

Shaping the Future of E-Commerce in Relation with the Data Economy

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Abstract

We are witnessing the constantly becoming larger landscape of the digital marketplace. Great expectations by 2025 regarding E-Commerce in US, as well in Romania are obvious. Without doubt, e-commerce is challenged by the potential value of the metaverse. There is a clear role of the digital/mobile wallet within this context. Shaping the future of e-commerce in relation with the future of the data economy involves to stay informed about trends in the retail & commerce industry, including supply chain trends.

Keywords: Digital Marketplace; E-Commerce; Digital Adoption; Metaverse; Digital/Mobile

Wallet; Data Economy; Trends in Retail & Commerce Industry

JEL Classification: D83; L81; L86; M15; M31; O32; O33

The constantly becoming larger landscape of the digital marketplace. Great expectations by 2025 regarding E-Commerce in US, as well in Romania

There is an obvious strong link today between the business growth and a successful ecommerce business ensuring an improved customer experience (CX) and an improved customers' perception of the brand. According to the Founder and CEO of Attrock (Sharma, 2022), in the constantly becoming larger landscape of the digital marketplace (ecommerce being favored by the global consumers), it is important to consider key factors in building a successful ecommerce business, such as: focusing on a niche audience and obtaining real insights for the necessary ecommerce marketing strategy (including content marketing, social media marketing, digital advertising etc.); delivering a seamless online shopping experience thanks to both a mobile-friendly online store, and to the right distribution channels (integrated with the help of the sales CRM tools); grabbing customers' attention based on high-quality and diverse content (including video); updating continually the segmented email lists and valorizing recipients'

feedback; doing effective personalization efforts to ensure the improved CX (based on user story maps, special deals and discounts, website incorporating an AI-powered chatbot etc.); both generating customers' engagement and filling sales funnel with quality leads with the help of digital marketing campaigns based on social media analytics. Sharma made reference to the fact that in the US, for instance, the retail ecommerce revenue in the US by the end of 2025 is expected to reach 1.3 trillion dollars, as shown by a Statista forecast (see figure below).

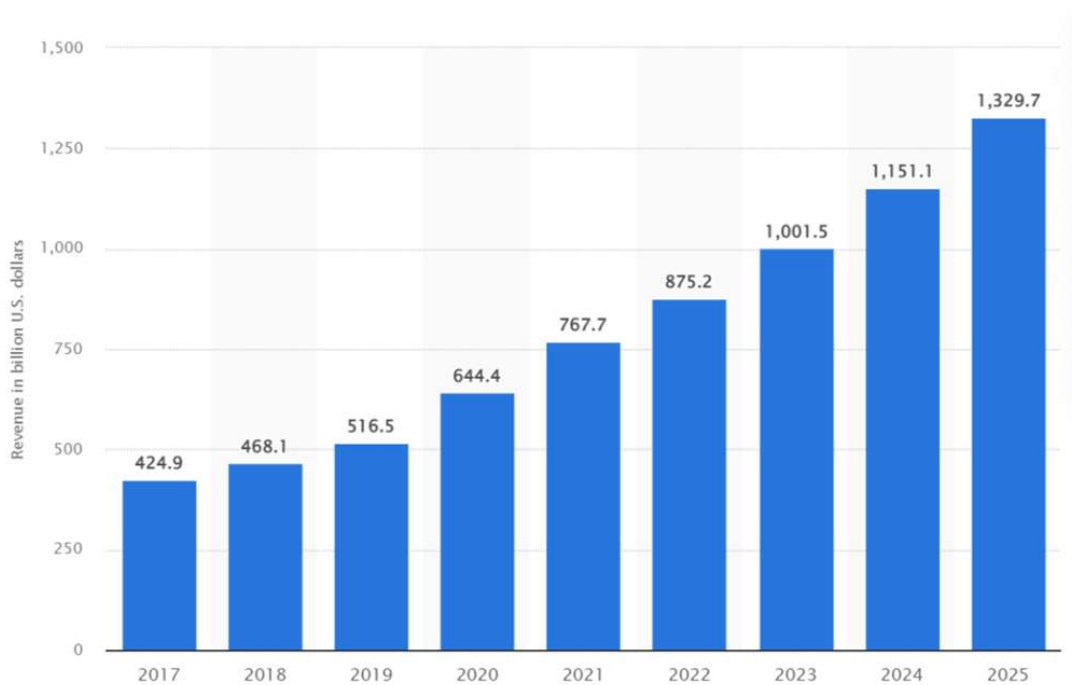


Figure no. 1: The retail ecommerce revenue in the US by the end of 2025, Statista forecast

Source: Sharma. G., 2022. 8 Effective Ways To Ensure Ecommerce Business Success, DigitalMarketer Blog, July 4, 2022 (work cited)

According to the 7th annual Omnichannel Retail Index by OSF Digital (2022), recognized for revealing U.S. retailers' and brands' way of both delivering on the omnichannel promise, and meeting rising customer demands, there are increased adoption rates of optimized search, frictionless checkout and cross-channel capabilities by top-scoring retailers and brands in a determined and forceful way: the digital and omnichannel best-practice capabilities has been better implemented this year (85%, compared to 72% in the 2021 Omnichannel Retail Index), but there is a lot of unoccupied space for improvement in delivering the expected seamless, convenient, and frictionless shopping experiences (by most retailers and brands in the 7th Omnichannel Retail Index that are below the average score of 61% adoption of best-practice capabilities); there was a significant rising in implementing BOPIS and curbside pickup (as omnichannel capabilities), and in the adoption of alternative payments and BNPL (Buy Now Pay Later) features (mainly among younger shoppers). The 2022 Omnichannel Retail Index also has measured for the first time how sustainability is embraced by retailers and brands (67% of them being already involved in).

