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Leveraging the power of consumer genome

Unlocking the potential of 'segment of one'

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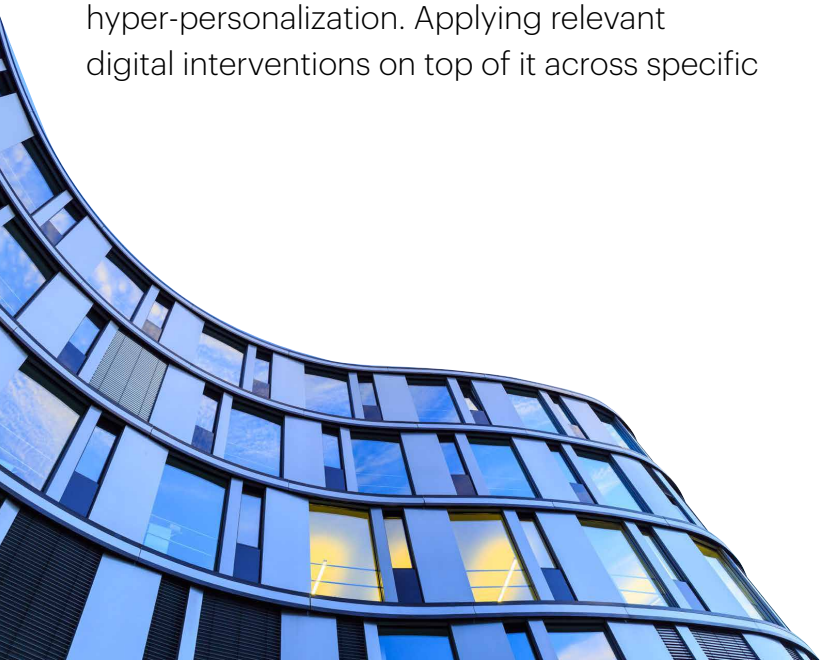
Executive Summary

With increasing digitalization and the emerging growth in the segment of millennials and Gen Z as consumers, Retail and Consumer Goods firms need to re-imagine the ways they reach out to potential and existing customers. Consumers' expectations increasingly shift to more targeted campaigns, tailored loyalty offerings, while companies on their part would want improved RoI on campaigns and promotions. From a blanket segmentation of customers to a micro 'segment of one', the way customers are targeted has evolved with time. A prime lever to do that more effectively is leveraging the individual 'Consumer Genome'.

Akin to the biological genome, each individual's consumer genome is unique. It looks through the digital footprint customers have left on the omnichannel world during the purchase journey and social media interactions. This forms the core of hyper-personalization. Applying relevant digital interventions on top of it across specific Use Cases for an organization can unlock unrealized business value.

This white paper delves into two use cases where we discuss how hyper-personalization can help companies improve customer engagement. In the first use case, we discuss how hyper-personalization can be used to recommend products and offers that are aligned to a specific life event of the customer. Life events of a customer can be traced using digital footprint of the interactions with various social media sites. Machine learning models help companies identify and use these life events to target communications and influence purchase decisions.

In the second use case, we talk about leveraging the customer genome and digital footprint to garner additional inputs from the customers' interaction with different social media applications, search data and browser interaction. These insights can be used to frame individualized loyalty programs for customers, as also provide relevant promotional offers and discounts.



