (Anzelia and Hasugian, 2020). But for most traditional marketing decisions and actions, information was really only needed at the aggregate or market level. That is, any marketer needed to know the average demand for a particular product feature within the potential customer population, or the price range that this market population would find attractive. However, in today's competitive environment, this information is not enough. Hypermarkets then use this information to plan production and distribution, as well as marketing and sales activities.

The purpose of this study is to reveal the role of intelligent markets in managing the relations with customers in chain hypermarkets. In this study, which is planned in this way, the road map which the enterprises will follow in order to have the ability to collect, edit, merge, integrate and distribute the customer information in real time to any individual or group within the scope of the operation is shown with examples.

PROBLEM S TATEMENT AND RESEARCH QUESTIONS

The main purpose of today's marketing program is to enable hypermarkets to get to know their customers well and to develop marketing strategies that will offer suggestions and offers in line with their wishes and expectations. Collecting customer information is, of course, the most important way to develop closer and more profitable relationships with individual customers. In order for these to happen, it is essential that the entity makes a reliable relationship with the customer and enables them to share their information easily.

In order to be able to answer the problem statement the following sub-questions are formulated:

1. *What are the ways to segment customers and identify leads?*
2. *What data is needed to identify a customer?*
3. *What are Questions that Determinate Customer Value in Chain Hypermarkets?*
4. *What factors determine the Consumer Decision Process?*
5. *What should be the roadmap of smart markets in managing relations with customers in chain hypermarkets?*

IDENTIFYING POTENTIAL CUSTOMERS

Identifying potential customers is crucial to all hypermarket's success. If the business is to be enlarged, it should be determined which segments of the population will be targeted. Identifying the right leads is key to business growth. No customer is the same as another. Every client differs based on their needs, characteristics, interests and many other factors. Identifying leads allows marketers to address each customer-specific need group in a targeted way. In other words, taking a step-by-step and structured approach to identifying the market helps to reach the right audience so that marketing efficiency can be increased effectively.

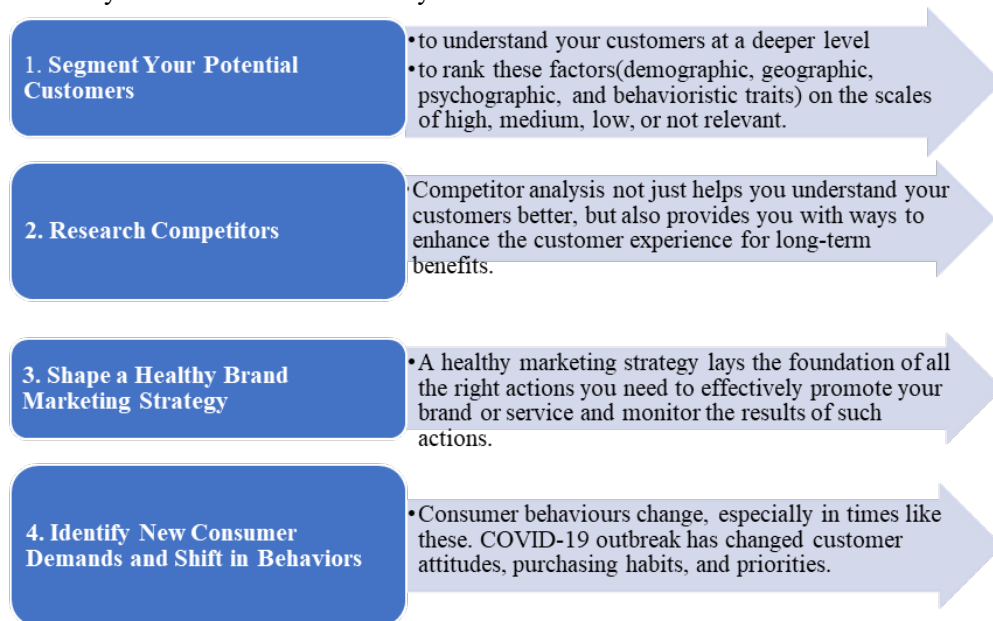


Figure1. Ways to segment customers and identify leads (Ruff,2022)

