FORESIGHT IN THE GLOBALIZATION ERA ON RETAIL

https://doi.org/10.47743/jopafl-2023-30-21

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Abstract: The paper addresses the topic of Forecasting in the era of globalization on retail, influenced by Artificial Intelligence. Artificial Intelligence is defined as the science of creating machines with the ability to achieve goals in the world. Humanity is currently facing a great change. We will live in a world of technology, which brings with it many opportunities but also many unknowns and challenges. They are generated by the impact of globalization, technological progress and the changes generated by the presence of millennials. Retail stores should be open to AI but be careful to adopt those AI solutions that lend themselves to their specific context. For this scientific article we implemented a qualitative research. Among other things, following the research, we found out that Artificial Intelligence applied in retail is the solution to achieve higher performance in the field of retail, but without being used in an unethical way. The results obtained from the research provide an overview of Artificial Intelligence in the sphere of the web at the present time. Considering the direction in which technology is evolving and based on the arguments of specialists, it can be stated that Artificial Intelligence will represent an element of distinctiveness and competitive advantage in the era of globalization.

Keywords: globalization, forecasting, trends, artificial intelligence, retail, customers.
JEL Classification: M31

This Article was presented as a paper at the 15th edition of the Annual International Conference Globalization and Higher Education in Economics and Business Administration (GEBA 2023), which was held at the Alexandru Ioan Cuza University, Faculty of Economics and Business Administration in Iasi, Romania from the 19-21 October 2023.

Introduction
The global market has expanded exponentially since World War II due to the opening of the world economy, the relaxation of trade and tariff barriers, and the diversification of customer needs (Coe, 2004). Since the mid-1990s there has been a notable change in retailing, a process that not only relates to store operations, but also to supply networks, support operations, knowledge and technology transfers, and the export of products under own brand. Companies that are able to innovate and learn in interaction with other actors are able to exploit the opportunities and face the challenges that arise from globalization, but also to internationalize their activities. Institutional setup, cooperation between companies, government socio-economic policies and active support for companies enhance their capabilities in terms of innovation, learning and internationalization (Awuah, 2011). The term "globalization" should be applied to cases where the retailer has deliberately considered internationalization options as part of an overall market expansion strategy. The corporate culture of individual companies can have a significant influence on
internationalization strategies. The characteristics of international retail expansion are innovation, brand control and market adaptations (Shulyn, 2015).

**Literature review**
Retail has evolved into a global, high-tech industry that plays an important role in the global economy. This leads to a trend in the retail activities practiced by many of the retailers to look for expansion to new locations around the world to gain more profit and a larger market share. In recent years, the combination of economic growth and population growth in emerging and less developed markets has accelerated the progress of retail globalization and the globalization of retail. The challenges faced by global retailers, which are already present in various international markets, respectively seek to increase the degree of penetration of new mature and emerging international markets, can be greater compared to those faced by companies in other sectors of activity (automotive, manufacturing, steel industry) (Reinartz, 2011). As retail expands and more international trade networks turn to globalization, the challenges they face increase. Retail innovations (Dabija, 2015), are imperative to turn these challenges into opportunities and compete successfully, especially in mature and emerging markets. Globalization is not right for every business and every retailer. Retailers must always understand that the domestic market is the main element of globalization. It is important for retailers to understand local consumers for international expansion. Understanding local consumers and knowing what they will be looking for when making a purchase decision is necessary for retailers to enter a foreign market. Retailers need to think deeply about when they enter the foreign market. Retailers usually enter foreign markets too soon. Global marketing has various opportunities and challenges. Organizations need to focus on their strengths and opportunities while making conscious efforts to address weaknesses and threats from competitors. It is essential for each company to prioritize the countries they wish to enter and analyze the competitive advantage in each country (Reinartz, 2011).

