

THE IMPACT OF COVID-19 ON THE DEVELOPMENT AND APPLICATION OF NEW TECHNOLOGIES IN ASSISTED RETAIL IN THE CZECH REPUBLIC

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Abstract: This study investigates the transformative effect of the COVID-19 pandemic on the development and implementation of advanced technologies in the Czech Republic's assisted retail sector. The pandemic accelerated digital transformation across industries, and retail was no exception. The enforced changes in shopping habits and safety measures have led to a surge in the demand for technology-driven solutions in retail, pushing businesses towards innovation to ensure continuity and resilience. The paper analyzes both qualitative and quantitative data gathered from various assisted retail businesses in the Czech Republic. The research employs a mixed-method approach, incorporating case studies, surveys, and statistical analysis to provide comprehensive insights into the swift technological transformations. The findings indicate a significant increase in the adoption of technologies such as contactless payments, augmented reality (AR), artificial intelligence (AI), and machine learning (ML) in retail operations. It further reveals the increased use of e-commerce platforms, digital marketing strategies, and mobile applications to promote contactless shopping. A notable aspect of the study is the rise of voice-assisted shopping, demonstrating a technological shift towards more personalized and efficient customer service. The implications of these findings suggest that the pandemic-induced circumstances have revolutionized retail technology in the Czech Republic. It also hints at the potential for other industries to learn from the strategies deployed in this sector. The study concludes by emphasizing the need for further research to assess the sustainability and long-term impact of these new technologies post-pandemic.

Keywords: assisted retail, covid-19, Czechia, digitization, sales motivation

1. Introduction

The COVID-19 pandemic has ushered in unprecedented changes across all sectors of global economies. These changes have been especially apparent in the realm of retail, where the outbreak has fundamentally altered the traditional retail environment, necessitating rapid adaptations and the implementation of new technologies to facilitate retail operations under novel and challenging circumstances. This paper focuses on these shifts in the context of the Czech Republic, a country that has seen a remarkable transition towards tech-enabled, assisted retail in response to the pandemic. The country's retail sector has historically relied heavily on in-person transactions, with only a modest penetration of e-commerce before the pandemic. However, the spread of COVID-19 and the subsequent containment measures have swiftly expedited the digital transition, fostering the development and uptake of a myriad of innovative retail technologies. The aim of this study is to analyse the transformation that the Czech retail sector has undergone, identify the key technologies that have emerged or gained prominence during this period, and evaluate their impacts on both businesses and consumers. We take a multi-faceted approach in our examination, considering aspects such as shifts in consumer behaviour, changes in supply chain dynamics, the rise of contactless shopping solutions, and the broader macroeconomic effects of these changes. Our findings not only contribute to the understanding of how the retail industry in the Czech Republic has adapted to the current crisis, but also shed light on the possible future trajectory of this sector post-pandemic. As such, this research offers valuable insights for industry stakeholders, policymakers, and academics interested in the intersection of retail, technology, and global health crises.

2. Materials and methods

In this paper we work with two main sources of data. First is existing article and studies which mainly focuses on global markets or American market to analyse what are trends around the world. Second source of data is own research done by eyeball observation of current situation on the floor of malls and other types of shopping facilities. Part of this eyeball observation is also understanding what modern trends are publicly presented using key companies' key communication channels, these channel are as follows.

In-Store Communication: This traditional form of communication remains crucial in retail. It includes signage, point-of-sale displays, and in-person communication from staff members (Levi, 2018). **Email:** Despite the rise of many new digital communication channels, email remains a major tool for retailers. It allows for personalized communication and is effective for both acquisition and retention strategies (Kumar, 2018). **Website and Mobile Apps:** Retailers' websites and mobile apps serve as vital points of contact with customers, providing product information, facilitating transactions, and offering customer service (Molnár, 2021). **Social Media:** Platforms like Facebook, Instagram, Twitter, and Pinterest are used by retailers to engage with customers, promote products, and handle customer service issues. Social media also plays a key role in influencing purchasing decisions (Hajli, 2014). **SMS and Push Notifications:** These direct and instant communication methods are increasingly being used by retailers to reach customers with timely, personalized messages (Barwise, 2002). **Online Marketplaces:** Platforms like Amazon and eBay are essential channels for retailers to reach a larger audience, especially for those without a strong standalone e-commerce presence (Zhu, 2018). **Print and Broadcast Media:** Traditional media channels, like newspapers, magazines, television, and radio, still play a role in retail communication, particularly for certain demographic segments and types of products (Jaremen, 2016). Expectation is that if company uses some kind of modern technology, it will be presented somehow.