Segmenting customers is the first step in identifying and understanding the potential customer base (Figure 1). Customer segmentation means dividing customers into groups based on demographic, geographic, psychographic and behavioral characteristics. Segmentation allows to understand customers on a deeper level. It also helps determine what is important to customers or whether factors such as location, price, customer service and quality are important. Segmentation allows to rank these factors on their high, medium, low, or irrelevant scale. This segmentation provides

an easy and effective way to organize and manage the relationship with customers. This process further simplifies your personalization and sales efforts to help increase conversions and customer loyalty.

Geographical segmentation groups potential customers by location, helping to know the local customs, climate and expectations of customers.

Customers can be divided into the following segments: region, climate, dietary preferences, rural or urban, behavioural

It works by grouping customers based on their behavioural data and how they interact with the hypermarket. Behavioural segmentation helps to understand the purchasing habits and patterns of potential customers. Moreover;

- *Number of times the customer bought from you*
- *Monthly, weekly and quarterly purchasing calendar*
- *The amount of product or service purchased*
- *How long does it take for buyers to make a purchase?*
- *Reason or reason for purchase*

Once you have an idea of what you're looking for, it can segment customers accordingly and build a customer profile based on the findings. The customer profile is key to formulating appropriate marketing strategies that will help succeed in the target market. Buyer profiles or personalities are extremely useful, especially when targeting strategically important segments of the market.

Competitor analysis will not only help to better understand customers, but also provide ways to improve customer experience for long-term benefits (Figure 1). Thorough research on competitors will reveal answers to the following relevant questions:

- *What segments do my competitors cover or ignore?*
- *How much are customers willing to pay your competitors?*
- *What is the market position of your competitors?*
- *What are customers discussing on social media? Which channels do customers use the most?*
- *What weaknesses or strengths can you identify with customer reviews?*

Identifying the weaknesses of competitors helps to take advantage of new opportunities. Reviewing what competitors are doing and succeeding provides accurate data points to shape the marketing plan.

A successful marketing strategy lays the foundation of all the right actions you need to effectively promote your brand or service and monitor the results of such actions (Figure 1). An effective marketing strategy comprises a set of elements to take people on a journey from knowing your

product to making the final purchase. One of the main reasons to segregate customer segments into targeted groups is to create a custom marketing plan for each group. With the buyers' persona and other data at your hand, it becomes easier to identify and execute strategies to grow your brand awareness and equity.

Consumer behaviours change, especially in times like these (Figure 1). COVID-19 outbreak has changed customer attitudes, purchasing habits, and priorities. Additionally, the ever-changing landscape of consumer buying behaviours (Shili and Sethom, 2022) is also influenced by factors like sustainability and health perspective.

Identifying Customers

It should be noted that the purpose of identifying customers is to facilitate the development of individual relations with them. The hypermarket should undertake all customer identification activities. These activities are (Peppers *et al.*, 2016):

1. Identify: It is necessary to decide what information will constitute the identity of the real customer: Name and address? Mobile number? E-mail address? Home phone number? House information?

2. Find: Hypermarkets' customers are out. An omnichannel approach is essential, involving information from every possible channel, such as call centres, websites, social and in-store interactions.

3. Collection: The priority of this stage should be to gather the information needed to identify customers and classify their behaviour. Businesses with a website and online customer service have an advantage in that customers can enter and protect their own information when purchasing their products.

4. Connectivity: With the information collected and stored centrally, the next step is to make this information available to staff in the most useful format.

5. Integrate and Recognition: It is a recognizable integration of the centrally collected and stored information for the entire operation.