The 2022 US Retail & Ecommerce Snapshot by eMarketer (made possible by the online payment service Amazon Pay) reconfirmed the traditional competition between Amazon and Walmart, followed by Apple, eBay, Target etc., considering where US digital shoppers are buying (see the first figure below). It was also revealed a spectacular increase of the Direct-to-Consumer (D2C) ecommerce sales for established brands, compared to the digitally native brands (see the second figure below).

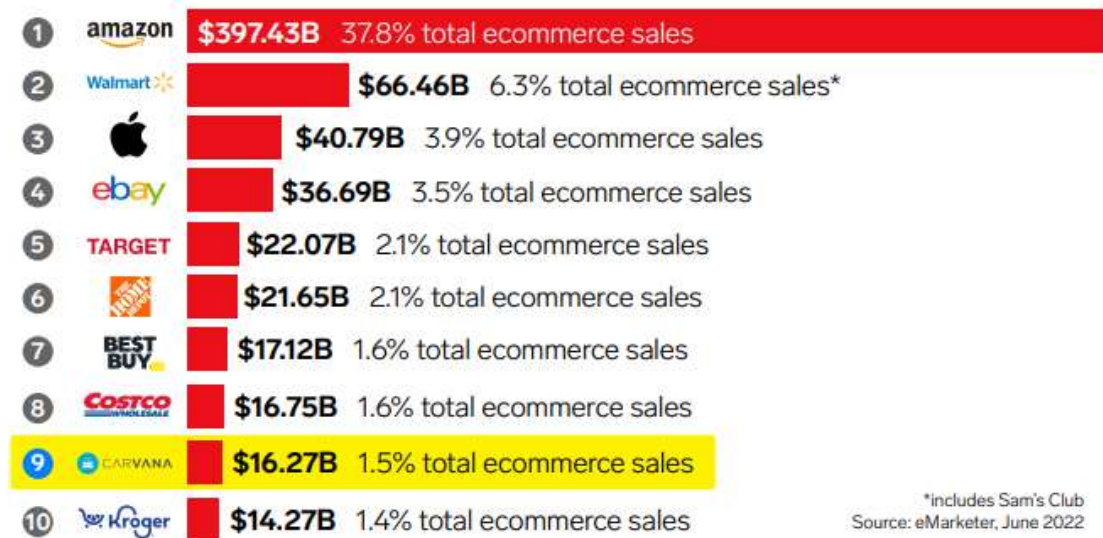


Figure no. 2: Where Digital Shoppers Are Buying (US)

Source: eMarketer, 2022. US Retail & Ecommerce Snapshot. [pdf] Insider Intelligence, June 2022, p. 4 (work cited)

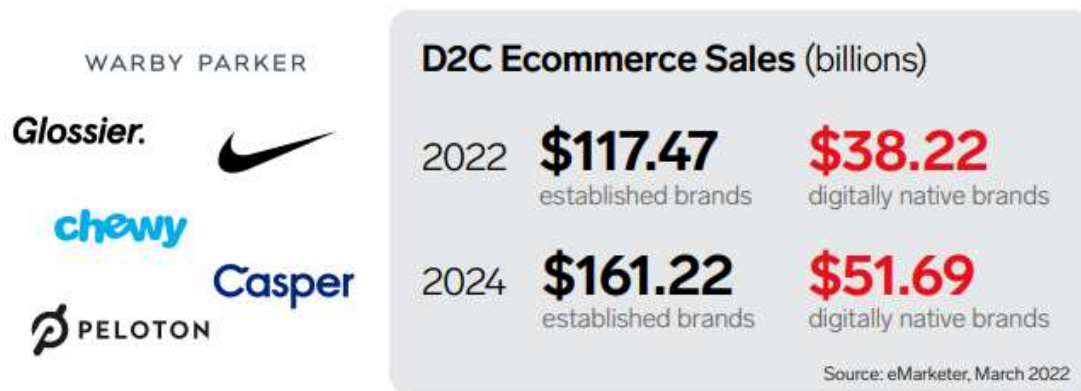


Figure no. 3: Direct-to-Consumer (D2C) ecommerce sales (US)

Source: eMarketer, 2022. US Retail & Ecommerce Snapshot. [pdf] Insider Intelligence, June 2022, p. 4 (work cited)

From the point of view of the US retail marketplace ecommerce sales (meaning the gross value of products sold from third-party sellers on a retail marketplace platform), it is expected an increase this year, compared to 2021, but that growth will continue to decelerate, sales continuing then to decline through 2024 (see figure below).