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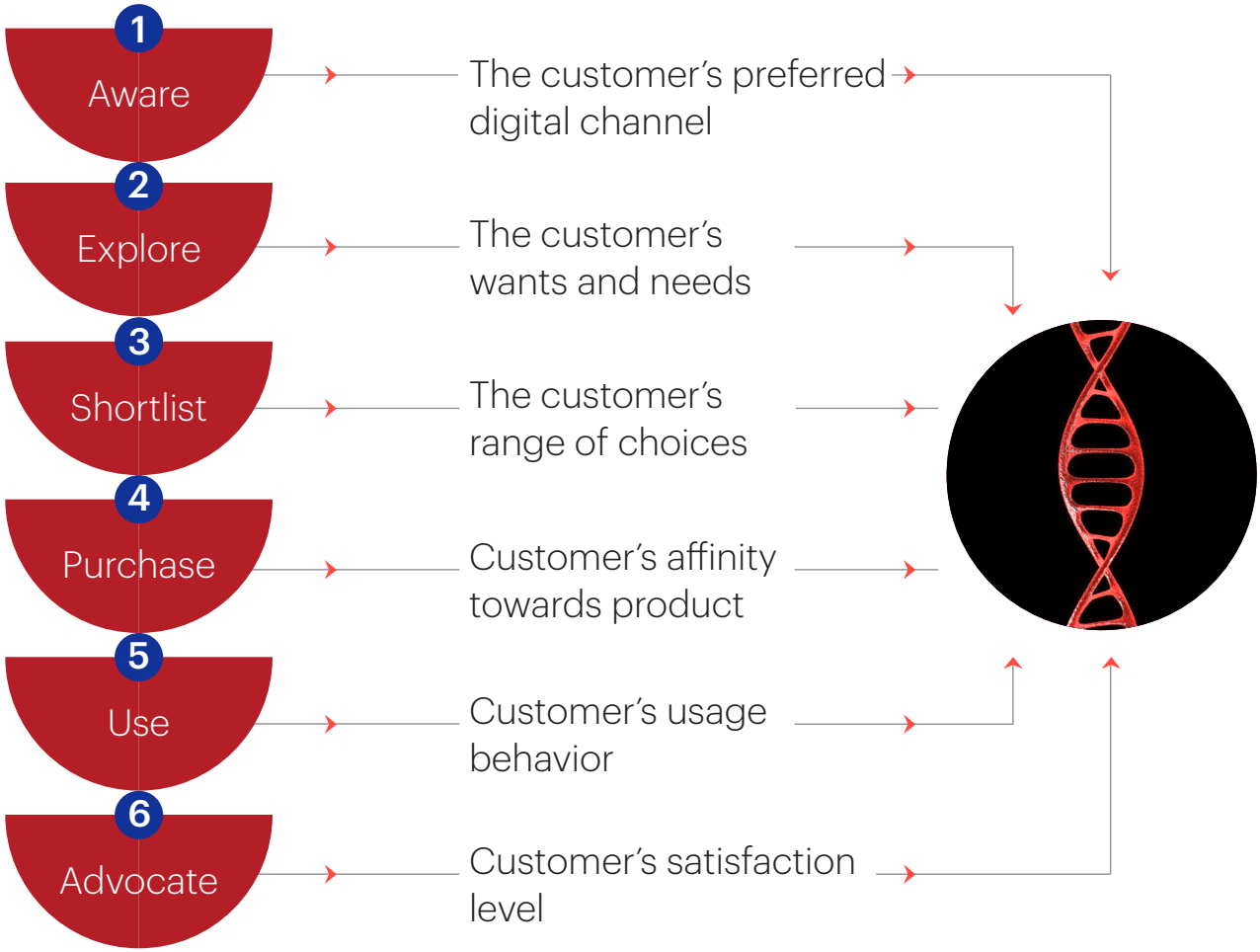
Introduction

Today's highly competitive markets, digitally evolved customers, and risk-prone supply chains compel retail and consumer packaged goods (CPG) companies to up their game to stay relevant. Targeting customers through traditional segmentation models or mass marketing campaigns is no longer enough. Consumers are often overloaded with information and communication, and making an impact in this clutter is challenging.

The way to grab consumer attention is to create personalized communications and customized experiences.

Highly tech-savvy millennials and Gen-Zs, with a digital-first mindset, form two of the largest consumer segments across the globe. Millennials, roughly considered as those between 25 and 40 years of age, constitute about 22% of the global population[1]. Gen-Zs, those between 9 and 24 years of age, are already outnumbering this group, at 24% of the global population[2]. Social media and online platforms have played a significant role in influencing the world view, behavior, and buying habits of these two consumer groups, who increasingly use these platforms to share their views and influence their peers and the world at large[3]. Consider this – the NRF reports that the average Gen-Z spends 4.5 hours on social media every day, while the millennial spends about 3.8 hours each day[4]. Clearly, these two consumer segments are prime opportunity segments for retail and CPG organizations to deliver hyper-personalized marketing for increased returns.

What is hyper-personalization and why is it relevant today?



"Figure 1: Data captured into the customer genome across the customer journey"

To understand hyper-personalization, we must revisit the concept of personalization. A concept that has been widely adopted by consumer services industries; personalization is not new. Companies have been targeting consumers through direct marketing programs for a long time now, based on their personal and transactional information such as name, location, preferences, buying habits, etc.

