A New Era for Technology: How the Metaverse Will Transform Retail

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ABSTRACT

The current state of metaverse implementation within the marketing industry is gaining popularity as reachable technologies and visions for the metaverse are created, media coverage on the topic becomes widespread, and the demand for the metaverse increases due to the influence of recent world events. The future possibilities and opportunities of the metaverse as the next revolutionary platform after the internet makes the metaverse an increasingly important topic for retailers and businesses. Due to the unique characteristics of a metaverse, a platform which incorporates both the virtual and physical aspects of retail, marketers should create a marketing strategy in the metaverse oriented around a "retail theater" experience for consumers. Using a retail theater, marketers will be able to attract consumers to their metaverse store, by allowing them to have a unique and enjoyable shopping experience. A deep understanding of consumer preference of the target market in the metaverse is necessary in order to increase consumer adoption of the new interface technology and to compensate for factors of consumer dissatisfaction regarding the current retail environment. The current paper aims to review and connect the literature regarding retail and the metaverse through deductive content analysis and research. By means of building upon and connecting literature regarding the metaverse and marketing communications, the paper proposes an effective marketing strategy in the metaverse for businesses. The proposed strategy may serve as a framework for future research as well as a guide for marketing professionals looking to expand retail into the metaverse platform.

Introduction

What if it was possible to see the beautiful sights of Paris and tour the city all from the comforts of home, without having to deal with the expenses or work necessary to travel there? What if social interactions with friends and work meetings could be held inside a hyper-realistic 3D virtual reality world? These previously described scenarios are only some of the endless possibilities of the metaverse. The term "metaverse" originates from the science fiction novel, *Snow Crash* by Neil Stephenson, however, the metaverse does not simply refer to science fiction (Stephenson, 1992). In fact, this new world with endless possibilities is fast-approaching, and many may already be involved with the metaverse today. Popular games such as Roblox, Fortnite, Animal Crossing, and Minecraft, which consist of players using avatars to interact with others and to build 3D worlds, have metaverse tendencies, as does most social media. In addition, those who own non-fungible tokens are also part of the metaverse experience as well.

The metaverse, consisting of the prefix "meta" (meaning beyond) and the stem "verse" from "universe", is a concept that denotes a hypothetical, next-generation internet consisting of persistent, shared, 3D virtual worlds. The metaverse acts as a virtual space which allows users to work, play, and socialize through avatars. The emergence of COVID-19 has dramatically sped up the evolution of the metaverse, due to restrictions on physical activity and increased demand for online ventures. Furthermore, the business economy has evolved from an industrial-based economy to an information-oriented economy, which is indicated by the increased informational elements of retail. The economy has also experienced an 'ICT revolution', which provides new and improved tools solely targeted towards dealing with information (Bourlakis, 2009). These changes within the business economy have allowed retailers to take

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advantage of the new opportunities for retail, which have become feasible, in the metaverse. Today, several leading tech corporations (e.g. Facebook, Microsoft, Epic Games, Nvidia, and Roblox) have begun to work on shaping the metaverse landscape.

The development of technology has allowed for the rapid expansion of the scope and reach of platforms utilized for retail and marketing. Although electronic methods of retail offer efficiency and convenience, they may lack the atmospherics and context of traditional retail methods. However, the metaverse may possibly overcome the limitations of both traditional and electronic retail methods, allowing consumers to fully experience a product while also offering the convenience factor at the same time (Papagiannidis, 2010).

In this review, marketing communications, which is defined by Kotler and Keller as "the means by which firms attempt to inform, persuade and remind their customers - directly and indirectly - of products and brands they sell", will be discussed (Kotler, Keller, 1967). It is perhaps one of the most complicated and difficult, yet essential aspect of retail, especially due to expanding possibilities of digital media options (Keller, 2016). In order to create a successful marketing communications strategy in the metaverse, businesses should consider the unique strengths and attributes of a metaverse for marketing, consumer preferences in the metaverse, and the elements of an integrated marketing communications program.

The Metaverse and its progression

The term 'metaverse' has started gaining traction since 2020, recently becoming one of the most popular tech terms. A research article discusses how several leading tech corporations are jumping on the 'metaverse business hype', stating that "a Google Trends search shows the term has been actively searched since early 2021, starting around the time when Roblox went public on March 10, then when Nvidia CEO Jensen Huang said in April that the company's next step was to create a metaverse, and when Facebook CEO Mark Zuckerberg announced his decision to rebrand the company with a new name, Meta, on October 28. Zuckerberg also stated the change would come with a new logo (an infinity sign)," (Kim, 2021). These activities may seem like brand-new, experimental ventures, or the pursuit of a wistful yet improbable fantasy, however there have been around 30 years of development behind the term 'metaverse'.