Figure no. 4: Retail Marketplace Ecommerce Sales (US)

Source: eMarketer, 2022. *US Retail & Ecommerce Snapshot*. [pdf] Insider Intelligence, June 2022, p. 8 (work cited)

With regard to E-commerce in Romania, Statista Research Department made known on Feb 1, 2022 the e-commerce revenue of 5.6bn EUR, and the number of e-commerce users 2021 of 9.2m, as well as other key figures, such as: the 2021 user penetration rate in the e-commerce market (48.12%); the share of: e-commerce users aged between 35-44 years old (24.8%), of female e-commerce users (51.1%), and of men who buy sports apparel and equipment online (54.3%); the number of online sellers on the eMAG Marketplace platform (23,000); the most popular store for FMCG products (Carrefour); the most important consumers' reason for shopping online (better prices); the main consumers' advantage of e-commerce (the home delivery); the main consumers' disadvantage of e-commerce (the inability of seeing the product beforehand); the most purchased product category by consumers (catering/ food delivery); the

consumers' average spending on clothing and footwear (689 Romanian lei), average order value for electro and IT&C products (270.9 EUR), and average order value during Black Friday for beauty products (48.1 EUR); the most used food delivery app by consumers in the capital city of Romania, Bucharest (Glovo), the most popular home delivery product (the food meals), and the share of people who use delivery apps once a week (15%).

Also, according to Statista (2022), the statistics about E-Commerce in Romania (sale of physical goods by B2C enterprises via a digital channel to a private end consumer) describes the following situations: a projected eCommerce market volume of US\$ 10,990.00m by 2025 (as a result of an expected revenue showing an CAGR 2022-2025 of 16.60%), this year (2022) the revenue being projected to reach US\$ 6,932.00m, the projected market volume being of US\$1,412.00bn (most revenue being generated in China; Statista is using including data on shopping behavior from Google Trends and Alibaba Trends, for example); by 2025, the number of users is expected to turn out to be 10.6m, user penetration being expected to reach 56.7%, while this year will be 51.1% (the users' situation by age in 2021, in percent, and the average revenue per user, in USD are shown in the next two figures below); the projected online and offline split of the sales channels by 2025 is also presented in the third figure below.



Figure no. 5: Users by age, 2021

Source: Statista, 2022. eCommerce Market Romania, Digital Markets, Jun 2022 (work cited)



Figure no. 6: Average Revenue Per User (ARPU)

Source: Statista, 2022. eCommerce Market Romania, Digital Markets, Jun 2022 (work cited)

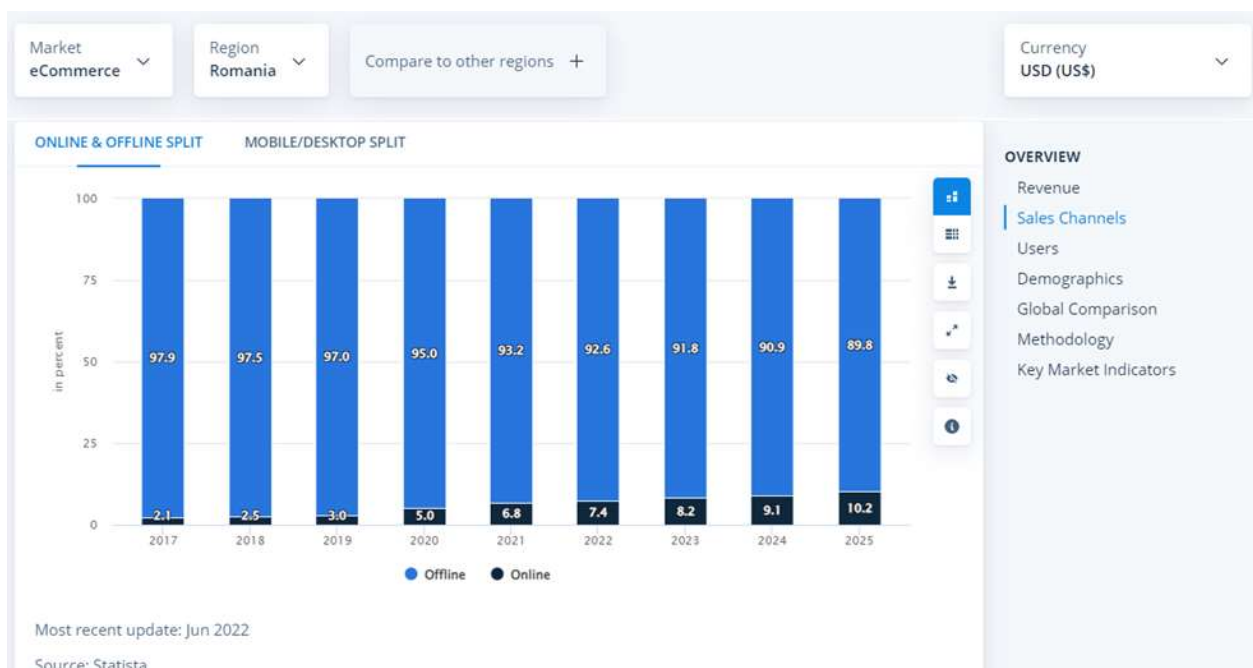


Figure no. 7: Online and Offline Split (Sales Channels)

