

E-Commerce Personalization and Digital Merchandising Strategy

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Abstract

We are witnessing marketing focus on the quality of being practical and a holistic approach of the buying experience. There is a clear need of incorporating the digital experience platform into the e-commerce strategy, and to valorize AI-powered e-commerce, as well as considering market opportunity of investing in computer-generated imagery as an important tool for e-commerce product imagery. It is now crucial to better understand the role played by AI into personalization, the importance of e-commerce personalization in customers' online shopping experience, and AI impact on marketing transformation. There is no doubt about the challenge to improve e-commerce CX and add value based on Gen AI.

Keywords: E-Commerce Strategy, E-Commerce CX, Digital Experience Platform, Digital Merchandising Strategy, E-Commerce Personalization, AI-Powered E-Commerce

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

Marketing focus on the quality of being practical and a holistic approach of the buying experience

Marketing is now challenged to focus on the quality of being practical, brought to our attention the B2C marketing analysts from Forrester Consulting (recognized for its recommendation to put the customer at the center of companies' leadership, strategy, and

operations in order to accelerate growth), being necessary for companies to pay attention to their investments' practicality in 2024 (Meyers, 2023). According to the former Editor-in-Chief of Search Engine Journal – who now is brand manager at Internet Marketing Ninjas, as well as Founder of Viral Content Bee – within the context of very quickly developing social media platforms it is important, for example, to better understand the great enthusiasm and eagerness caused by the holidays for the end of the year (Smarty, 2021). Two years ago already she recommended a checklist (by researching relevant hashtags and setting up companies' tracking, finding and connecting to influencers, keeping an eye on companies' competitors, optimizing companies' site for conversions, tracking companies' results) in order to ensure the success of the holiday marketing campaign on Twitter (now rebranded as X).

Now, for the 2023 holiday season, e-commerce was seen by eMarketer's experts (Stambor, 2023) as being more important than ever (mobile commerce keeping developing more quickly; consumers' financial plan with limited resources being helped by alternative payment methods like BNPL; the so called Cyber Five holiday – the five days from Thanksgiving to Cyber Monday, Black Friday in particular – remaining the most important part of the holiday season), being forecasted that online sales will grow considerably even higher than in 2020. As recently shown by Retail Brew (Vuocolo, A., 2023), Lupine Skelly, who is Retail Research Leader at Deloitte, highlighted that the preference for online shopping on (the above-mentioned) Black Friday is becoming the new normal. Of course, during this shopping season consumers need to pay attention to data security in general, taking into account cybercriminals' intense action, and avoiding, for example, being scammed based on the links of various instant messages or social media posts, phishing emails, so-called urgent requests for updated their billing information, different offers on fake websites etc. (Ortiz, 2023).

On the other hand, for instance, spectacular developments took place in 2023 in auto retail (the car-buying experience), given the new e-commerce strategic partnership between Amazon (which is becoming a virtual showroom) and Hyundai (who is embracing Amazon Web Service/AWS for a digital complete transformation of the appearance), integrating Alexa into next-generation vehicles, and redefine this way the customer journey steps (Miller, 2023).

The need of incorporating the digital experience platform into the e-commerce strategy, and to valorize AI-powered e-commerce, as well as the considerable market opportunity of investing in computer-generated imagery as an important tool for e-commerce product imagery

In today's challenging digital commerce landscape, according to the Content Marketing Manager at Bloomreach (Donnelly, 2023), going on the path to digital transformation and to create the best digital experience the starting point consists of having an effective website or a mobile app (then using social media content, email campaigns, and other digital technologies), while advancing on this way a tremendous advantage for digital marketers being to manage