The millennial generation represents the last generation of the 20th century. They were born between 1980 and 2000. Globally, the number of Millennials is over 2 billion. Retail companies try to understand their purchasing decisions (Petričević, 2017) and, as far as they can, determine their behavior, respectively attract them to stores (Dabija and Bejan, 2018). Born and raised in the era of booming technology and rapid societal change, millennials exhibit a different mindset than any other generation. The demands of millennials are special, they expect very fast results and rely quite a lot on technology, online communication and social media (Dabija et al., 2017). Organizations are thus faced with a changed situation, having to adapt to the new expectations and demands of this generation. The millennial generation expects a company to have ties to the community and especially to get involved in it, trying to support it, respectively to contribute to its protection (Dabija and Băbuț, 2019). They choose socially responsible companies that use technology and can offer fast and quality services (Genoese, 2016). This generation has imposed itself on the entire retail industry, significantly changing the buyer's decision-making process and its behavior, thus stimulating retail companies to adapt to the new reality (Dabija and Bejan, 2018). It is possible that millennials will become the largest consumers in history, therefore, the interest in attracting this generation to shop and enhancing their preferences for store brands are important goals for retailers (Knezevic, 2017). Research dealing with millennials (Dabija et al., 2017); (Dabija et al., 2018),
indicates that they have a unique lifestyle, one quite different from those of previous
generations. From a marketing perspective, classic advertising campaigns that use
magazines and radio or television spots are no longer effective for millennials, but it is
necessary for them to take place online. Millennials tend to believe more easily the real
experiences of consumers from the Baby Boomers generation (Dabija et al., 2017)
especially due to the fact that they often resort to quickly checking the information they
receive on the Internet (Dabija et al., 2018). Millennials use gadgets such as smartphones,
laptops or tablets while purchasing products (Dabija and Grant, 2016). Millennials are the
first digitized generation. Retail chains must reorient themselves and define strategies and
appropriate ways to approach this generation of consumers who are informed online. Thus,
the retail sector must take into account demographic changes, properly analyzing,
understanding the behavior of individuals and quickly adapting to them. In this way,
retailers will be able to grow in the long term and achieve financial success. The number
of millennials and their strong online presence is forcing retailers to adapt to the new reality
as they increasingly depend on this customer base. For example, on Amazon Prime almost
40% of users are between 18 and 34 years old (Don, 2019). Millennials are
interested/captivated by e-retailers such as Amazon and Alibaba (Don, 2019).
In the era of globalization, retail companies must be present more and more often on social
networks. 34% of respondents preferred a brand active on social media. Nowadays, pro-
active participation on social networks is a prerequisite for survival for every company.
60% of millennials would consider buying a product endorsed by a YouTuber, while a third
consider blogs a valuable source when making a purchase decision. 92% of consumers rely
on the recommendations of friends, acquaintances and relatives when making their
consumption decision, rather than on the information provided by companies (Dabija, Pop
and Săniuță, 2017). The influence exerted by influencers on blogs, forms and/or online
video channels has become exceptional, with millennials having more trust in a certain
person, even unknown, but who posts on social networks, than in the recommendations of
companies (Dabija et al., 2017 ). Millennials are the largest generation in history, one that
will soon rise to prominence as the largest customer sector. With their specific behavioral
patterns, shaped by the global economic crisis, they influence the business practices of all
economic entities, and the retail sector (Ram, 2017). Millennials are an interesting group,
one that needs to be the focus of every retail company's attention. They are the ones who
make the difference in the retail industry (Petričević et al., 2017).
To remain competitive and survive in a globalized market, retailers must become more
agile (Oosthuizen, 2020) and innovate their value chain by adopting new technologies. In
retail, today, retailers are taking multiple approaches to improve customer experiences,
including state-of-the-art in-store technologies (Grewal et al., 2017). In the era of
globalization, retailing is evolving at an accelerated pace due to changes made possible by
technologies and evolving consumer behaviors (Grewal et al., 2017). Artificial Intelligence
is greatly influencing the international business environment providing important benefits
to both sellers and buyers in the retail trade. Its machine learning and predictive tools often
provide relief to the buyer's efforts. Artificial Intelligence for Retailers enables retail to
obtain clearer predictive tools that ensure clearer business decisions are made (Oosthuizen,
2020). Algorithms enhance the ability to visualize business implications and translate
results such as higher sales and lower costs through customer service, product inventory
and personnel. Customer service is an important aspect of any retail business as it drives
consumer loyalty and brand retention. Platforms like Facebook allow retailers to save on operational costs related to customer service by incorporating chatbots through Facebook Messenger. Artificial intelligence replaces the conventional customer service agent who answers questions by sending links, images and texts and uses human responders only if the problem is more complicated (Nadimpalli, 2017). If product inventory is mismanaged, it could trigger customer frustration and lost sales. Artificial Intelligence is a new trend of the 21st century, which makes it necessary for people to accept it and use it to receive benefits. It is important for the society to identify its benefits and threats so that they can give it the right place, be used appropriately (Nadimpalli, 2017).