Source: Statista, 2022. eCommerce Market Romania, Digital Markets, Jun 2022 (work cited)

On the other hand, Statista (Coppola, 2022) has presented in May this year the estimate of B2B e-commerce revenue of physical goods in Romania by 2024, the revenue from business-to business (B2B) e-commerce sales being expected to reach 6.23 billion U.S. dollars, as shown in the below figure.

(in billion U.S. dollars)

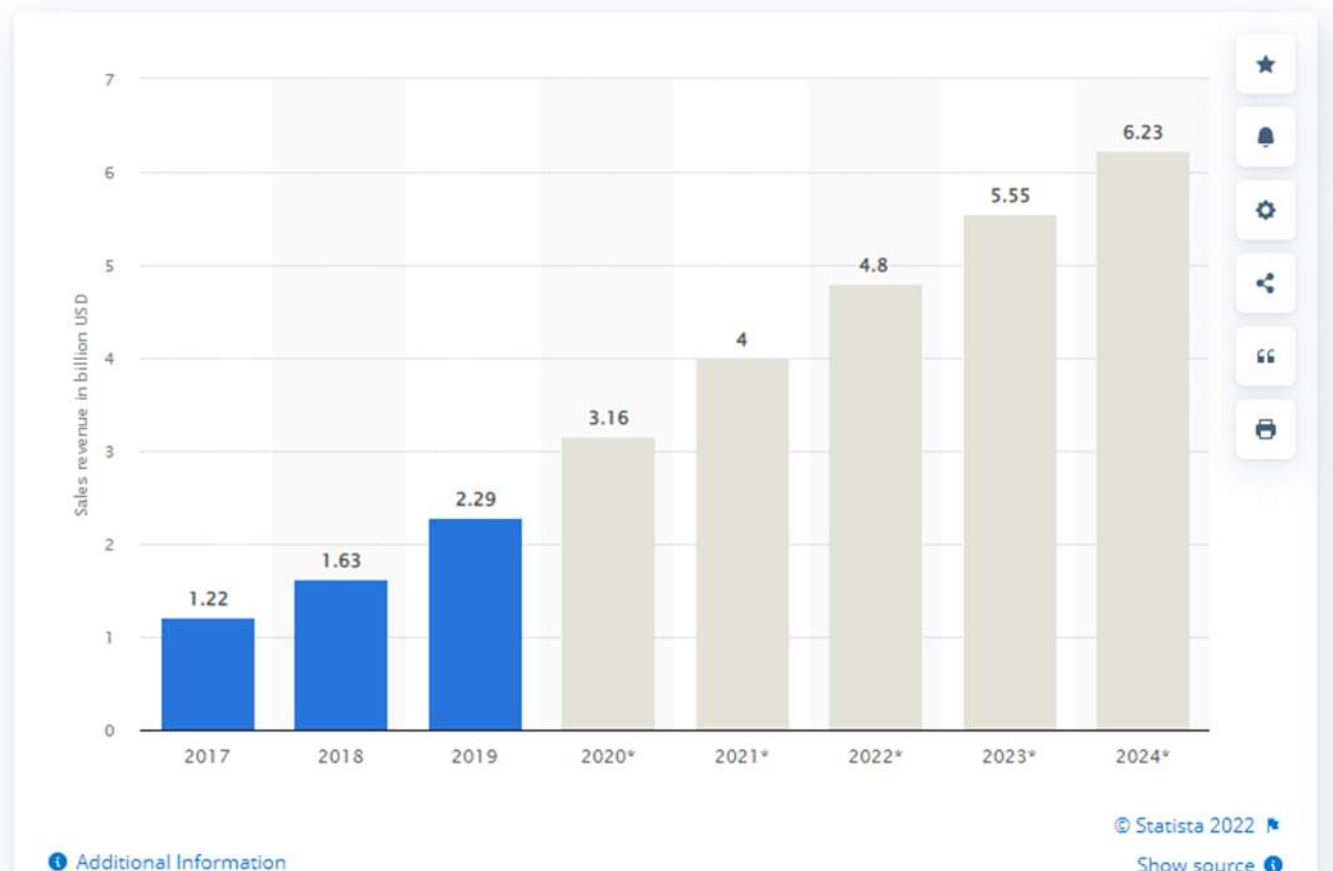


Figure no. 8: Estimated B2B e-commerce revenue of physical goods in Romania from 2017 to 2019, with a forecast from 2020 to 2024 (in billion U.S. dollars)

Source: Coppola, D., 2022. Estimated B2B e-commerce revenue of physical goods in Romania 2017-2024, Statista Market Forecast, eCommerce - Romania, May 9, 2022 (work cited)