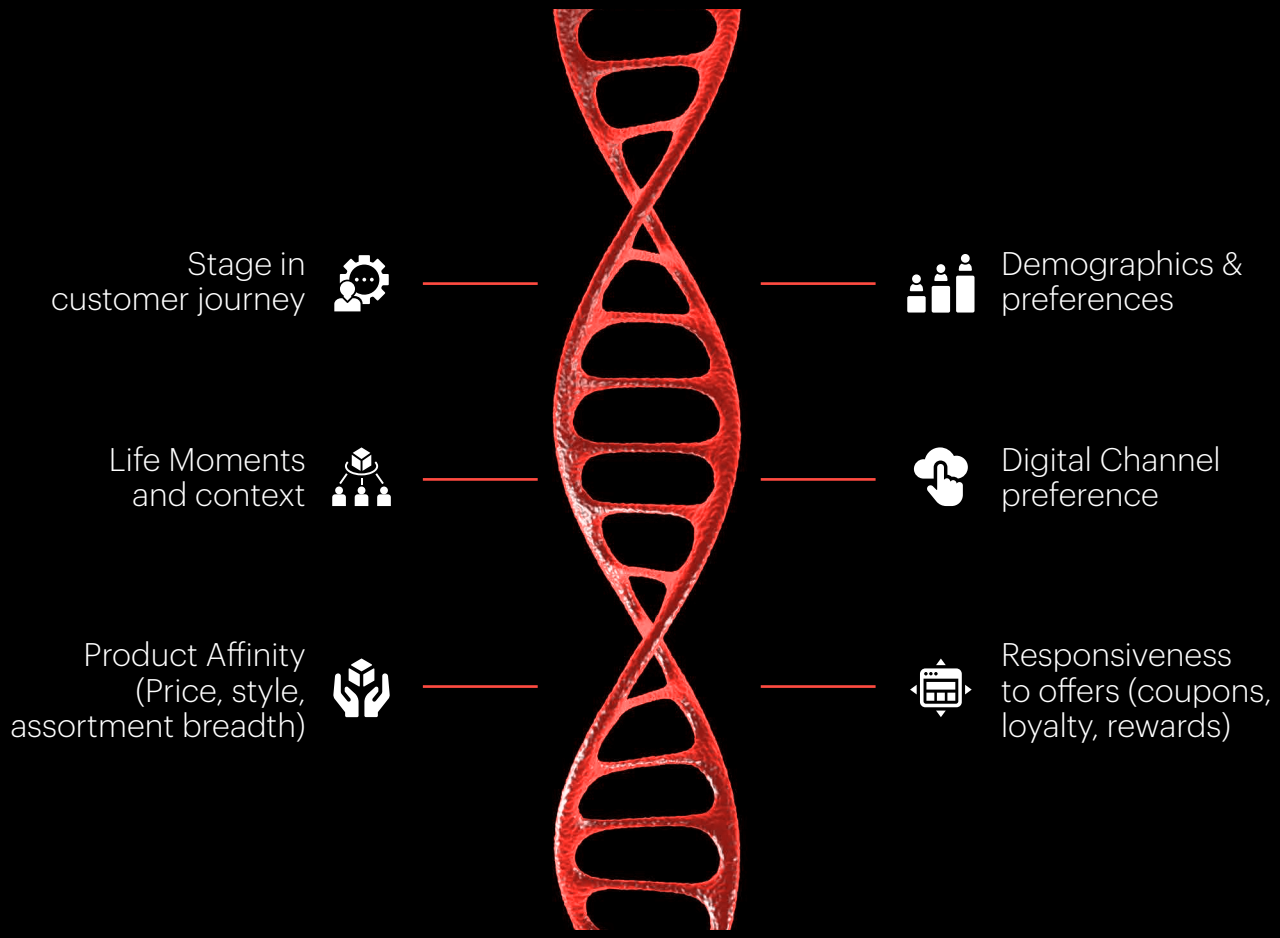
Hyper-personalization takes this to the next level, with a key element added to the mix –

technology. Essentially, the use of next-gen technologies like artificial intelligence (AI), machine learning (ML), predictive analytics, and related tech combined with the prolific data available in real-time today, is what constitutes hyper-personalization.

Hyper-personalization enables companies to send highly contextualized and personalized communication to their customers at the appropriate time and place, enabling meaningful engagements and experiences. Companies like Netflix, Amazon, and Spotify have mastered hyper-personalization to engage with, and delight their customers. What these companies have achieved is a classic example of deeply mining and leveraging the customer data available to them.