In the era of globalization, the data companies collect about their customers is one of a company's greatest assets. More and more companies are using data mining to increase revenue and reduce costs. There are all kinds of valuable information that could make a difference to how any business organization runs their business and interacts with their current and potential customers, gaining the competitive edge over their competitors. The easiest way is through Data Mining. Data mining is a set of automated techniques used to extract information from large databases using various criteria, making it possible to discover patterns and relationships. This new derived information can be used in areas such as decision support, prediction, forecasting and estimation to make important, better decisions (Ramageri, 2013). Data mining software uses data as raw material, using a predefined algorithm to search through the large amounts of raw data and group the data according to the desired criteria, which can be useful for future target marketing. Data mining can also help businesses account for peak periods of consumption, freight flow and irregular transactions, which can also help reduce losses attributable to internal fraud, which is around 40-50% of inventory, suffered by retail companies. Data mining can also help resolve patterns involving refunds, discounts, price overrides, credit cards, store cards, debit cards, staff reductions, reversals, overages and shortages due to stock listed as damaged or defective, thus making retail fraud detection much easier, accurate, timely and economical. Data mining and electronic commerce provide numerous opportunities for technical communications and collaboration among professionals willing to acquire new skills and expertise (Apte, 2002).

Creating a picture of what's going on is based on the continuous collection, storage, processing and analysis of large amounts of data to provide the information a business will need. Sales transactions made by people generate terabytes of data, which is growing every day. Data mining tools predict future trends and behaviors, allowing companies to make knowledge-based decisions that will affect the company (Hebert, 2014). Data mining is typically used for the following purposes: to improve customer acquisition and retention, to reduce fraud, to identify internal inefficiencies and then restore operations. The main types of tools used in data mining are: artificial neural networks, genetic algorithms, rule induction, data visualization. Data mining uses discovery-based approaches where pattern matching and other algorithms are used to discover key relationships in the data, previously unknown to the user (Hormozi, 2006). It can be said that data mining applications can be used in a variety of sectors: retail, consumer goods sales, finance, manufacturing, banking, insurance and utilities. Thus, if a company has data about its customers, suppliers, products or sales, it can benefit from data mining, and it can be predicted that data mining will be one of the best tools to be used by retailers and in general by business communities in the next century (Han, 2006).
In retail, every time merchandise is handled, it costs the retailer. By incorporating data mining techniques, retailers can improve their inventory logistics and thus reduce their inventory handling costs. Through data mining, a retailer can identify the demographics of its customers, such as gender, marital status, number of children, etc. and the products they buy. This information can be extremely beneficial for stocking merchandise at new store locations. For national retailers, this information can have a tremendous positive impact on their operations by reducing inventory movement as well as placing inventory in locations where it is likely to sell (Bala, 2009).

Most retail businesses use Data Mining in one way or another, using simple software or third-party services. Wal-Mart is often described as a pioneering leader in data mining and data management: Wal-Mart captures point-of-sale transactions from more than 2,900 stores in six countries and continuously feeds this data to its massive 7.5 terabytes. Wal-Mart allows more than 3,500 suppliers to access data about their products and perform data analysis. These providers use this data to identify customer purchasing patterns at the store display level. They use this information to manage local store inventory and identify new merchandising opportunities. Small businesses can also use data analytics techniques to attract more customers or increase sales from their current customer base (Shaw, 2001).

Data Mining is also used in the emerging e-commerce industry to study and identify performance limitations, analyze data for patterns, detect fraud, and implement fraud reduction methods. Data Mining helps e-commerce to increase sales, do it 24/7 and eliminate political and physical borders. But at the same time, it is essential to pay due attention in its use in e-commerce, due to its global feature that has no national borders. As such, no country or organization can establish rules, safeguards to ensure its correct use and to certify the integrity of the result. Data mining presents challenges that go far beyond the technical. Data mining should be used with well-defined criteria, which should not be based on any kind of prejudice or stereotypical assumptions. Otherwise, the result of data analysis will not give the desired result (Hebert, 2014). Many data management challenges remain, both technical and social. Large online databases raise serious social issues. A prominent social issue is electronic data exchange and data mining software that makes it relatively easy for an organization to track all of its customers' financial transactions. By doing so, one can build a very detailed profile of the consumer's interests and finances (Wu, 2002). Data mining is a very powerful tool that should be used with utmost care to increase customer satisfaction by providing better, safe and useful products at reasonable and economical prices. This should be used to make retail more competitive and profitable. Data mining should be used in such a way as to preserve the privacy and individuality of the human being. It should not be used in any way that may cause undue hardship, financial loss or emotional setbacks (Ahmed, 2004).