It is also worth mentioning that as shown recently by GPeC (2022), in 2022 (compared to 2021) there will be an increase in the Romanian e-commerce between 5 and 10% (depending on the evolution of the situation in Ukraine, the orders delivered from online stores dropping by up to 40% immediately after the outbreak of the war, according to the general opinion of the players in the Romanian courier market, FAN Courier, Sameday, Packeta). The CEO & Founder of GPeC, Andrei Radu, underlined some trends in the Romanian e-commerce, such as: the need of

online stores to focus on existing customer loyalty, and expand into new sales channels like marketplaces or cross-border; as consumers want convenience and independence from the courier schedule, online stores will need alternative delivery methods like the parcel locker method (compared to the classic door-to-door delivery); eight of ten companies in Romania operate exclusively locally, only two out of ten also having an international presence (according to Google, which provides, for instance, online merchants with Google Market Finder as a free tool), while more than 30% of Europeans (according to Eurostat) buy online from a store in other countries than the country of origin; the Romanian e-commerce market (that shares currently about 12% of the total retail) has a lot of unoccupied space for growth to over 30% of what is now registered in western countries (according to Euromonitor).

Coming back to eMAG Marketplace (2022), it is worth showing that beyond the above-mentioned 23.000 online sellers (22.844 partner stores in July 2022), there are 500.000 daily buyers, and 10.890.921 products listed on this Marketplace, while in the so-called Open Romania Program (designed to support small business, being eligible also NGOs with self-funded production activities and freelancers/PFA to enter the program from the very beginning) are already taking part 2.000 stores. This program was launched by eMAG five years ago (Business Review, 2017). On the other hand, eMAG has launched at the end of October 2021 the first online hypermarket Freshful by eMAG, which: registered 30,750 unique customers in the capital city Bucharest and the Ilfov county area (in the Freshful application available on iOS and Android were registered over 70% of all customers' orders, immediately after placing an order being made with the card over 65% of payments in the app and website) in less than six months of activity; offers consumers a rich assortment of over 20,000 products (from over 550 local and international suppliers and manufacturers, 60% of them being local producers which are mainly part of associations or cooperatives, and 20% being small producers), the ordered products reaching the customers' doors within two hours of placing the order or at scheduled intervals of two hours (Intermodal & Logistics, 2022).

McKinsey's third annual Digital Sentiment Survey in Europe (Hajro et al., 2022) revealed companies' need to invest differently in their digital offerings, taking into account that: user experience, mobile (smartphones, tablets, wearables, and smart appliances), and revenue-generating interactions are key areas of digital opportunity (the digital users' experience journey can be improved with the help of different forms of AI); despite the fact that usage is still high overall, the digital activity post-COVID-19 has cooled (see below the digital adoption ranking, 2022, including Romania); there is a great convergence among countries in the European Union created by the digital adoption (see the second figure below; Romania is also included); the fact that digital adoption has varied significantly by country in a few sectors, including in grocery (see the third figure below), where we can observe a lot of room for improvement in the case of Romania, for example.

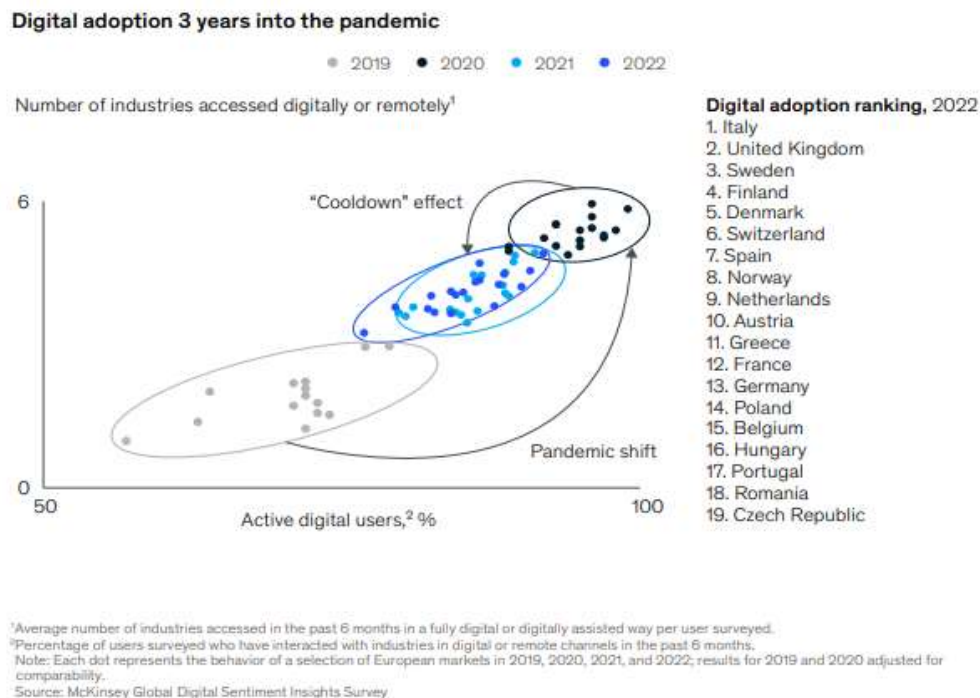


Figure no. 9: Digital adoption 3 years into the pandemic

Source: Hajro, N., Hjartar, K., Jenkins, P. and Vieira, B., 2022. Opportunity knocks for Europe's digital consumer: Digital trends show big gains and new opportunities. [pdf] McKinsey Digital, June 2022, p. 3 (work cited)