The concept of a metaverse is a fast-growing area of research from many different subjects, and has attracted the interest of various industries and researchers (eg. business, psychological, marketing, legal, music, and more), (Bourlakis, Papagiannidis et al., 2009). In addition, realistic visions for the metaverse and developments in multimedia technologies have motivated the industry in constructing the metaverse. For example, Roblox, an online game platform and creation system, reached more than \$40 billion in value at its peak. Furthermore, NVIDIA has built a platform named Omniverse to support real-time virtual collaboration in industrial design and visualization. Many large tech firms (e.g., Tencent, Bytedance, Epic Games) have put in much effort in building metaverse-related applications as well (Duan et al., 2021).

These seemingly attainable visions for the metaverse were largely influenced by the success of the film Ready *Player One* in 2018, which has brought the metaverse back to the vanguard of modern discussions (Cline, 2011). In the film, a virtual world named 'OASIS' is shown in which users act through avatars, and are able to do almost anything imagined. The film shows several reachable technologies, such as "HMD, VR, rendering, ubiquitous sensing, haptic feedback, and modeling of the physical world," (Mystakidis, 2022). Furthermore, businesses have shown interest in the concept of the metaverse as it continues to gain popularity due to the Covid-19 pandemic. Since outdoor activities and in-person social interactions have been limited, the demand and need for metaverses have increased. Especially for the MZ and alpha generations who are active in online activities, the metaverse has become a major platform for interaction and entertainment (Han, Heo et al., 2021).

Technological advancements, such as the computer, phone, and the internet have expanded the horizons of retail, allowing for limitless possibilities of advertising and marketing which have not even been imagined before. Retail has evolved from traditional, to electronic, to metaverse spaces, with each containing a diverse set of challenges and opportunities (Bourlakis et al., 2009). Since now, there existed two spaces, online and offline. However, recent

technological developments, such as new AR/VR technologies are allowing for the creation of a new space: the metaverse, in which economic and social activities may take place. The creation of new spaces has evolved the retail industry, opening up a new plethora of opportunities as well as complexity. Traditional retailing has focused on product-oriented retail, in which retailers focus on the quality, display, and price of the product as well as the atmospherics and context of the store. On the other hand, electronic retailing is customer-oriented, in which retailers focus on targeting the needs of individual consumers, excellent prices, and ease of shopping. Metaverse retail is experience-oriented, in which retailers focus on creating a "unique experience" for consumers instead of focusing on the product itself.

Experience-oriented approach with the Metaverse

Retail in the metaverse is a combination of both electronic and traditional retail, in which consumers can experience the product in a 3D environment, while also maintaining the convenience factor of electronic retail. Therefore, the new metaverse space may allow for the resolution of limitations on traditional and electronic methods of retail (Papagiannidis, 2010). Although electronic channels of retail have allowed for more convenience and efficiency, they often lack the context and atmospherics of traditional channels. On the other hand, traditional channels of retail have allowed consumers to view real products and have social interactions with store personnel, however, are not convenient for shopping since consumers must visit the store in person.

As this new space is created, Metaverses may allow for the establishment of a more experience-oriented retail environment. The evolution of retail in the metaverse will attract consumers to the new platform by increasing the enjoyment factor of shopping through a retail theater environment. Consumers are looking to not only consume a product, but to experience it in the metaverse, and marketers should respond to developing technology by adjusting their marketing strategy to a retail-theater based approach, (Papagiannidis, 2010). Retailers in the metaverse should use "exciting retail theater environments that invariably involve opportunities for audience participation and interaction, characteristic of theater performances" (Baron et al., 2001). By offering a consumer the opportunity to interact with a product, the consumer is able to gain experiences not available in traditional or electronic platforms for retail.