**Research methodology**

The methodology followed by the article is a content analysis of forecasts in the era of globalization in the retail field. This method is widely used in the specialized literature. In this article, the first phase involves a literature review and consists of selecting relevant articles from ResearchGate, Science Direct, Scopus and Springer. The articles found were identified using the keywords "globalization", "retail", "artificial intelligence", etc. and we identified a set of about 30 items. In the second phase, the selected articles are analyzed to
identify the following aspects: the impact of globalization in the retail sphere, how artificial intelligence changes the landscape of retail in the context of globalization, etc.

Results and discussion
In the age of globalization the more "intelligent" technologies become, the more autonomous they become and make their own decisions. This means that a new relationship is developing between man and machine that must be guided by law and regulation. Important to note is that society is introduced to new technology. This will inevitably lead to adaptations to existing laws and the development of new legislation and regulations where gaps exist (Holder, 2016). Robotic technologies will have a major impact on the retail industry and society, and will therefore affect how the law develops. Robots are functional objects that physically interact with the material world. As a result, the main intellectual property rights that concern robots are patents and copyrights, the latter arising from the software that controls the operation of robots. The Technical Board of Appeal of the EPO (European Patent Office) tried to provide a definition of what would be contrary to ethics or morality. The Council considered that the concept of ethics covered the protection of public safety and the physical integrity of individuals as part of society, as well as the protection of the environment. Therefore, inventions the exploitation of which could violate public peace or social order, or seriously harm the environment, should be excluded from patentability (Clark, 2020).

Nowadays, customer experience has become the main point of competition for most organizations (Beranek, 2018). Retailers recognize that better customer understanding can enhance customer satisfaction and retail store performance (Puccinelli, 2009). What customers really care about is finding an answer to their current needs or wants in a way that's convenient, enjoyable and gives them good value, both in terms of their money and the use of their time. Today's customers have access to a wider range of technologies than previous generations, with many customer segments growing or being heavily influenced by technology. Changing lifestyles mean that customers want to undertake the purchase process at a time and place that suits their needs, using technology that is in their hand or in front of them (Cook, 2014). Customers want a buying process on their terms and at their convenience. Retailers need to adapt to this and provide customers with such a pleasant experience that customers want to keep coming back. (Cook, 2014).

Artificial Intelligence is changing the customer experience in the era of globalization (Hilton, 2020). The omni-channel consumer experience exhibits a different set of behaviors than the traditional retail consumer experience. Omni-channel customers are better informed, use technology more. When they find a retailer that provides the experience they want, those customers become very loyal and profitable, provided the overall experience is maintained. Serving the omni-channel customer requires the retailer to use smart technology so that information and data are available not only to customers but also to the staff serving those customers (Cook, 2014). In order to understand retailing and consumer experiences, it must be understood that consumers are trying to achieve a specific goal by purchasing and using a specific product or service (Puccinelli, 2009).

Conclusion
New technologies such as the Internet of Things (IoT), augmented reality (AR), virtual reality (VR), mixed reality (MR), virtual assistants, chatbots and bots, which are typically
powered by artificial intelligence (AI), dramatically changes the customer experience. In the future, customers will have radically new experiences thanks to new technologies (Hoyer, 2020). Thanks to IoT, AR, VR, MR technologies and virtual assistants, chatbots and robots, customers will have a new retail experience - the way shoppers experience the world, the way they relate to others and the way they perceive objects in this world. AR, VR, MR add additional informational capabilities and experiences to existing real-life experiences. AR does this by creating an additional and interactive experience of a real-world environment through computer-generated displays, thereby creating more interactive, vivid and rich experiences for consumers. For consumers, digital technologies increase shopping convenience and offer new purchasing channels. AR will enable retailers and brands to virtually display products and accessories - allowing consumers to imagine what they would look like before purchase (Pantano, 2012). There is no doubt that technology is having a strong impact on the retail landscape (Grewal et al., 2017), with innovation becoming especially important to the customer experience in highly competitive industries such as retail (Romano, 2020).

References