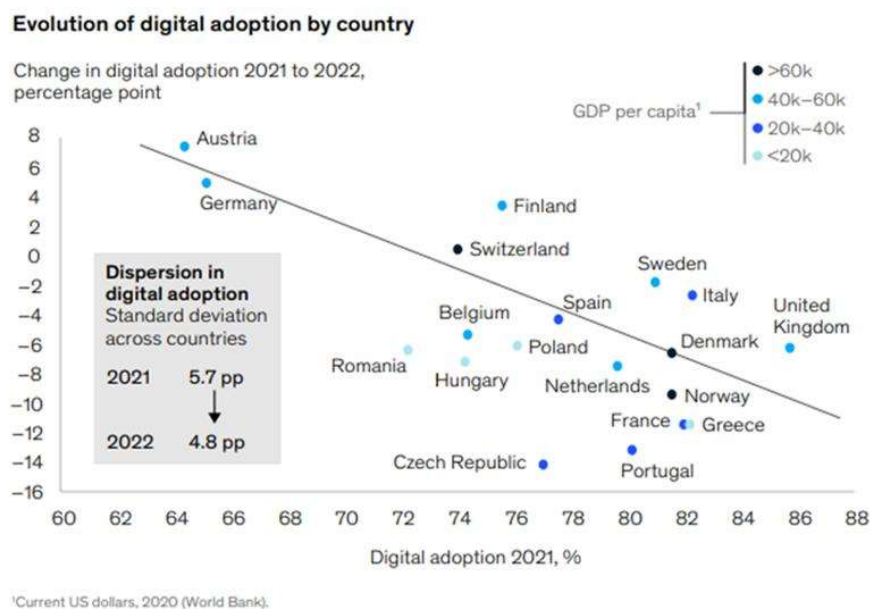
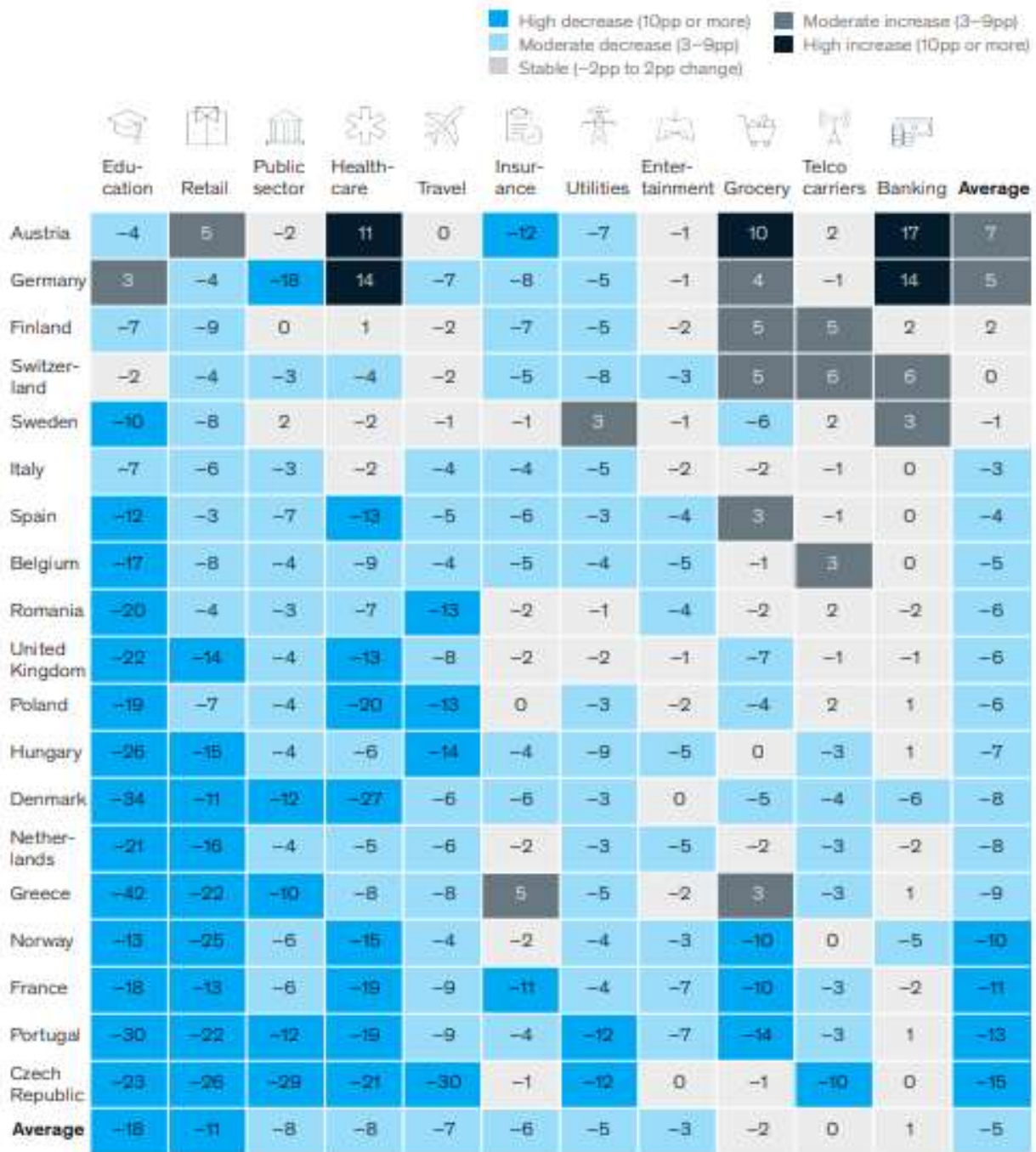