Traditional Retailing	Internet Retailing	Metaverse Retailing	
Store	Retailer's Website	Metaverse (Second Life)	
Personnel and customers	Delivery and order taking personnel	Avatars	
Social interactions	Non-interactive	Active, participatory-based	
Competitive prices and product choice	Excellent prices, satisfactory product delivery	"Unique" experience creation	
The customer should visit the store to interact socially and to experience social integration	Minimum/basic store interaction and integration with retail personnel	It does not portray the real identity of the person, creating possibilities for misbehavior. Further limitations posed by technology.	
Possible integration with retail personnel and other customers confined within the store	Basic integration with retail personnel confined within customer's house	Possible extensive integration with other avatars confined within the metaverse space	
Purchasing real goods Full integration with the supply chain Total market approach	Purchasing mainly real goods Full integration with the traditional supply chain Mass customization	Purchasing mainly virtual goods Possible integration with aspects of the traditional supply chain A small/"niche" market for	
	Personnel and customers Social interactions Competitive prices and product choice The customer should visit the store to interact socially and to experience social integration Possible integration with retail personnel and other customers confined within the store Purchasing real goods Full integration with the supply chain	Personnel and customers Delivery and order taking personnel Social interactions Non-interactive Competitive prices and product choice Excellent prices, satisfactory product delivery The customer should visit the store to interact socially and to experience social integration Minimum/basic store interaction and integration with retail personnel Possible integration with retail personnel and other customers confined within the store Basic integration with retail personnel confined within customer's house Purchasing real goods Purchasing mainly real goods Full integration with the supply chain Full integration with the traditional supply chain	

Table 1. Retail experience in traditional, internet, and metaverse retailing (Papagiannidis 2010)

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An experience-oriented approach to retail in the metaverse is active and participatory based, with avatars serving as key actors, and retailers providing a "unique" experience for consumers (Papagiannidis, 2010). Through a retail theater-oriented approach, consumers will experience more fun during shopping than in traditional or electronic spaces. Table 1 compares the differences between the three spaces, traditional, internet, and metaverse, showing the key characteristics of each space for retail. The unique characteristics for the metaverse allow the space and Although retailers may use retail theater in order to ultimately increase sales, each retailer may have different motivations regarding specific goals for their brands (Papagiannidis, 2010). Some aim for consumers to interact with their products, in order to create a range of responses that will result in product sales. Others aim for consumers to develop a sense of belonging, creating brand loyalty.

Although the metaverse provides many opportunities for retailers, it also poses various obstacles. Key challenges of the metaverse platform include potential for misbehavior as well as technological limitations. Current technology may not be advanced or convenient enough to support retail in the metaverse or store the massive amounts of data kept by each brand. Retailing in the metaverse is a concept that is still in its development phases, with many obstacles to overcome, however may provide retailers with great opportunities if successful.

Consumer Preferences

A well-integrated marketing strategy is developed with a full understanding of the target market as well as a knowledge of customer preferences. This deep understanding of consumer preference and the target market applies especially to the metaverse in order to increase consumer adoption of the new interface technology. Consumers may use technology in the shopping process for a variety of reasons. Interactive shopping technologies may offer large selections of products, effective search and screening, and great amounts of data (Alba et al., 1997).

A study on consumer's reactions to different technologies found specific attributes of technologies which were more preferred than others (Meuter, 2000). Technologies which saved time, worked reliably, were easy to use, addressed a salient need, offered greater control, and allowed 24/7 access were deemed satisfactory. However, much of the technologies were also not satisfactory, mainly due to technology failure, process failure, or poor design. Re-tailers in the metaverse should ensure that these needs and concerns of consumers regarding technology are addressed for the highest consumer satisfaction. A researcher who studied the reasons for consumers choosing electronic platforms of shopping over traditional methods found several factors which consumers took into consideration (Zeithaml, 2000). It was found that Consumers enjoyed the convenience, ability to buy unique items, ease of comparison, and lower prices of online retail. The ease of navigation, flexibility, efficiency, site aesthetics, reliability and price knowledge were also some essential factors in the consumer decision-making process as well. However, it was shown that consumers usually preferred the physical product interaction, service, security, and privacy of offline shopping.



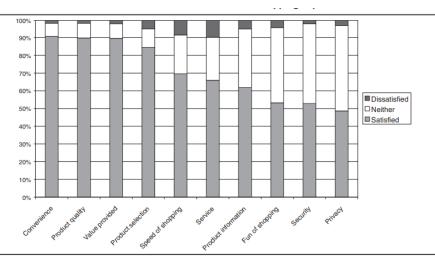


Figure 1. Consumer Satisfaction in different areas with current shopping experience (Burke 2002)

Improving areas of consumer satisfaction and dissatisfaction in the current retail environment will allow retailers to attract their customers to shop in the metaverse as well. A survey conducted in a study by Raymond Burke indicated factors of satisfaction and dissatisfaction for consumers provided by retailers today (Burke, 2002). Consumers are generally satisfied with the convenience, quality, selection, and value of products. On the other hand, consumers were less satisfied with the speed of shopping, level of service, available product information, fun of shopping, security, and privacy. Furthermore, in online stores, customers felt that adequate information on the product (e.g. price, warranty, usage, etc.) was essential, while in in-person stores, customers felt that knowledgeable, helpful sales assistants were essential. Figure 1 exhibits consumer satisfaction with the current shopping experience, including the factors of convenience, product quality, value provided, product selection, speed of shopping, service, product information, fun of shopping, security, and privacy. Through retail in the metaverse and the use of a retail theater-based approach, consumers' satisfaction in areas such as fun shopping and service may be increased (Burke, 2002).