Hyper-personalization offers the benefits of micro-targeting, tailoring recommendations for individual consumers. Apart from enhancing customer satisfaction and the overall experience, companies can expect improved returns on investment on the marketing and advertising spending, while improving the reach of their products. Hyper-personalization helps drive enhanced customer engagement, increases the relevance of the brand or product, enables revenue growth, and builds trust with the company.

The ‘segment of one’ concept



"Figure 2: Glimpse of information contained in a customer genome"

In an era of a digital-first mindset, consumers want a dedicated and tailored focus of retailers and brands on themselves, in terms of how, when, and where they would want to be targeted with offers, promotions, product recommendations, product pages, listings, loyalty benefits, and more. This need cuts across the physical and digital channels of buying. This is where the concept of ‘segment of one’ comes into play. This would entail targeting customers based on their digital footprint. Today, a broad-based segmentation approach targeting customers based on their age, gender, or location is just not enough. Two people living in the same house will have different needs and different purchase preferences, and this is what companies must address. The segment of one concept, therefore, approaches each consumer as an individual segment or a target group for brands to target and enhance their future offerings. This entire concept needs to be further aided by digital levers such as AI, ML, natural language processing (NLP), sensors, and related technologies.

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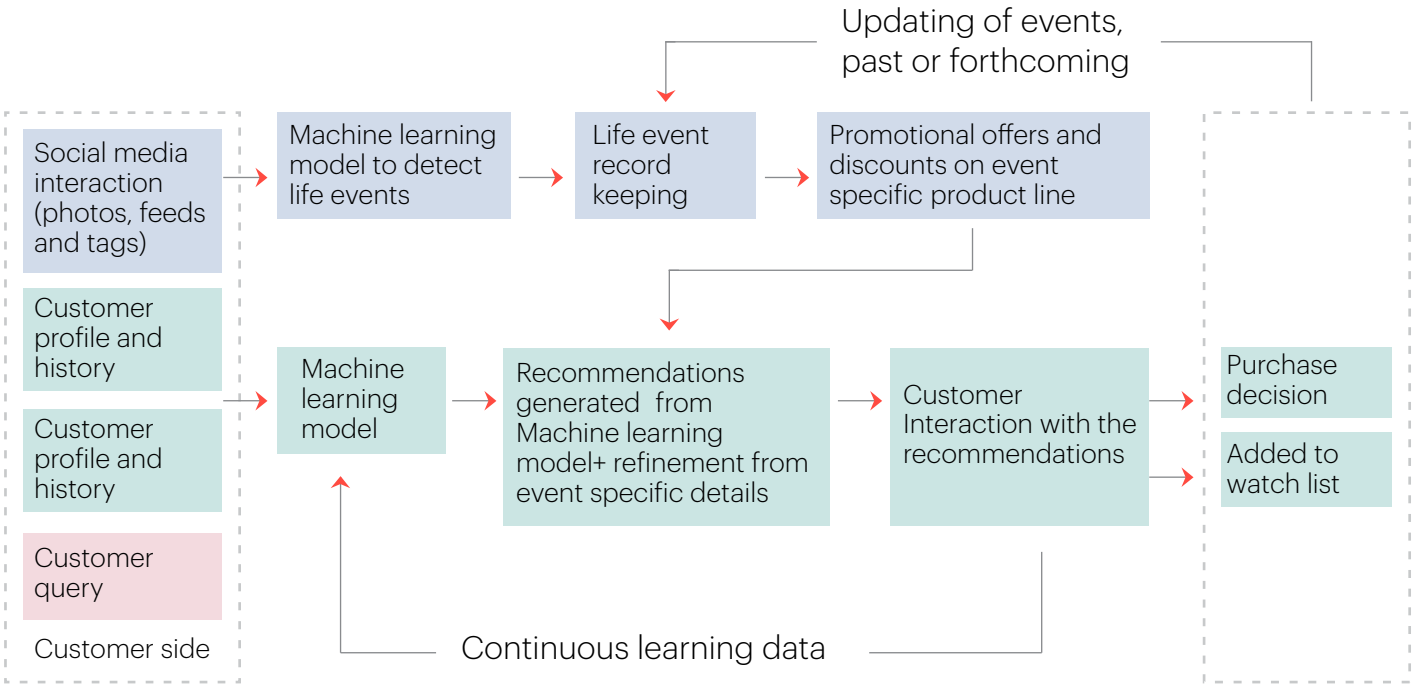
How can companies leverage hyper-personalization to engage better with their customers?