Figure no. 10: Evolution of digital adoption 3 years into the pandemic

Source: Hajro, N., Hjartar, K., Jenkins, P. and Vieira, B., 2022. Opportunity knocks for Europe's digital consumer: Digital trends show big gains and new opportunities. [pdf] McKinsey Digital, June 2022, p. 4 (work cited)

Digital adoption variation in 2022 vs 2021, percentage point



Source: McKinsey Global Digital Sentiment Insights Survey

Figure no. 11: Digital adoption variation in 2022 vs 2021, percentage point

Source: Hajro, N., Hjartar, K., Jenkins, P. and Vieira, B., 2022. Opportunity knocks for Europe's digital consumer: Digital trends show big gains and new opportunities. [pdf] McKinsey Digital, June 2022, p. 5 (work cited)

E-Commerce challenged by the potential value of the metaverse. The role of digital/mobile wallet as the best ranked e-commerce payment method used worldwide

A very recent McKinsey report (McKinsey & Company, 2022) has marked a significant contribution (as independent work) to right driving the ongoing dialogue about the development of the metaverse, highlighting the potential (depending on multiple technological and user-experience factors) of the metaverse as the next iteration of the internet, the core building blocks (content and experiences, platforms, infrastructure and hardware, enablers) of the metaverse's technology stack, and the layers of the metaverse (see figure below). And this within the context in which the report also underlined from the very beginning important consumer-centric aspects, such as: how consumers and brands are already engaging, being excited (59% of them) about transitioning everyday activities to the metaverse (social, entertainment, gaming, travel and shopping being the top activities they are excited about); the fact that there are already a lot of adopters (57% of metaverse-aware companies).

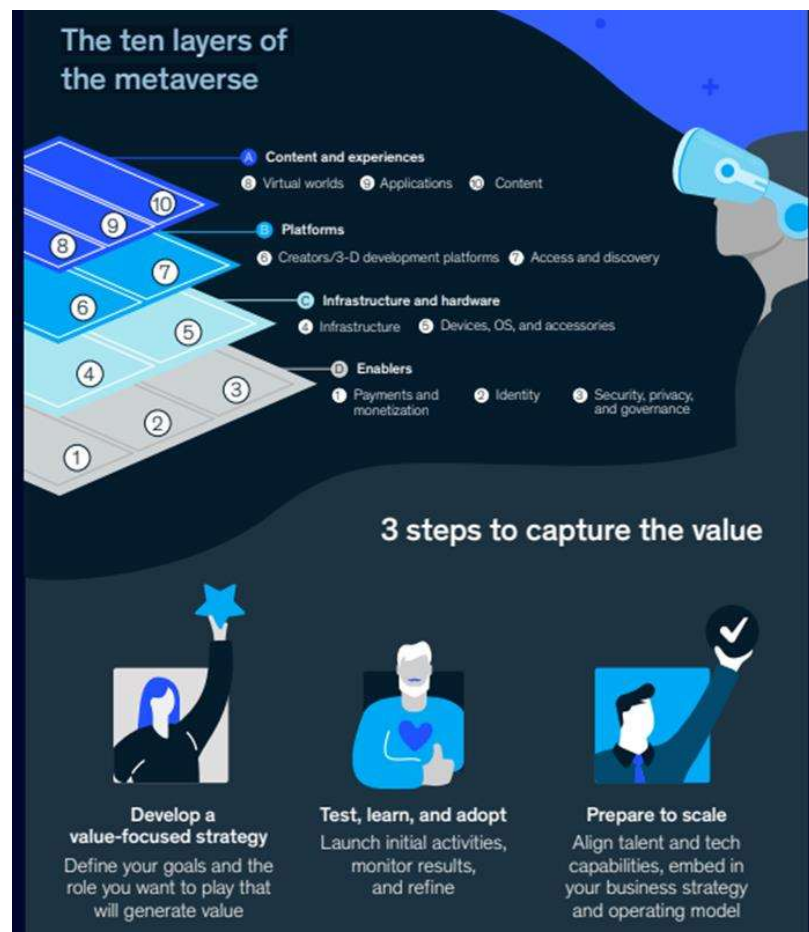


Figure no. 12: The ten layers of the metaverse

Source: McKinsey & Company, 2022. Value creation in the metaverse: The real business of the virtual world. [pdf] Report, June 2022, p. 7 (work cited)