2.1. Key czech assisted retail companies

Assisted retail, also known as guided selling or assisted selling, refers to a sales strategy where sales associates, through the use of technology or personal expertise, guide customers in their purchasing decisions. This can happen in a physical store or online, with the aim of providing a personalized shopping experience, enhancing customer satisfaction, and ultimately driving sales. In a physical store, this might take the form of a knowledgeable salesperson providing expert advice to a customer, using their expertise to suggest products that best meet the customer's needs or preferences. The assistance might also come in the form of interactive product demonstrations, personalized product recommendations, or even augmented reality experiences to help customers visualize products. In the online world, assisted retail often takes the form of technologies such as chatbots, AI-powered product recommendation systems, virtual try-on tools, and interactive quizzes or questionnaires that guide the customer to the most suitable products based on their answers. In the context of COVID-19, assisted retail technologies have become particularly important, as they help retailers maintain a high level of customer service even when face-to-face interactions are limited or not possible. For example, live chat and video chat tools allow sales associates to offer real-time advice to online customers, much as they would in a physical store. Similarly, AI-powered solutions can analyse a customer's browsing behaviour to recommend products they might like, effectively replicating the role of a helpful sales associate. By offering personalized, expert advice, assisted retail strategies aim to make the shopping experience easier and more enjoyable for customers, while also boosting the retailer's sales and customer loyalty. In this paper assisted retail is focused on selling of services, especially long-term services such as banking products, insurance products and telecommunications. For this reason top nine companies defined by number of clients by the end of 2022 are considered. Overview of this companies is enlisted in table below. Three biggest examples from each industry are selected.

Tab 1: Top nine companies in Czech market in selected industries.

Company	Industry	Clients
Česká spořitelna	banking	4,493 mil.
Komerční banka	banking	4,225 mil.
Československá obchodní banka	banking	2,251 mil.
T-Mobile	telecommunications	6,423 mil.
O2	telecommunications	5,671 mil.
Vodafone	telecommunications	3,989 mil.
Česká pojišťovna a.s.	insurance	4 mil.
Kooperativa pojišťovna, a.s.	insurance	2,5 mil.
Allianz pojišťovna, a.s.	insurance	1,2 mil.

Source: Annual reports 2022.

2.2. World wide used modern technologies

Technologies are commonly divided into sections by common interest (stakeholder). First basic category is Customer facing innovation, followed by employee faced innovation and last one which does not have to be obvious is supplier or internal innovation.

Phygital

'Phygital' in retail encapsulates experiences where physical and digital elements are seamlessly integrated (Pantano, 2020). With consumers increasingly seeking convenience, customization, and engaging shopping experiences, retailers are adopting phygital strategies to create differentiated value propositions. The phygital retail journey starts with omnichannel strategies that allow businesses to engage customers across various touchpoints. However, phygital goes beyond omnichannel by not just providing multiple channels, but merging these channels into a unified, enhanced shopping experience (Verhoef, 2015). AR/VR plays a crucial role in phygital retail. AR allows customers to visualize products in their environment before making a purchase (Rese, 2014), while VR can create immersive, virtual shopping experiences that closely mimic physical stores (Grewal, Roggeveen, 2017). IoT contributes to the phygital space by creating interconnected experiences. Smart fitting rooms, connected shelves, and beacons provide personalized and interactive experiences to customers (Kumar, 2016). AI-powered solutions such as chatbots, recommendation engines, and predictive analytics contribute to the personalization and efficiency of the phygital experience (Huang, 2020). The future of retail lies in the innovative integration of digital technology within physical spaces, making shopping an engaging and immersive experience. Retailers who will invest in creating holistic phygital experiences are more likely to win customer loyalty in the increasingly competitive market (Piotrowicz, 2014). The phygital approach is transforming retail, creating immersive, personalized, and convenient shopping experiences. As technology advances, retailers must continuously evolve and adopt innovative phygital strategies to stay competitive and meet consumer expectations.