6. Store: The most effective way to store and manage customer information is to have a relational database - a central customer database should be created to ensure that all systems operate from the same source and ensure that everyone has up-to-date information.

7. Update: All customer data

8. Analyse: By using data mining tools in spreadsheet programs that analyse data to identify patterns or relationships, you can begin to profile customers and develop sales strategies.

9. Make it available

10. Securing and protecting

What data is needed to identify a customer?

Directly supplied data consists of three obvious types (Ruff, 2022):

Behavioural data: Such as customers' buying and purchasing habits, interactions with the company, communication channels used, language used, product consumption and company wallet share.

Attitudinal data: reflecting attitudes about products, such as satisfaction levels, perceived competitive positioning, desired features, and unmet needs as well as lifestyles, brand preferences, social and personal values, opinions and the like.

Demographic data: gender, education level, age, income, marital status, household composition, home ownership, and so on.

THE ROADMAP OF SMART MARKETS

The essence of managing customer relationships is to treat different customers differently. The first requirement for any business to enter into such competition is that it recognizes a customer in a way that distinguishes it from the other. The main purpose of the modern-day marketing program should be to accumulate customer information by encouraging shoppers to introduce themselves. The collecting customer information is, of course, the development of closer and more lucrative relations with individual customers. In order for these to happen, it is essential that the entity makes a reliable relationship with the customer and enables them to share their information easily.

In the table 1 shows the elements of the consumer decision process (Puccinelli *et al.*, 2009; Aldin and de Cesare, 2011).

Table 1. The Consumer Purchase Decision Process

	Need Recog nition	Informat ion Search	Evaluation	Purcha se	Past- Purchase
Goals schema and information processing	x	x	x	x	x
Memory		x	x		
Involvement	x	x	x		

Attitudes			X	X	X
Affect	X	X	X	X	X
Atmospheres			X	X	X
Attributions and choices			X	X	X

Sherman (2012) emphasized that retail sales forecasts and forecasting buyer behaviour are extremely important as retailers apply customer analysis to improve customer relationship management and meet customer demands and expectations. Therefore, it is necessary to select the elements that create for the customer value and the questions that will shed light on this (Puccinelli *et al.*, 2009).

Questions Determining Customer Value (Puccinelli *et al.*, 2009) in Chain Hypermarkets are shown in Table 1.

Table 2. Questions that Determinate Customer Value in Chain Hypermarkets

Questions
Goals • How does congruity between the shopping goal and the retail environment affect consumers' evaluation, search, and shopping behaviour? • How do environmental factors (e.g., economic conditions) influence consumer motives? • How might the retail context facilitate shopper need recognition through in-store communications (e.g., point-of-purchase displays)? Memory • Which types of in-store activities can hypermarkets use to increase involvement (e.g., sampling, trials)? • What is the effectiveness of offering food samples to increase involvement, trial, purchase, and satisfaction in grocery settings? • Can hypermarkets increase experiential trial through merchandise, such as when music stores allow consumers to sample and listen to music prior to purchasing CDs? • Are experiential trials more effective when they include a host of products? • What are the benefits of deeper processing for hypermarkets that carry more merchandise and consumers who shop there? Attitudes • How should hypermarkets or brand managers update their attitude models to reflect the balance between prior store/brand associations and new information? • What are the trade-offs associated with different attitude assessments (e.g., conjoint versus Likert scales), and which best reflect consumers'

evaluations?

- If attitudes are stored in memory, what cues can hypermarkets use to evoke positive prior assessments when managing bad news or crises?
- How do hypermarkets establish equity after they have reverted to a “sale after sale” mentality?
- How might hypermarkets use research on reinvigorating old brands to save brands that once had both high awareness and very positive associations, when they have become less positive but awareness remains high?
- How can hypermarkets employ attitudinal measures to predict the subsequent behavioural intentions and actions of their prospects and consumers?