As shown by McKinsey's representatives in this above-mentioned valuable report, among other aspects, a rigorous bottom-up assessment focused on top use cases digging into the details of user needs and the potential of the metaverse technology (by 2030) for value creation offered a necessary. Within this framework, e-commerce was seen: as one of the most important consumer uses cases (together with gaming, live entertainment, education, health and fitness, advertising, digital media, AR/VR hardware, virtual real estate, and NFTs) across analyzed sectors; as becoming immersive in the future (going beyond the daring undertaking towards socially-driven commerce including user-generated content). That means a promising perspective thanks to a E2E personalized CX of irresistible force (search, browse, purchase, post-purchase) in the phygital world.

It should be also mentioned that we recently highlighted (Purcarea, 2022) various opportunities and challenges in the economy of the metaverse, and how retailers are under pressure to develop a test-and-learn mentality regarding the metaverse, so as to ensure a new improved personalized digital CX, including considering the role of the metaverse shopping (together with other key technologies like conversational commerce, 3D assets etc.) in shaping the future of e-commerce, and the already metaverse-friendly Generation Z. On the other hand, eMarketer showed recently (Nunez and Paige, 2022) that Facebook rebranded as Meta will shut down in September 2022 its digital wallet known as Novi (by abandoning the Facebook-backed digital currency Diem/Libra project), and on the path to create a digital wallet for the metaverse could use Novi's technology to support both the necessary framework for metaverse payments (the most probable payment method in it being the cryptocurrencies), and a Meta's NFTs project. It is also worth adding that:

- eBay (that started in 2021 to allow NFT sales on its well-known site) is now controlling a high ranked NFT Marketplace by acquiring KnownOrigin (Shakir, 2022);
- Digital/mobile wallet is the best ranked e-commerce payment method used worldwide, as shown in figure below (Nunez, 2022).

Ecommerce Payment Methods Used Worldwide, 2021 & 2025		
<i>% of total</i>		
	2021	2025
Digital/mobile wallet	49%	53%
Credit card	21%	19%
Debit card	13%	13%
Bank transfer	7%	6%
Buy now, pay later	3%	5%
Cash on delivery (COD)	3%	1%
Direct debit	1%	1%
PrePay	1%	1%
Prepaid card	1%	0%
PostPay	1%	0%
Other	1%	1%
Note: numbers may not add up to 100% due to rounding Source: FIS, "The Global Payments Report," March 2, 2022		
275069 InsiderIntelligence.com		

Figure no. 13: Ecommerce Payment Methods Used Worldwide, 2021 & 2025

Source: Nunez, A., 2022. Revolut and Stripe sign payments partnership to drive global expansion, eMarketer, Jul 7, 2022 (work cited)

Instead of conclusions: *Shaping the future of e-commerce in relation with the future of the data economy, staying informed about trends in the retail & commerce industry, including supply chain trends*

Featured insights from Pivotree (2022) show that in shaping the future of e-commerce involves to consider significant trends (like the evolving omnichannel commerce, the growth of social commerce, online/offline hybridization etc.), as well as the impact of the next generation of users, anticipating their needs and expectations, and adapting accordingly, actively integrating into e-commerce organizations' practices everything that is necessary in relation to the current important evolutions. Let us remember that eMarketer already recommended in December 2021 to stay informed about three trends in the retail & commerce industry: a sustainability strategy to respond to changing consumer expectations (for Gen Y and Gen Z consumers sustainability being a primary brand consideration) about product sourcing, packaging, and delivery; the continuously growing BNPL wave (the charge being led by Gen Z digital buyers); the expansion of QR Codes adoption (better CX, reduced business costs).

And in shaping the future of e-commerce it is also imperative to take into account supply chain trends like those underlined by one of the best ecommerce platforms, Shopify (Moore, 2022): the optimization of the last mile by reducing the impact of supply chain disruptions via micro-fulfillment; the investment in the role of supply chain executive (C level); to be well-prepared for unexpected supply chain disruptions; to ensure more adaptability by integrating flexible contracts; to ensure increased inventory reserves, including based on new sources; the investment in supply chain agility, and improvement of the supply chain responsiveness; the investment in continuous CX improvement; the investment in the improvement of the supply chain forecasting; the investment in better quality data to improve data analytics and decision-making accordingly. It is also worth mentioning, within this framework of the future of e-commerce in relation with the future of the data economy, that according to Accenture Research (Falk, Mukherjee and Wright, 2022) the acceleration of the data ecosystem engagements and the maximization of their business value involves to consider four essential building blocks: digital business models, technology enablers, governance framework, and data-driven culture.

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