The metaverse

The concept of the metaverse is not a new phenomenon. It has been in literature and pop culture for years. However, with technological advancements in AI, VR/AR, and blockchain technologies, the realization of the metaverse in retail is becoming increasingly feasible and attractive. This article explores how the metaverse can reshape the retail industry, offering unprecedented immersive and interactive experiences. We will delve into practical use cases, benefits, and challenges, whilst referencing relevant research and studies. With technology constantly evolving, the retail industry has seen

significant transformations over the years. From brick-and-mortar shops to ecommerce, and now to the metaverse, retail continuously explores new ways to engage with customers (Rigby, 2011). The metaverse, a collective virtual shared space created by the convergence of physical and virtual reality, is seen as the next frontier for retail (Kinsella, 2022). This paper explores how this digital universe can transform the retail landscape. The Metaverse in Retail in few Practical Use Cases: Virtual Showrooms and Stores: In a metaverse, retailers can design virtual stores that mirror their physical counterparts or create unique experiences impossible to replicate in reality (Gucci, 2021). Customers can explore these stores using avatars, interact with products, and make purchases. An example is the "NikeLand" in the Roblox metaverse, where users can try on and purchase virtual footwear (Nike, 2023). Immersive Product Demonstrations: Product demonstrations can be more engaging in a virtual environment, particularly for products such as furniture, fashion, and electronics (Ikea, 2022). Customers can interact with the products in a virtual space, experiencing their use in a realistic context before making a purchase. Social Shopping Experiences: The metaverse enables social interactions akin to shopping with friends in the physical world (He, 2020). Users can meet in virtual stores, browse products together, and exchange opinions, enhancing the social aspect of shopping. AI-Driven Personalization: Retailers can use AI algorithms to track user behaviour within the metaverse and offer personalized recommendations (Huang, 2023). This goes beyond online cookies, as it can include understanding how users interact with products in the virtual environment. There is a lot of benefits of the Metaverse in Retail Enhanced Customer Engagement. The metaverse offers a richer, more immersive experience compared to traditional online shopping. It allows consumers to interact with products and brands in novel ways, enhancing engagement and brand loyalty (Pantano, 2021). Increased Reach and Accessibility: Virtual stores in the metaverse can be accessed from anywhere in the world, removing geographical limitations of physical stores. This can potentially open up new markets for retailers (Moeslein, 2022). Innovation and Differentiation: Retailers who adopt metaverse technologies can differentiate themselves from competitors. Innovative use of the metaverse can be a unique selling point, attracting consumers seeking novel shopping experiences (Porter, 2014). With all the benefits, there are challenges and limitations. Despite the promising potential, the adoption of the metaverse in retail is not without challenges. Technological Limitations: While VR/AR technology has advanced considerably, creating a truly immersive, seamless metaverse is still a technical challenge (Schroeder, 2016). Furthermore, consumer adoption of necessary hardware like VR headsets is still relatively low. Privacy and Security Concerns: The metaverse involves gathering large amounts of data about user behaviour and interactions. This raises significant privacy and security concerns that need to be addressed (DeNardis, 2020). The metaverse offers an exciting new paradigm for retail, promising unprecedented interactive and immersive experiences. While there are challenges to its implementation, with the pace of technological advancements and increasing consumer acceptance of virtual experiences, the metaverse is set to become an integral part of the retail industry's future.

Hyper-personalization

Next prominent trend is hyper-personalization, which is the use of data to provide highly individualized interactions, products, and services to customers (Tam, 2006). In the realm of assisted retail, where digital and physical shopping experiences merge, hyper-personalization can lead to a multitude of benefits, including increased customer engagement and loyalty, and consequently higher sales (Manthiou, 2020). Some use cases includes personalized shopping assistants: Assisted retail often involves the use of digital assistants to guide customers through the shopping process. Hyper-personalization can enable these assistants to provide recommendations based on past purchases, browsing behaviour, and customer preferences (Chu, 2020). Tailored Promotions: Retailers can use customer data to offer hyper-personalized promotions, targeting individuals with offers that are most relevant to them, enhancing the likelihood of