Affect

- What makes a shopping environment more or less engaging/arousing to customers? What is the role of product assortment, service, and atmosphere in generating arousal/engagement? In what circumstances does customer engagement translate into higher sales and/or profits?
- What can be done to make the shopping experience fun, desired, and a treat?
- How do affect-laden signage/displays/end-caps influence consumer evaluations and choice? **Atmospherics**
- What role does consistency between exterior atmospheric cues (e.g., parking lot, store exterior, signage, and window treatments) and interior atmospheric cues (i.e., ambient, design, social) play in shopping?
- What role does consistency between the atmosphere of the store and its Web site play?
- Do thematic designs within stores serve as attracting or avoidance destinations?
- What is the role of emerging ambient elements (e.g., scent, temperature)?

Attributions

- How can hypermarkets increase customer satisfaction through attributions to retail employees for positive events?
- What tactics can prevent customers from blaming the hypermarket, or how, in the event of a real mistake, the hypermarket can help the customer forgive the hypermarket?

Customers value friendliness and attentive treatment, and these must be achieved in order to be successful, especially in a competitive market. Smart markets to use information about their customers to make smarter decisions (Shili and Sethom, 2022). As artificial intelligence is widely used by all sectors, technological change in the world is accelerating. Artificial intelligence will be discussed in the next 20-30 years. Technology

companies will compete with each other to integrate whatever humanity uses into new technologies (Mekruksavanich, 2019). Recently, both shopping and eating and drinking habits of consumers have started to change thanks to smart supermarkets, especially in the retail sector.

For example, some supermarkets initially made a difference with fast delivery of fresh products (fruit-vegetables, meat and seafood products, dairy products), smart rail systems in the market, fresh restaurants in the market, and fast checkout counters. They can cook the fish selected in the market and offer opportunities to eat it with pleasure. In fact, while it is possible to buy that fish over the internet, they can also serve it to homes as cooked.

Many markets can already offer these services to their customers under different service names. They even know how often their customers shop and what they buy with their loyalty cards. This data cannot be used effectively in many markets. Supermarkets do not send anything other than general announcements to their customers with loyalty cards via spam SMS. Moreover, the majority of those who shop at traditional supermarkets do not have such a card, so many consumers may not be among the loyal customers of the grocery stores.

However, with the effect of the recent pandemic, especially the spread of online shopping has changed this situation. At this point, with online memberships or loyalty cards, the customer can know how much meat and how much fish he eats per month. It can also know whether you like the meat cooked or undercooked. Customers are also informed about the campaigns on the most consumed products. In other words, being a smart consumer warns you to consider the prices of the products. In this way, it continues to change the shopping habits of consumers.

Applications were made to make it easier for people to pay in this way by establishing fast payment cashiers (Edwan *et al*, 2020). By getting their payments via their loyalty card or phone number application, their customers can know which products they buy and how often, at what intervals they shop online or at the supermarket, whether they like fish or meat, and how they like meat.

In summary, as in previous periods, hypermarkets are now doing the job of calling apprentices and shaking the basket. But now you can even schedule the time of your order. Since all these are returned through the application, the margin of error can remain at a minimum.

DISCUSSION AND CONCLUSION

In fast moving consumer goods, if companies that cannot become a brand within 5-10 years cannot put their products on the shelf, they will either

become contract manufacturers or close their factories and become workers somewhere. It can be said that the same end awaits restaurants or that smart supermarkets will have to compete (Edwan *et al*, 2020). Whether smart market applications are fully used by hypermarkets, street restaurants will not be as close to their customers as smart supermarkets, where consumers are always at hand and do their home shopping. Unless food companies are branded and hit the shelves, they won't have a chance to hit the shelves in 10 years. Since consumers won't be going to the markets very often in the coming years, they will rarely encounter new brands. Provided it has not already become a Brand, Smart Hypermarkets will not accept those companies or they will have to pay very high amounts. If brand X pasta enters the consumer's cabinet, brand X pasta will continue to enter. Thanks to the artificial intelligence they have, the hypermarkets, called smart markets, will know which brand of pasta their customers consume and will automatically continue to send that brand.