With the abundance of big data, supported by the next gen technologies available to consumer services companies, AI-powered hyper-personalization has become easy. These technologies enable companies to identify customer preferences and habits, map customer characteristics, personas, geographic locations, and movements, and tailor products and services to consumers on an individual level.

So, how can companies leverage hyper-personalization to engage better with their customers? From data-driven customer segmentation and content generation to dynamic advertising and pricing opportunities, workflow automation, and more, hyper-personalization opens up a plethora of in-moment customer connections for retailers. Let's answer this question by examining this phenomenon in the consumer goods and retail scenarios with two business use cases.

Hyper-personalization using an understanding of life events from social media

Consumers are likely to feel a higher affinity towards products and brands that strike a deeper connection with them. And this connection can be best established through certain life events such as birthdays, weddings, anniversaries, the birth of a child, graduation, and so on. With social media so deeply ingrained into the societal fabric, it's only natural for it to be used as a platform to disclose life events. In a survey by Sprout Social, 79% of respondents[5] indicated that they had used social media to reveal a life milestone. The survey also revealed that 94% said Facebook was their platform of choice, followed by Instagram (39%) and Snapchat (27%). Social media has enabled brands to direct user-generated content based on the inputs gathered from these life events or milestones. For instance, on Twitter, companies can get to know the data points well in advance using the hashtag - 'birthday'. These data points also enable companies to create targeted messages, campaigns, offers, recommendations, and promotions.



"Figure 3: Hyper-personalization leveraging life events through social media"

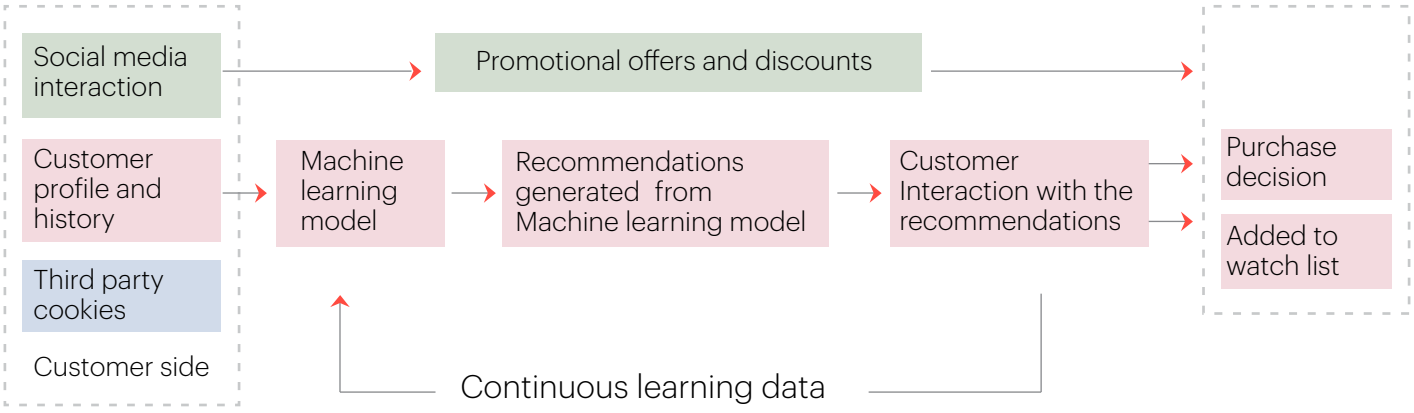
The technical architecture

In this use case, we discuss how hyper-personalization recommends the products that are aligned to a specific life event of the customer. The collection of various life events of a user can be collected using the digital footprint of the interactions with various social media sites. This entails training a machine learning model using the social media feeds along with the tags to figure out if the feed represents a customer's life event or relates to their network. Once identified, these event details can be updated in the customer database, depending on whether it's a recurring or repetitive event like a birthday or a one-time event like graduation. Every time a customer logs in to shop or enters a query, the machine learning model for generating recommendations turns active and populates the recommendations.
A further refinement on products specific to the life event or offers is applied in addition, when the life event is approaching. This refinement allows the user to see the personalized recommendations, and the user can decide to interact with the products and offers before making a decision to buy. In this case, the customer interaction with the recommendations can be used for continuously updating the recommender machine learning model. Purchase decisions can be applied to update life events, or product lines to further refine the recommendations.