purchase (Sahni, 2018). Individualized In-Store Experience: With the use of IoT devices and smartphone apps, retailers can personalize the in-store experience. Customers can receive tailored product suggestions and locate items in-store based on their shopping list (Want, 2015). Benefits of using hyper-personalisation involves increased Customer Satisfaction: Hyper-personalization enables retailers to cater to the unique needs and preferences of each customer, which can lead to higher satisfaction levels and customer loyalty (Yi, 2013). Improved Sales: Hyper-personalized interactions can increase the conversion rate by presenting customers with relevant product suggestions and promotions, leading to increased sales (Cho, 2012). Enhanced Customer Retention: By offering a tailored shopping experience, retailers can increase customer retention, as satisfied customers are more likely to return (Verhoef, 2007). Despite the potential benefits, the implementation of hyper-personalization in assisted retail presents challenges. Privacy Concerns: The use of customer data raises significant privacy concerns. Retailers must ensure they comply with relevant data protection laws and maintain transparency with customers about how their data is used (Martin, 2017). Data Quality: The effectiveness of hyper-personalization depends on the quality of the data collected. Poor data quality can lead to irrelevant suggestions, damaging the customer experience (Wang, 1996). Retailers must implement robust data management practices to ensure data accuracy and relevancy. Hyper-personalization holds great promise in the realm of assisted retail. By delivering tailored experiences, retailers can enhance customer satisfaction, increase sales, and improve customer retention. While challenges exist, particularly around data privacy and quality, careful implementation and robust data management can help realize the potential of hyper-personalization in transforming the retail landscape.

Web3

Web3 represents a shift from centralized, server-based systems to decentralized, peer-to-peer networks (Tapscott, 2016). Blockchain, a cornerstone technology of Web3, is a decentralized ledger that facilitates secure, transparent, and tamper-resistant transactions (Nakamoto, 2008). In assisted retail, which aims to blend online and offline shopping experiences, Web3 can unlock new possibilities for customer engagement, data management, and personalized shopping (Verhoef, 2015). Web3 can be used as Decentralized Customer Data Management: Blockchain technology can create a secure, decentralized database of customer data. This allows for data self-sovereignty, where customers control their data and can grant permissions to retailers to access it (Zyskind, 2015). Tokenized Loyalty Programs: Retailers can leverage blockchain to create tokenized loyalty programs, enhancing customer engagement. Customers can earn and trade tokens across different retailers, improving the flexibility and attractiveness of these programs (Kumar, 2016). Authenticated Product Information: Blockchain can be used to authenticate product information, ensuring transparency and reducing counterfeiting. Customers can verify the origins, ingredients, or production process of products, fostering trust (Tian, 2016). Enhanced Customer Trust: Web3 technologies, like blockchain, promote transparency, data security, and customer control over personal data, which can enhance trust in retail interactions (Ølnes, 2017). Improved Customer Engagement: Tokenized loyalty programs and authenticated product information can lead to more engaged customers, who are likely to feel valued and trust the authenticity of products (Demirkan, 2018). Efficient Data Management: Decentralized data management can streamline data handling processes, reducing inefficiencies associated with centralized systems and enhancing data privacy (Mougayar, 2016). Despite the potential benefits, the application of Web3 in assisted retail also presents challenges. Technical Complexity: The implementation of blockchain and other Web3 technologies requires technical expertise, which may be a barrier for some retailers (Drescher, 2017). Regulatory Concerns: Given the nascent state of Web3 technologies, regulatory frameworks are still evolving, creating uncertainty for businesses (Tapscott, 2018). Adoption and Acceptance: The success of Web3 in retail

is also dependent on customer adoption and acceptance of these technologies, which may take time and education (Atzori, 2015). Web3 holds great promise in revolutionizing the retail industry, providing new mechanisms for customer engagement, data management, and trust-building. Despite the challenges, retailers that adapt and innovate using Web3 technologies could gain a competitive edge, shaping the future of the retail experience.

Chatbots

In the evolving retail landscape, businesses continually seek innovative ways to engage with customers and drive sales. Among these, chatbots, interactive software platforms that simulate human conversation, have emerged as powerful tools for assisted retail (Brandtzaeg, 2017). By facilitating a seamless blend of online and offline shopping experiences, chatbots can personalize interactions, streamline operations, and enhance customer service (Ghose, 2020). Personal Shopping Assistants: AI-powered chatbots can serve as personal shopping assistants, offering product recommendations based on user behaviour, past purchases, and preferences (Davenport, 2020). Customer Service: Chatbots can provide instant, round-the-clock customer support, answering common queries, providing information about products or services, and resolving complaints (Gurman, 2018). Sales and Marketing: Chatbots can be programmed to upsell and cross-sell products, notify customers of promotions, and facilitate transactions, thereby driving sales (Dai, 2019). Of course there are benefits such as Improved Customer Engagement: By offering personalized recommendations and immediate responses, chatbots can engage customers more effectively, fostering a positive shopping experience (Huang, 2018). Operational Efficiency: Automating repetitive tasks like responding to common customer queries allows retailers to allocate resources more efficiently (Marinova, 2017). Enhanced Sales: By assisting in the purchase process and offering tailored product suggestions, chatbots can potentially increase conversion rates and boost sales (Li, 2014). While chatbots present significant opportunities for assisted retail, they also pose challenges. Customer Acceptance: Despite advancements in AI, some customers may prefer human interaction over chatbots (Lu, 2019). To mitigate this, retailers can focus on improving the sophistication of chatbots and maintaining an option for human assistance. Data Privacy: The use of chatbots involves collecting and analysing customer data, raising privacy concerns. Retailers must comply with data protection regulations and be transparent with customers about their data usage policies (Martin, 2017). Technical Limitations: Although AI has come a long way, chatbots may still struggle to understand complex queries or exhibit empathy. Continuous technological advancements and training are crucial to address these limitations (Zhou, 2012). Chatbots, by bridging the gap between digital and physical retail spaces, present a compelling opportunity for businesses to enhance customer engagement, improve operational efficiency, and drive sales. Despite certain challenges, strategic implementation of chatbots can contribute significantly to the evolution of the retail landscape.