digital customer experiences across multiple touchpoints with the help of a central Digital Experience Platform (DXP, as software solution streamlining digital experience management). Within this framework, it was underlined significant aspects, as follows: as the digital experience it is now critical to grow both customer satisfaction, and loyalty post-acquisition, DXP (which had in its evolution, as basic parts, three stages: content management system's introduction, web experience management's need for, DXP's emergence) ensuring websites', portals', mobile apps', and other digital experiences' continually improvement; a DXP presents three advantages: to control every touchpoint; to connect the business, being a technology which can be incorporated into the e-commerce strategy, and having an essential role in a company's marketing technology kit (see figure below); to leverage a flexible architecture. DXP allows to obtain customer's unified 360-degree view (by enabling customer data capturing, processing, and profiling), and enables not only business practices' reengineering, but also efforts' streamlining. And of course, as a DXP is including in a natural way the artificial intelligence (AI), the digital experience (from acquisition to loyalty) can be improved by AI (semantic search, contextual personalization, AI-powered analytics), opening the way to innovate with very differentiated experiences.

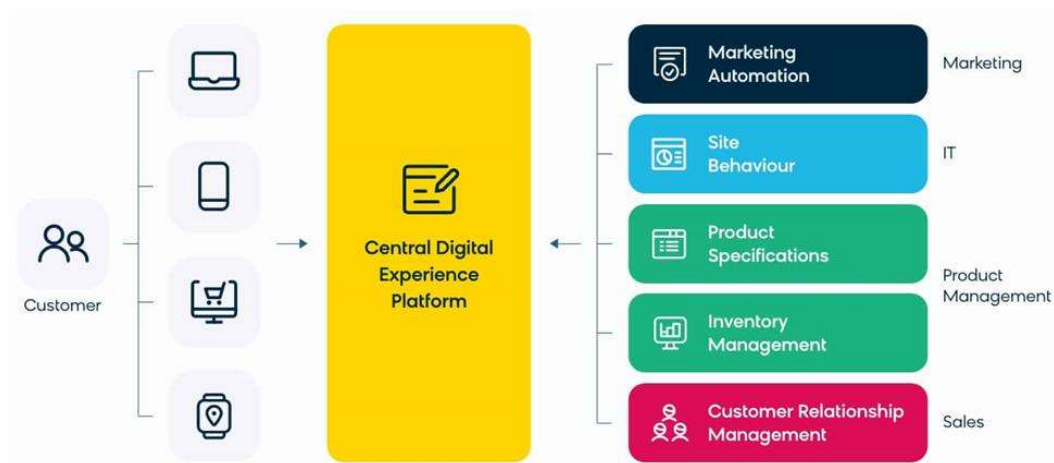


Figure no. 1: The role of DXP in a company's marketing technology kit

Source: Donnelly, I., 2023. *What Is a Digital Experience Platform?* Bloomreach, 15.11.2023 (Work cited)

With regard to customers' increasingly preference to shop with AI, another representative of Bloomreach (Woolard, 2023) showed how essential for e-commerce success is to consider AI (impacting operational costs' cutting, and having the ability to offer 24/7 customer service), the shopping experience being quickly transformed by it (based on: personalized shopping recommendations' generation, virtual try-on capabilities' offering, order fulfillment automation the case of B2C), every transaction being made not only easier and more efficient, but also deeply personalized. Product demand forecasting and supply chain managing are two examples

of use cases with the help of AI. In AI-powered e-commerce, reactive AI, limited memory AI, theory of mind AI, and self-aware AI are, for instance, four types of AI generally used. Also, product development and innovation, supply chain and logistics, marketing and sales, and merchandising and products are examples of AI in Online Shopping.

As revealed by a recent report produced by Coresight Research (2023), an important asset to communicate information to customers (both effectively, and efficiently) is represented by product imagery (based on computer-generated imagery – CGI, which allows alternate versions' creation of the same image to be used across channels, including e-commerce) in e-commerce. CGI (or 3D rendering) offers key benefits (sales conversion increase, overall costs and product returns reduction), being thus a clear need in retail for CGI and 3D product imagery (key themes are shown in figure below). Brands and retailers adopting CGI in the early stages will be better positioned to drive continuous improvements in the process of producing product visuals and understanding shopper needs