Hyper-personalization of product recommendations based on the customer journey (genome) and digital footprint, incorporating loyalty

The growth in e-commerce as a result of the pandemic has also enhanced the influence of social media on buying behavior. Today, social media plays a key role in influencing consumer buying decisions. Research by Smart Insights indicates that 57% of the global population uses social media[6]. In the US alone, 51% of respondents, in a September 2020 study, revealed that their purchasing decisions were influenced by social media ads. Out of all the social media platforms, Facebook remains the largest with about 2.7 billion monthly active users[7], with Instagram a close second at 1 billion users[8].

The digital footprint left by customers on social media, e-commerce sites, and other pages is instrumental in building a customer DNA (customer genome). This is the essence of how a customer traverses their journey in the digital world. Data from other channels such as physical, point of sale (PoS), and others can be clubbed with this digital DNA to map the overall omnichannel profile (genome) of the customer. Product recommendations can then be made based on purchase history, purchase frequency, and other data points. This can also help in framing loyalty offerings for each customer, based on the purchase patterns and quantum or value of purchase during each transaction.



"Figure 4: Hyper-personalization of product recommendations"

The technical architecture

The traditional personalized recommender systems used simple approaches like collaborative filtering and content-based filtering. The input data requirement for these models included customer rating, buying patterns, and product information. These systems were effective but were not able to target individual customer's preferences and needs.

The hyper-personalization approach, using customer genome and digital footprint takes additional inputs from the customers' interaction with different social media applications, search data, and browser interaction. These recommender systems can be seen as mobile recommender systems where the location and other customer interaction data along with profile forms the input to the machine learning model. The machine learning model presents its recommendations to the customer. Further, the interactions of the customers with these generated recommendations can also be used as a cue to the customers' preference and used as the input data to train the machine learning model in an active learning setting. This simple pipeline of hyper-personalization for presenting recommendations can be further enriched by including customized promotional offers and discounts using the customer's profile, location, and history information. In addition, based on the customers' buying pattern and purchase values of specific SKUs, loyalty programs can be designed for the individual customer and bucketed into tiers across categories (Platinum, Gold, Silver) based on the past purchase value. Promotional offers and discounts can be rule-based or simple ML models.

The data requirements for this use case would incorporate both structured and unstructured formats. Unstructured would include customer purchase value over past few months, frequency of purchase of various SKUs, browser search for a specific item with certain detail, Interaction with the ads in different applications, etc.

The PII challenges as foreseen in this use case would be medium.In this use case, the data can be collected by taking a consent from the customer to enable a better experience. Further, other channels for data could be social media and any other information that is explicitly made public.

Other selected use cases in consumer hyper-personalization

Other use cases of hyper-personalization which are going to increase customer engagement throughout the customer journey and increase customer satisfaction are as follows:

Customized product discovery

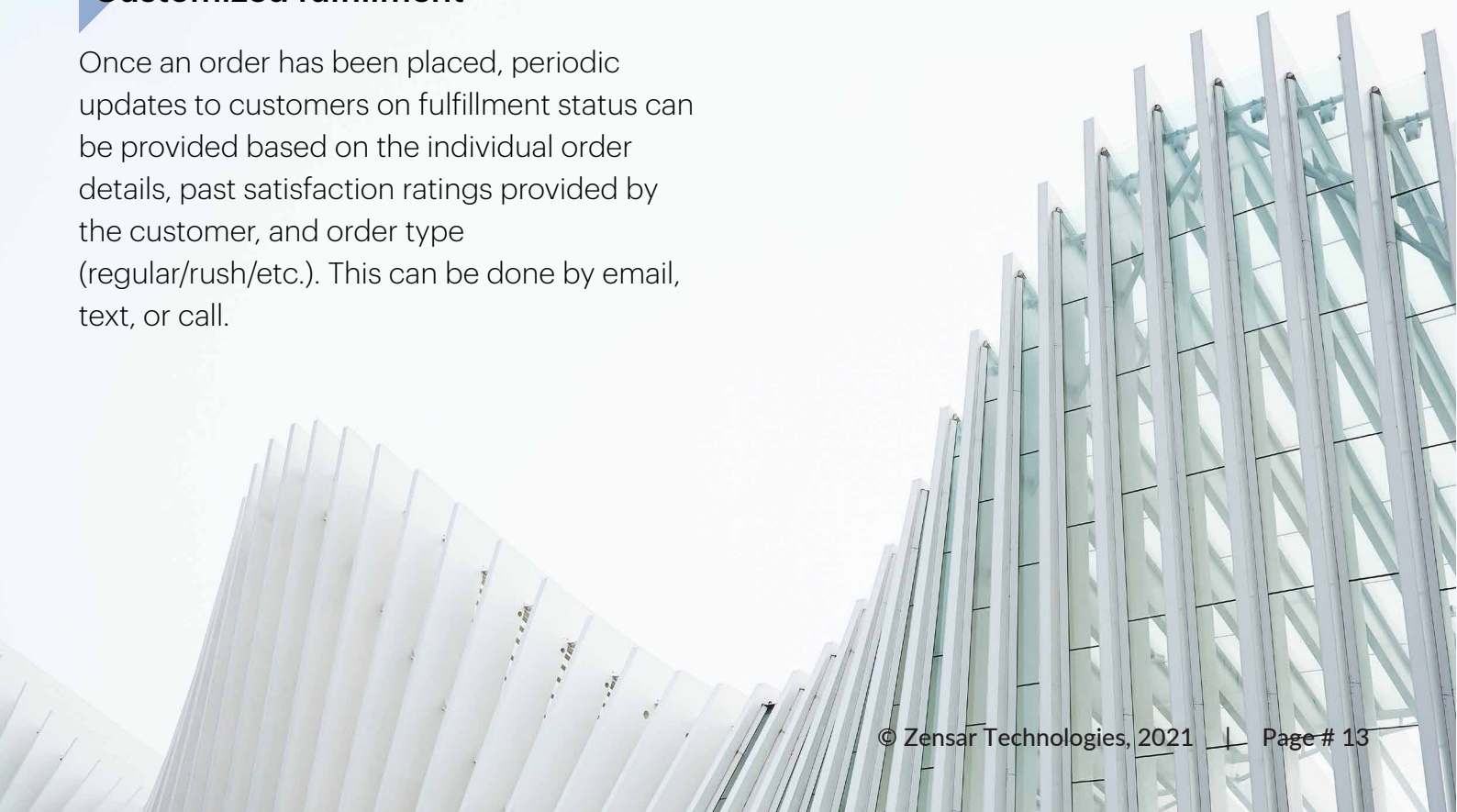
Based on the digital footprint left by consumers across e-commerce sites, social media, other websites, micro-targeting of consumers can be achieved. This will facilitate quicker and better product discovery, and enhance overall customer experience (CX) and customer retention.

Customized fulfillment

Once an order has been placed, periodic updates to customers on fulfillment status can be provided based on the individual order details, past satisfaction ratings provided by the customer, and order type (regular/rush/etc.). This can be done by email, text, or call.

Personalized customer support

Returns are a sore point for many retailers. While it has a big impact on the overall logistics and supply chain, the CX part can be better managed using the personalized customer support. Depending on individual order history for the customer, a personalized plan around returns can be built around providing discounts to the next order, additional benefits via coupons, gift cards, and others, whenever the return is activated for individual groups of customers.



The next era of hyper-personalization

In an increasingly volatile and competitive marketplace, hyper-personalization will be the norm for forward-thinking companies. The growing use of AI and data to connect with consumers at a deeply personal level will set the pace for success. As the next-gen technologies of AI, ML, and automation technologies become more sophisticated, marketers will be able to leverage them to create more personalization strategies for their consumers. The use of AI has helped retailers enhance demand forecasting (especially in times of the pandemic with disrupted supply chains), and enabled better product placement. Technologies such as augmented reality (AR) and virtual reality (VR) are already making an impact in the retail sector. Leading retailers are already leveraging augmented reality to enhance the "try-before-you-buy"[9] experiences, particularly in times of store closures due to the pandemic.
Together with other new-age technologies, consumer services companies expand personalization possibilities, enabling decision-making through virtual experiences. Many software and solutions companies have introduced virtual tours of their research and development facilities through the pandemic to enable immersive life-like experiences at the click of a button, supporting decision-making for clients. In the travel industry, for instance, a virtual tour of a destination helps consumers determine if they want to actually visit the place.

Deeper customer engagement, coupled with great customer experience is the way to go with hyper-personalization in the future.