Remote assistance

The retail sector has undergone significant digital transformation in recent years, a trend that has been expedited by the COVID-19 pandemic. Assisted retail, combining online and offline experiences, has been particularly affected, with remote assistance emerging as a crucial facet (Pantano, 2020). Leveraging technologies like Augmented Reality (AR), Virtual Reality (VR), and AI-powered chatbots, remote assistance offers a digitally-enhanced, personalized shopping experience, irrespective of geographical constraints (Huang, 2020). The pandemic has caused unprecedented disruption to retail, necessitating an immediate shift towards digital platforms. Remote assistance has become an essential tool to maintain customer engagement, respond to inquiries, and drive sales amidst widespread store closures and social distancing measures (Sigala, 2020). Virtual Store Tours: Through AR and VR technologies, customers can undertake virtual store tours, browsing products from their homes (Liu, 2020). Real-Time

Assistance: Retailers can provide real-time assistance via video calls, instant messaging, or AI chatbots, offering immediate support and consultation to online customers (Dacko, 2017). **Personalized Product Demonstrations:** AR and VR can be used for personalized product demonstrations, providing customers with immersive, detailed insights into products (Kim, 2019). **Greater Accessibility:** Remote assistance extends retail services to customers unable to visit physical stores, a scenario amplified during pandemic-related lockdowns (Pantano, 2020). **Enhanced Customer Experience:** By providing real-time support and interactive product presentations, remote assistance enriches the shopping experience, fostering customer loyalty (Poushneh, 2017). **Boosted Sales:** Detailed product information and personalized customer support can facilitate informed purchasing decisions, potentially boosting sales and average order values (Sigala, 2018). While remote assistance offers significant advantages, it is not devoid of challenges. **Technological Barriers:** Customers unfamiliar with digital technology may find it challenging to utilize remote assistance services. Retailers must ensure user-friendly interfaces and provide necessary guidance (Dwivedi, 2020). **Privacy Concerns:** The increased digital engagement raises data privacy concerns. Retailers must prioritize secure data handling practices and comply with data protection regulations (Martin, 2017). The COVID-19 pandemic has accelerated the adoption of remote assistance in assisted retail, transforming the retail landscape. Despite the challenges, this shift towards a more digitally integrated, customer-centric retail experience is likely to persist beyond the pandemic, making remote assistance a vital tool in the retail arsenal.

2.3. Covid-19 impact

COVID-19 has impacted retail in multiple ways. Initially, non-essential retail faced widespread closure, causing a surge in unemployment (Hobijn, 2021). Consumer behavior shifted towards online channels, creating new opportunities and challenges for retailers. Panic buying and stockpiling exacerbated supply chain challenges, creating gaps in inventory and disruptions in logistics (Ivanov, 2020). Despite these challenges, some retailers thrived by pivoting their operations and capitalizing on e-commerce and delivery options. With consumers confined to their homes, online shopping saw a dramatic increase (Ling, 2021). Retailers responded by accelerating digital capabilities, improving their online platforms, and offering contactless delivery options. The concept of omnichannel retailing, a multi-channel approach that provides the customer with an integrated shopping experience, has become even more critical (Verhoef, 2015). The need for safety and hygiene gave rise to the adoption of contactless payments. These systems, like Apple Pay or Google Wallet, use NFC (Near Field Communication) technology to enable transactions without physical contact (Hayashi, 2020). VR and AR technologies have seen increased adoption, helping retailers to provide immersive online experiences. These technologies allow customers to visualize products in a realistic environment before making a purchase (Rese, 2014). AI and ML have become essential tools for retailers, assisting in demand forecasting, inventory management, and customer service. For instance, chatbots are used to automate customer service and improve the shopping experience (Huang, 2020). The COVID-19 pandemic has spurred significant changes in the retail industry. The emergent technologies have not only provided solutions to navigate the challenging landscape but also paved the way for a more digitized future of retail.