Figure no. 2: The need for, and benefits of, CGI and 3D Product Imagery in retail: Key themes

Source: Coresight Research, 2023. *Digital Merchandising Strategies: The Power of Automation and 3D Product Imagery in Retail*, Custom Report, Manik Bhatia, Senior Analyst, Coresight Research, in partnership with Nfinite, p. 9 (Work cited)

It is known that an essential aspect of online retail is e-commerce merchandising (understood as products' presentation and arrangement of products in an e-commerce store targeting sales driving and CX improvement), an easy to navigate e-commerce site being critical for the success of visual merchandising, the more so as a great user interface and experience is increasing in importance (Spong a, 2022). And as one of the merchandising solutions is product search (beginning with displaying for a given search term, sorting categories' order and on the home screen showed banners etc.), it is recommended to consider investing in a good product search solution (the AI of this search solution opening the way to begin optimizing CX) as the first step in starting a conversation with target customer, the role of a great product search engine being obvious (Spong b, 2022). As more recently confirmed by a highly recognized expert in

digital marketing solutions, voice search, SEO and local (Aggarwal, 2023), with regard to understanding both context and intent, search engines are becoming more and more better.

On the other hand, more and more online shoppers demand personalized search results, where the pressure on e-commerce business to ensure search personalization in order to improve CX and obtain positive brand perception, and consequently customer engagement and loyalty (Coveo, 2023). Within this framework it was recommended to make difference between history-based and in-session search personalization, as shown in figure below.



Figure no. 3: How does search personalization work?

Source: Coveo, 2023. *Delivering Search Personalization With (User) Intent*, Digital Commerce, Jan 25, 2023 (Work cited)

The role played by AI into personalization, the importance of ecommerce personalization in customers' online shopping experience, and AI impact on marketing transformation

In May 2023 took place in New York the inaugural BrXnd Conference focused on exploring the role of AI in marketing and discuss today's possibilities (based on a true challenging agenda: BrXnd Ad Turing Test, Opening: Building Intuition in AI; Hallucinations For Fun and Profit; Bringing Research to Life with AI; When AI Met Creative; Pragmatic Optimism: Building digital products in the age of AI; Easy, Confident & Responsible: Shutterstock's Approach to Generative AI; Generative AI And Brand Safety: Problems and Possibilities; AI Product Photography; AI Under the Hood; AI is Shaking Up B2B Marketing; Copyright versus Generative Creativity; Designing AI Systems & Experiences), BrXnd.ai stating

that its existence is at the intersection between brands and AI (BrXnd.ai, 2023). On the occasion of this inaugural BrXnd Conference the Founder of CMO Huddles underlined that mass personalization was marketing's dream for many years, this dream (of one-to-one messaging personalized for each consumer) being moved by Gen AI eruption closer to reality, but without eliminating concerns (Lebow, 2023). In marketing, mass personalization can include many aspects (user-specific products' creation, consumers' reaching on the basis of physical location – location-based targeting recommendations, marketing messages' delivering etc.), while the future can bring marketers' ability to approach individual consumers at scale using AI based on creating specific copy and images automatically. Personalization is streamlined by Gen AI on the basis of tasks' automation (for example, copywriting and image creation). Coming back to the above-mentioned concerns, it is worth mentioning the increasing consumer privacy concerns with regard to hyper targeted marketing (digital content delivered through advertising) or (as another example of concerns) marketers' concerns regarding AI-personalized outputs' checking (of images and copy for brand safety) at scale.

As offering recommendations' practice based on users' behavioral patterns, ecommerce personalization is essential in customers' online shopping experience bringing convenience and choice. (Charlson, 2023). An omnichannel audience can be better balanced by an ecommerce personalization strategy which ensure (beyond product recommendations and email marketing) brand loyalty increasing, customer engagement increasing (by offering curated customer service), sales increasing and so on. An e-commerce business's customer loyalty, sales, and competitive positioning can be considerably impacted by AI-powered commerce personalization, avoiding of course shoppers' data misuse.