References

1. https://population.un.org/wpp/Download/Standard/Population/
2. https://population.un.org/wpp/Download/Standard/Population/
3. https://www2.deloitte.com/content/dam/Deloitte/global/Documents/2021-deloitte-global-millennial-survey-report.pdf
4. https://nrf.com/blog/how-gen-z-driving-future-retail
5. https://sproutsocial.com/insights/data/q4-2017/
6. https://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/
7. https://sproutsocial.com/insights/new-social-media-demographics/
8. https://sproutsocial.com/insights/new-social-media-demographics/
9. https://hbr.org/2020/10/how-ar-is-redefining-retail-in-the-pandemic

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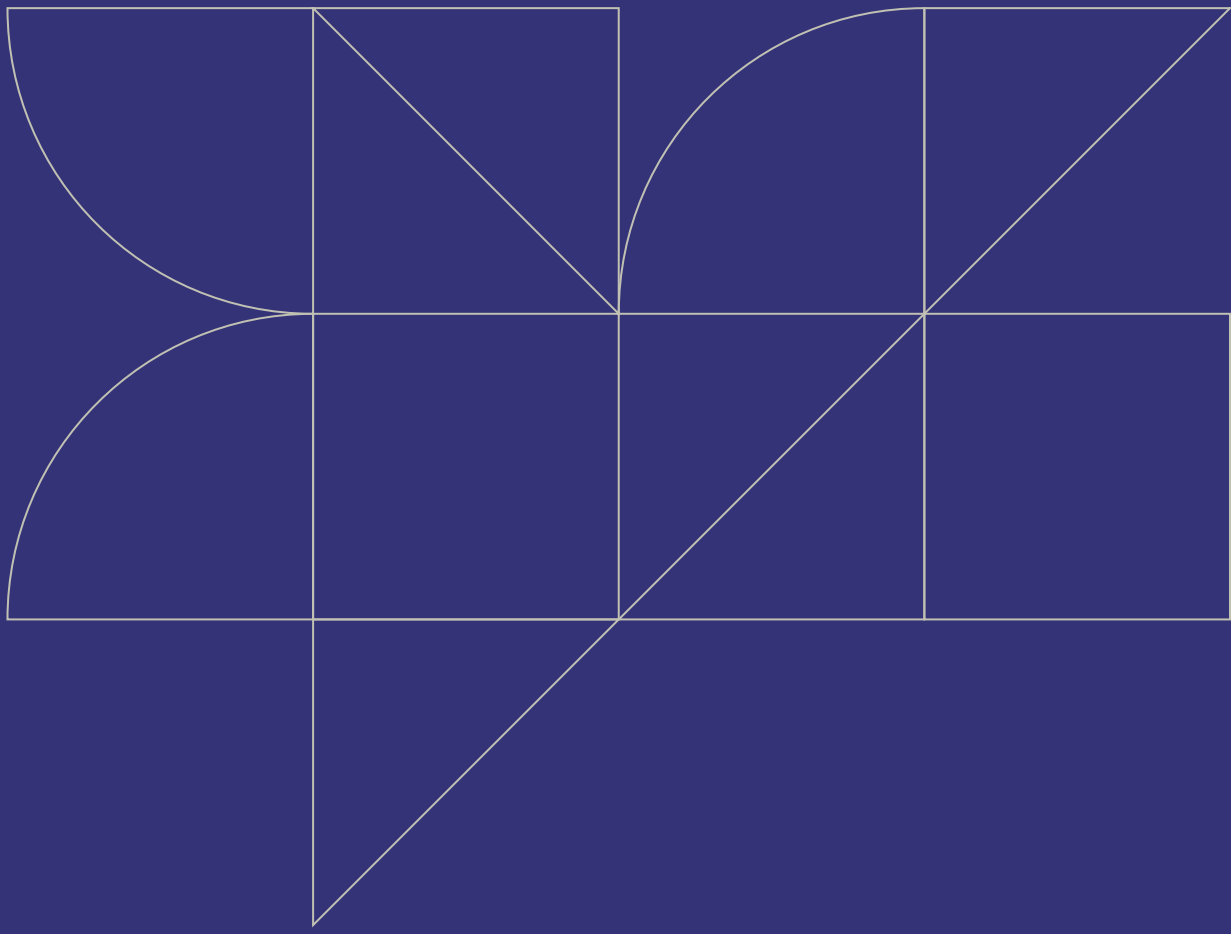

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