Evaluation	Positive		Neutral		Negative	
Functions	Users	Percentage (%)	Users	Percentage (%)	Users	Percentage (%)
Welcome	36	83.7	1	2.3	6	13.9
Recommendations	21	48.8	18	41.8	4	9.3
Search	25	58.1	8	18.6	10	23.2
Product and product information view	40	93	2	4.6	1	2.3
Order placement	11	25.6	11	25.6	21	48.8
Order view	10	23.2	20	46.5	13	30.2
Purchase	18	41.8	15	34.8	10	23.2
Order tracking	16	37.2	25	58.1	2	4.6

Table 2. Customer evaluation of virtual e-commerce environments compared to conventional web ones (Papadopoulou 2006)

A comparison between consumer perception of virtual retail environments and conventional retail websites found that consumers found certain features of virtual environments helpful compared to others. Based on the findings presented in Table 2, the participants displayed a preference for the majority of functions available in the virtual environment. The users clearly favored the product and product information view (93%), welcome feature (83.7%), and search function (58.1%). Additionally, they expressed positive sentiments and a strong inclination towards the



recommendations (48.8%) and purchase capabilities (41.8%). The reasons underlying this preference have already been explained in the preceding analysis.

Some participants remained neutral when evaluating certain functions, particularly order tracking (58.1%), order view (46.5%), and recommendations (41.8%). This neutrality stemmed from their inability to discern any significant distinctions between how these functions were offered in a virtual environment compared to a conventional web setting. For them, the presence of the specific function was more important than the mode of delivery, whether virtual or not.

In some aspects, though, consumers favored the traditional features of a conventional website over the added functions of a virtual environment. Individuals voiced a preference for performing activities, such as order placement (48.8%), using the familiar approach of multiple clicks on a traditional web platform rather than typing sentences as required in the virtual environment. They cited their familiarity with existing websites and the perceived time efficiency associated with performing these activities on such platforms as reasons for their preference. Taking these features into account is essential in order to develop a retail experience that focuses on the features customers view as beneficial.

Marketing Strategies

In addition to improving the shopping experience for consumers, businesses should consider the preferences of their target market for their marketing plan. A study found that age, gender, education, and income play a significant impact on the preferences of consumers (Burke, 2002). Younger consumers (under the age of 25) were more likely to favor having fun, variable prices, newer technology, and customization. Older consumers (over the age of 25) were more interested in detailed product information, quality service, and a fast and secure shopping environment. Men were more positive about new technology and product information than women. Women were more interested in price, promotions, shopping convenience, speaking to real people, and assistance than men. Higher education consumers were more comfortable with non-store channels, and resisted the increase of complexity of the shopping experience. Lower education consumers were more comfortable with forms of intrusive communication and personalization. Higher income consumers had a greater interest in detailed photos of products, using credit cards for payment, and increased levels of customer service (Burke, 2002).

A considerably essential aspect to creating an effective marketing strategy is a successfully integrated marketing communications program (IMC). Marketing communications is one of the most significant components of marketing. According to a study on marketing communications, "One of the most important topics concerning the future of advertising is how marketers should design, execute, and evaluate IMC programs", (Keller, 2016). Some of the most successful brands have benefited greatly from a well-integrated and diverse marketing communications program. Furthermore, developments in technology have further expanded the significance of IMC programs. New media, shifting media patterns, and divided consumer attention have made marketing communications increasingly important. New technology has made marketing communications extremely complicated, as endless possibilities of advertisement emerge from new developments (e.g. personalized ads, electronic retail, etc.).