According to Mann and Niessing (2023), a new era of business–customer interaction is signaled by the arrival of both AI and more sophisticated data interpretation, customer interactions' nature and industries' reshaping being revolutionized by the proactively anticipation of customers' needs and wants. In their opinion, marketing will be transformed by multifaceted applications of AI (including Gen AI), hyper-personalization being applied to customers' entire digital journey (discerning where they are in the life journey), and their emotional landscapes being better understood (based on not only available interaction speeds, mouse movements, but also biometric feedback). Digital interaction will be stimulated by voice recognition based on AI, and user queries' emotional undertones will be increasingly captured and understood with the help of AI-driven chatbots, while visual cues from UGC will be interpreted by AI, better informing marketing strategies.

Instead of conclusions: *Improving E-Commerce CX, and adding value based on Gen AI*

In order to grow and thrive companies must understand the importance of providing a seamless e-commerce customer experience (CX), ensuring online shoppers trusted buying and right products' finding, and avoiding negative business implications like a decreased net

promoter score, reduced customer visits, as well as lost revenue/market share to direct competitors (McAuliffe, 2023). There is a real need to improve e-commerce CX by ensuring a personalized experience, intelligent search, rich content and information, flexible purchase and delivery options, and fitting mobile within the digital CX, knowing that e-commerce CX can be optimized by using AI.

There is no doubt about the impact of Gen AI on e-commerce, especially through providing solutions for product discovery and shopper knowledge discovery, enhancing the online shopping experience, and managing the risks involved in adopting Gen AI (Sanchez, 2023). According to an e-commerce expert from Coveo, Gen AI implementation in company's e-commerce ecosystem needs to start by identifying where Gen AI can both add value, and improve CX, so as to maximize profitability and minimize risk.

From the point of view of McKinsey's experts (Harkness et al., 2023), a new age of marketing capabilities is catalyzed by Gen AI, by automating processes, powering hyper-personalization, making permanently structural changes of the idea generation process and so on. Going on that path, marketing function appears to be reinventing companies' end-to-end (E2E) processes with Gen AI, valorizing long-term opportunities (see figure below).

Generative AI is poised to help the marketing function become more sophisticated over time.

	Getting started with gen AI	Customized gen AI solutions	Transformative gen AI
Approach to marketing	Integrate mostly off-the-shelf generative AI (gen AI) software into existing workflows to drive incremental changes in efficiency and effectiveness.	Lightly tailor foundation models for use cases. Use both gen AI and nongenerative AI solutions in tandem to accelerate chains of action.	Use a full suite of digital and AI capabilities, including customized gen AI solutions. Humans define objectives and monitor performance but are otherwise not "in the loop."
Examples	A retailer increases efficiency in creating copy for email communications by using ChatGPT for first drafts.	A telco increases personalized communications to its customer base by tapping gen AI to generate creative copy and imagery. Humans review and approve content, and machine learning decides which customer gets what communications.	A home improvement retailer trains a gen AI model on its corpus of information about home improvement projects. Gen AI is embedded into an app, which is used to provide project guidance to customers during in-store experiences.

McKinsey & Company

Figure no. 4: Generative AI is poised to help the marketing function become more sophisticated over time

Source: Harkness, L., Robinson, K., Stein, E. and Wu, W., 2023. How generative AI can boost consumer marketing December 5, 2023, McKinsey & Company, Growth, Marketing & Sales, December 5, 2023, p. 3 (Work cited)

And the last but not the least, let's remember the words of the reputed Michael Hinshaw (President/CEO of McorpCX, and a mentor and teaching fellow at UC Berkeley's Haas School of Business): *"The personalization capabilities brought on by the digital age have revolutionized marketing, sales, and service... And it's only just beginning. Just as personalization was a game changer a decade ago, hyper-personalization is a game changer today with tools like real-time journey orchestration and optimization driving 1-to-1 personalization at scale"* (Hinshaw, 2022).

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