With its smart devices in kitchens (Minh and Khanna, 2018), this artificial intelligence will interact with devices in the kitchen. Self-ordering of appliances in our kitchen (Shweta *et.al.*, 2013) which was once thought to be impossible, may soon happen. Very soon, our refrigerator will contact the hypermarket who uses this type of artificial intelligence application (Mohamed and Ahmed, 2014), will order the missing products at home, and the consumer will only give approval. It will not look for a new brand, it will continue to use what it already uses. The transportation costs of the companies to the consumers will increase, so in the future, it will be inevitable to either become a brand or be a subcontractor for existing brands.

With smart markets meeting artificial intelligence, supermarkets around the world are testing technologies that revolutionize the supermarket experience and bring our offline behaviour into the digital realm. For example, companies like Amazon have anticipated the needs of their customers and tried to make their plans around it (Alex, 2022). It knows that most of the consumers do not like to pay the delivery charges. Hence, they have offered various options for free or minimum payment delivery.

With increased competition and supermarkets needing to work harder to win the favour of shoppers, technology will become the main feature of the way we shop. The growing popularity of online grocery shopping and click-to-collect services will change how consumers do their weekly shopping. Incorporating predictive technologies into the online shopping experience allows consumers (Fan *et al.*, 2020) to access discounts on their favourite brands or reorder the same essential items each week without having to add them to the cart individually. These features have major implications for convenience (Goi'c *et. al.*, 2021). For example; Let's say you buy two packs

of milk, a bucket of yogurt and a bag of delicious red apples via a smartphone app on your way home each week. Then, the next time you log in to grocery shopping, your favourite items are already in your cart, ready to check out, and "*Forgot toothpaste?*" with a reminder. Using data collected from your previous purchases, hypermarkets can understand what you've bought and how often, and send you friendly reminders when it's out (Fan *et al.*, 2020). The days when you realize that you forgot to buy toothpaste on the way home will be in the past.

While data-driven technologies allow consumers to shop with ease, these apps are also useful for supermarkets looking to manage inventory and reduce food waste (Ceryes *et al.*, 2021).

To combat these challenges, so-called smart markets, hypermarkets use consumer data to understand how to market and sell "unattractive" or "defective" products. For example, Australia's Woolworths is successfully doing this with their '*Odd Bunch*' app, which aims to save ugly fruits and vegetables from the trash by reducing their prices (Mortimer, 2020). As society becomes more and more demanding, retailers are investing large sums to stay ahead of consumer trends. As a result, it will be possible to reach consumers in a very short time, which traditional supermarkets have not been able to reach with loyalty cards for decades. They will be able to know better than anyone else what the people in the field of activity are constantly eating and consuming. In the future, they may even issue health warnings to their customers. It can be said that dietitians can also undertake the work of artificial intelligence.

This article has summarized the roadmap that smart markets will follow in managing relations with customers in chain hypermarkets so that they have the ability to collect, organize, consolidate, integrate and distribute customer information in real time to any individual or group within the scope of operation. This overview stimulates additional research into the host of retailing issues discussed herein. These topics demand further research that can enrich existing retailing theory and practice.

REFERENCES

1. Aldin L., Cesare S. de, (2011). A literature review on business process modelling: new frontiers of reusability, *Enterprise Information Systems*, 5, pp. 359-383
2. Anzelia, A., & Hasugian, P. S. (2020). Application of Data Mining in Determining Sales Patterns at 212 Mart Supermarkets in Lubuk