2.4. Methods

Based on previous defined world trends analysis of czech market will be performer. This analysis consist of two steps. First step is analyse publicly available source like web sites and other means of commutation which could be publicly observed. Second step is defining flag ship stores of these companies. Flag ship stores will be performed in person by visiting these stores and trying to observe as many mentioned features as possible. This could not be considered as exact measurements, but the goal is to see if

even on the czech market there are modern features after pandemic of covid-19 or if czech market is still behind world trends. Another fact to consider which should help to this observation is hypothesis, that companies would like to present modern features to get more natural publicity. This hypothesis will be confirmed or rejected in conclusion.

3. Results

Following table shows results of public source analysis and personal visits of flagship stores of several companies defined in previous chapters. Goal is not to evaluate companies between each other or looking for most modern company and because of that results are consolidated into just type of industry.

Tab 2: Presence of modern informatics trends in Czech assisted retail.

	Banks	Insurers	Telco
Phygital	No	No	Yes
The metaverse	No	No	No
Hyper-personalization	Yes	Yes	No
Web3	No	No	No
Chatbots	Yes	Yes	Yes
Remote assistance	No	No	Yes

Source: Own research.

During performed analysis only small sample of shops (which are presented as flagship or biggest) was visited. It does not make sense on this small sample to count occurrences of any of defined trends. Results are in Boolean format to just have idea about modernisation condition of various elements.

4. Discussion

It is fair to say that presence of modern trends in czech retail market was evaluate with very low criteria, that means that if some features is presented by company and called by modern trends, maturity was not evaluated. For phygital there was just few experimental elements in one of telco companies shop, but it is enough to satisfy criteria. Elements of The Metaverse are not present in any of defined shops. Reason for this could be that whole Metaverse platform is currently target to US market and it maybe hard to implement anything outside of US. Hyper-personalization was observed in both insurance and banking companies. In general, this type of companies has more personal information (about spending and properties) than any other type of company. With having just publicly available information it is hard to tell if they are indeed using AI or some machine learning models to evaluate their personalised offerings, but speed and correctness often leads to expectations that they do. Mostly in banking sector there is expectations that Web3 and blockchain technology would take place, but during observation this was not confirmed in opposite to some worldwide banks. Chatbots are not particularly new technology, but with new methods it is easier than before to implement very advanced ones. Especially using GPT technology, which is publicly available since 2022 it means big bang in this field and chatbots are in some form present in all fields. Surprisingly remote assistance in retail was present only by one company from the list. Expectation is that remote assistance boosted by pandemic of covid-19 would be key technology in assisted retail to save resource and optimize networks, but it didn't happen (yet) oppose to world trends.

5. Conclusion

In conclusion, this in-depth examination and comparative analysis of modern trends in the Czech retail sector have revealed a notable lag behind the global advancements in the industry. Despite the rapid evolution and adaptation in the retail landscape worldwide, driven by technological progression, customer expectations, and global market dynamics and especially covid-19 development boost, the Czech retail sector seems to have stagnated or, at best, developed at a slower pace. However, the relative underdevelopment should not be mistaken for a permanent state of affairs. The Czech Republic has

demonstrated resilience and adaptability across various economic sectors in the past, and there is immense potential for growth and evolution within its retail industry. While current observations suggest a gap, the dichotomy of progress serves as an important point of introspection, providing valuable insights into areas requiring focused efforts for advancement. It opens avenues for retailers, and stakeholders to understand the key areas of global retail that could be assimilated or innovatively adopted in the local context. Undeniably, every market and every innovation has unique characteristics and contextual challenges. Our findings should not necessarily be interpreted as a failure on the Czech retail sector's part, but rather as an opportunity for strategic realignment. Our future research will focus on investigating possible socio-economic, regulatory, and infrastructural barriers that might be inhibiting the Czech retail market's pace of growth. Furthermore, we will explore potential strategies and actionable plans for accelerating development to match global retail trends. We believe that a detailed exploration of these perspectives will contribute to the existing body of knowledge and provide a blueprint for the future development of the Czech retail sector.

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