Criteria	Definition	Representative Questions
Coverage	Proportion of the target market reached by each communication option, as well as how much overlap exists among communication options.	 How many target market consumers are reached by the communication options? How much overlap exists among communication options across target market consumers?
Cost	The financial efficiency associated with the communication options and program.	 How much is the total financial cost of communication options? What is the relevant cost per thousand and other efficiency metrics? Are there any relevant nonfinancial costs?
Contribution	The inherent ability of a communication option to create the desired communication effects and achieve the desired communication objectives, independent of prior or subsequent exposure to any other communication options for the brand.	 What are the likely effects of the communication options and how they will impact communication objectives? What is the likely impact of the communication options on sales? What is the likely impact of the communication options on brand equity?
Commonality	The extent to which a communication option is designed to create communication effects and achieve communication objectives that are also the focus of other communication options.	 How much overlap in meaning exists among communication options? How much overlap in creative strategy exists among communication options?
Complementarity	The extent to which a communication option addresses communication effects and objectives <i>not</i> addressed by other communication options.	 How much of the consumer-decision journey is covered by the communication options? How many of the communication objectives are covered by the communication options? How much of the desired positioning of the brand is covered by the communication options?
Cross-effects	The extent to which communication options are designed to explicitly work together such that interaction or synergy occurs and enhanced communication effects emerge as the result of exposure by consumers to both options.	 How many synergies exist among communication options? How does the coordination of the meaning of communication options appropriately leverage brand knowledge at different stages of the consumer-decision journey? How does the coordination of the creative strategies of communication options improve the attention to and processing of communication options?
Conformability	The extent to which communication works across target market consumers regardless of their communications history or other characteristics.	 How well do the communication options work acros consumers with different communication histories? How well do the communication options work acros different types of target market consumers?

According to a study on marketing communications, an optimal IMC program can be judged through seven defining criteria: Coverage, Cost, Contribution, Commonality, Complementarity, Cross-effects, and Conformability (Keller, 2016). Table 3 provides the definitions as well as representative questions for each criterion. When developing an IMC program, satisfying the seven criteria will ensure that the program is comprehensive, cohesive, and impactful. Marketers should consider the cross-effects of these seven criteria, and effectively establish trade-offs in order to create a well-balanced and diverse IMC program.

Most marketers distinguish between three types of media: Paid, owned, and earned. Marketing communications should focus on these categories (Stephen and Galak, 2011). Paid Media is the media activity generated by the company. Owned media is the media activity generated by the company in channels which it controls. Earned media is media which is not directly generated by the company, but produced through other entities. Marketers communicate to consumers through these media, and should utilize these channels, especially paid and owned media (which can be directly controlled), to create an IMC program.

Conclusion

In this review, the components of a successful marketing strategy in the metaverse have been discussed. The findings show that businesses should aim for a "retail theater" oriented approach to marketing since consumers are looking for a new and unique experience while consuming a product in the metaverse. The data on consumer preferences in the metaverse should also be considered, and marketers should seek to maintain aspects of

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satisfaction while improving aspects of dissatisfaction to create an evolved retail experience for consumers. This paper also explains the elements of an integrated marketing communications program, and the seven criteria used for creating an IMC program. Using this criterion, businesses should use the two types of media which were focused on in this paper, paid and owned media, to communicate to a target audience successfully. Communication and marketing methods may evolve in the metaverse, so a criterion was given instead of a model to accommodate for such future changes.

Today's new communications environment has greatly pushed the boundaries of the capabilities for businesses and consumers. The emergence of new technologies and digital communications methods have made marketing communications increasingly complex, but also important. In the coming years, taking advantage of these new technologies, as well as utilizing traditional methods, to increase sales and brand equity will be one of the most important aspects of marketing and advertising for businesses. To effectively create a marketing strategy in the metaverse, marketers must first understand the opportunities and challenges offered by the metaverse platform, and how consumers make brand decisions. Using this understanding, marketers should then choose a set of communication options which will have the greatest chance of reaching their marketing goals for the brand.

The emergence of the metaverse is likely to revolutionize retail similarly to how the creation of the internet had evolved retail. The internet had created new and complex methods of retail which were never imagined before, creating an entirely new category of business and marketing, with the prefix "e" used to indicate association with online activity, such as e-commerce, e-tailing, and e-business. Now, the prefix "meta" is necessary for a new category of business completely different from electronic or traditional methods of marketing. The metaverse is the future for retailing, and several large corporations are already working on building it. Marketers should create an understanding of consumer preferences in the metaverse and research how to create a successful marketing communications plan so that they do not get left behind in the new business era.

Although much research has been done on marketing in the Metaverse as well as retail in the early Metaverse marketplace *Second Life*, there are certain areas which need further research. Future research should focus on the continually evolving digital and metaverse communication environment as well as the delivery and design of a marketing communications plan in the metaverse. For marketers to successfully launch marketing communications programs, it is necessary for them to have a detailed understanding of how consumers make products, brand, and purchase decisions. Refined research on how consumers make these decisions in the metaverse is necessary for marketers to create a sharpened marketing strategy.

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