- Pakam Using the Apriori Algorithm. *Journal of Intelligent Decision Support System (IDSS)*, 3(4), 10-17.
3. Aseminachin K. I. (2022). Technological Inclusions as a Necessity to Customers' Response of Hypermarkets in The South-South, Nigeria. *BW Academic Journal*, 1(1), <https://bwjournal.org/index.php/bsjournal/article/view/655> (accessed 20.07.2022)
 4. Biter, A. (2022). Amazon Style Wants Roll Out Across The-Country Job Listing, <https://www.businessinsider.com/amazon-style-wants-roll-out-across-the-country-job-listing-2022-3> (accessed 04.08.2022)
 5. Ceryes, C. A., Antonacci, C. C., Harvey, S. A., Spiker, M. L., Bickers, A., & Neff, R. A. (2021). "Maybe it's still good?" A qualitative study of factors influencing food waste and application of the EPA Food recovery hierarchy in US supermarkets. *Appetite*, 161.
 6. Edwan, T. A., Tahat, A., Hammouri, S., Hashem, L., & Da'boul, L. (2020). An intelligent and automated approach for smart minimarkets. *International Journal of Computational Intelligence Systems*, 13(1), 852.
 7. Fan, X., Ning, N. and Deng, N. (2020), "The impact of the quality of intelligent experience on smart retail engagement", *Marketing Intelligence & Planning*, Vol. 38 No. 7, pp. 877-891. <https://doi.org/10.1108/MIP-09-2019-0439>
 8. Goić M., Levenier C., Montoya R. (2021). Drivers of customer satisfaction in the grocery retail industry: A longitudinal analysis across store formats, *Journal of Retailing and Consumer Services*, Volume 60, May 2021,
 9. Maoz, M., & Manusama, B. (2018). "Magic Quadrant for the CRM Customer Engagement Center." May, <https://www.gartner.com/doc/reprints?id=1-4TMGJ66&ct=180321&st=sb> (accessed 07.08.2022)
 10. Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>
 11. Mekruksavanich, S. (2019). The smart shopping basket based on iot applications. In 2019 IEEE 10th International Conference on Software Engineering and Service Science (ICSESS) (pp. 714-717). IEEE.
 12. Minh V. T., Khanna R. (2018). Application of Artificial Intelligence in Smart Kitchen, *International Journal of Innovative Technology and Interdisciplinary SciEnces*, ISSN: 2613-7305 Volume 1, Issue 1, pp. 1-8,

13. Mohamed A., Ahmed F. (2014). Smart home automated control system using android application and microcontroller. *International Journal of Scientific & Engineering Research*, vol. 5(5), pp: 935-939.
14. Mortimer G., (February 7, 2020). This is what's in store for supermarkets in 2020 and beyond, Retail <https://www.smartcompany.com.au/industries/retail/supermarket-predictions-2020>
15. Peppers, D., Rogers, M., Kotler P. (2016). *Managing Customer Experience and Relationships, s: A Strategic Framework 3rd Edition*, Wiley pub.
16. Puccinelli N. M., Goodstein R. C., Grewal D., Price R., Raghubir P., Stewartf D. (2009). Customer Experience Management in Retailing: Understanding the Buying Process, *Journal of Retailing* 1, 15–30 pp.
17. Ruff H. (2022). Identifying Customer <https://www.oreilly.com/library/view/managing-customer-experience/9781119236252/c04.xhtml> (accessed 20.07.2022)
18. Sheman, E. (2012). Retail: How-tec is changing retail, available at <http://www.inc.com/erik-shaman/successful-retailers-use-technology-to-bost-sale-and-margin.html>(accessed 03.08.2022)
19. Shili, M., & Sethom, K. (2022, February). Internet of Things in the Setting of COVID-19 In E-Commerce: Defining and Implementing an Appropriate Framework. In 2nd International Conference on Industry 4.0 and Artificial Intelligence (ICIAI 2021) (pp. 34-39). Atlantis Press.
20. Shweta S., Priyanka R., Madhura M. (2013). Automated food ordering system with real time customer feedback, *International Journal of Advanced Research in Computer Science and Software Engineering*, (2013), vol. 3(2), pp. 220-225