

Digital Interactions and Brand Experience Design: a future perspective

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This paper introduces an overview and positioning of the contemporary brand experience in the digital context. With technological advances in games, gamification and emerging technologies, such as Virtual Reality (VR) and Artificial Intelligence (AI), it is possible that brand experiences are getting more pervasive and seamless. In this paper, we review the current theories around multi-sensory brand experience and the role of new technologies in the whole consumer journey, including pre-purchase, purchase and post-purchase stages. After this analysis, we introduce a conceptual framework that promotes a continuous loop of consumer experience and engagement from different and new touch points, which could be augmented by games, gamification and emerging technologies. Based on the framework, we conclude this paper with propositions, examples and recommendations for future research in contemporary brand management, which could help brand managers and designers to deal with technological challenges posed by the contemporary society.

Keywords: brand experience; virtual reality; contemporary brand; games; future

Introduction

People are changing the way they interact with brands, products and services. Consumers are more connected through digital devices, such as laptops, smartphones, tablets, smart watches, fitness wristbands and video game consoles. This high adoption of digital technology has impacted consumer behaviour considerably. With this, the consumer experience has also changed. As mentioned in a report published by Deloitte (2016), this change in consumer behaviour has brought new ways to do business, including the



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embracing of cognitive technologies (e.g. speech recognition systems, artificial intelligence, machine learning), virtual reality development (e.g. Google cardboard goggles and Oculus Rift utilised to promote immersive environments), high Internet connection around the world (e.g. broadband access and live streaming), touch technologies in m-commerce (e.g. consumers can pay through their mobile phones), cross-channel integration (e.g. consumers who interact in mobile phones also use their PC desktop) and strong social media participation (e.g. commerce is becoming more "social"). However, to what extent do digital technologies influence people's experiences with a brand? The report, trendwatching.com (2017) indicates that people give value to brand experiences that are often virtual experiences that become part of one's identity. Often, therefore, virtual experiences have the same level of importance as real experiences. In this context, even Google built an interactive and immersive shopping experience during Christmas holidays called Window Wonderland¹, in which consumers could window shop from their home, but also have an immersive experience very close to reality. This is the result of the experience economy or, in other words, an economy and consumer society that see value in experiences people have with brands, usually supported by engaging activities (Pine and Gilmore 1998). This suggests that getting the attention from the consumer is not enough. It is necessary to focus on consumer engagement, evoking consumer participation and collaboration (Mcgonigal 2008). Hence, experience becomes a commodity; brands would have to compete in order to promote the best experience for the consumer.

A brand is a multifaceted approach to imprinting and distinguishing a particular product or service in the mind of the consumer. Over the years it has progressed from simple branding stamps to sophisticated logo design and different communication strategies. Since the 1990s there has been an acceleration of the ways in which brand identity can be created and disseminated to the audience. The subtle changes have also meant that brand communications have moved from being pushed to the audience to becoming more interactive with the audience. These changes mirror the rise of the digital communication technologies beginning with the Internet and computers to more recently, the advent of social media platforms and mobile devices with Apps being linked to specific brands. People are now experiencing brands through digital platforms, clever algorithms and sometimes coming across new brand quite by chance. Brand experience design seeks to satisfy customers and through series of steps ensures that they get the maximum value from the brand concerned. Many companies will go above and beyond the normal steps and even delight the customer, so that they become more loyal to the brand. In this paper we wish to explore the steps that take place before a person actually purchases or experiences an item, through digital brand design experiences. We argue that these experiences can also be enhanced in the post-purchase stage through digitally based feedback and interactions. Considering those aspects, we ask:

- How are consumers likely to interact digitally with brands in the future?
- How does technology contribute to a virtual brand design?

In order to address those questions, we start by reviewing the current literature in brand experience and brand design, with the aim to identify the main elements from a holistic

¹ <https://windowwonderland.withgoogle.com/>

brand experience that could be augmented by emerging technologies. As a result of this review, we present a framework for brand experience design in the context of technological changes. We conclude our paper by posing four future propositions based on this framework and examples in order to promote a holistic brand experience in a changing world.

Background

This paper aims to encompass the various stages of the customer brand experience and to understand how this changes with new digital experiences and developments that are taking place globally. We live in an age where the consumer is connected every day and every hour through various channels, including mobile or computer based. The variety of devices is continuously expanding and now we have intelligent watches that can not only geolocate but also feedback important health and fitness data.. It is also apparent that brand managers are evolving different methods of interaction with the consumer, not only gauging their needs and wants in a more intelligent manner, but also offering relationships based on datasets that they hold and can analyse. In an age where we have smart connected products, the customer modes of interaction change from being passive to being active and engaged. Many products are connected to the Internet and are also part of a 'cloud' system, where they have access to data and remote software. Examples of this are smart cars such as Tesla, intelligent electric bicycles (Pedelec, Van Moof and others) using systems such as SEMS² and fitness trackers such as Apple Watch, Garmin fitness trackers and FitBit to name a few. In addition we also have many devices such as household appliances linked to the cloud as well as home control devices such as Nest for tracking energy usage. According to Porter and Heppelmann (2015) these smart devices not only create value but are also changing the competitive landscape by offering new capabilities. This means that a brand has to be able to incorporate a myriad of pre-purchase, purchase and post purchase experiences into its design.

Brand design

When people engage with a product or service a whole spectrum of experiences come into play, from the encounter with the brand, through magazines or digitally to actual purchase, use and after use service care. The way in which these interactions take place and the way in which either positive or negative experiences occur will determine the total brand experience of the consumer. This experience and the carefully orchestrated design of this experience will affect the value, validity, integrity and strength of the brand.

² <http://www.smart-ebikes.com/smart-ebikes/smart-e-bikes-monitor-system-sems/>

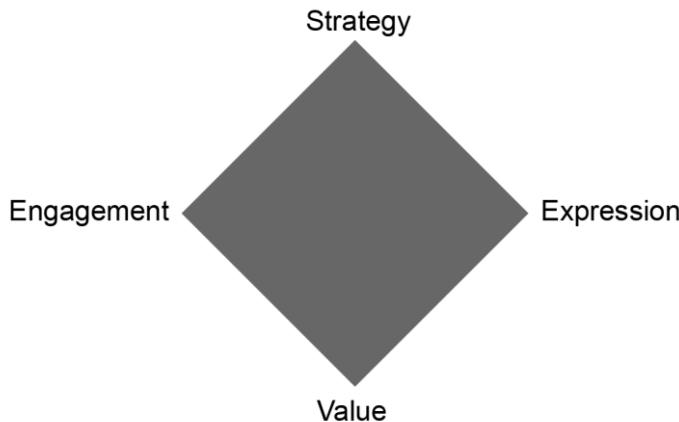


Figure 1 *Brand as arising from all of a business's activities*. Adapted from (Newbery and Farnham 2013)

According to Newbery and Farnham (2013) a brand is connected in a business through four areas as depicted in Figure 1. These are presented by as:

- Strategy: the core corporate strategy, encompassing the mission, vision and core meaning for the brand and its positioning, together with functional components such as technology strategy, product/service strategy and market strategy.
- Expression: How is the company identity portrayed and articulated? What communication strategies in marketing and advertising as well as company presentation through graphics and trade press increase recognition for the company
- Value: The actual products/brands, services and solutions that a company may place into the marketplace, including the tangible, intangible and aspirational values
- Engagement: How people outside the company (press, partners, most importantly customers) interact with and interpret what the business is doing (the manifestation of strategy, expression and value). This includes the basic journey from awareness to consideration, purchase, and use of the brand, as well as cycles of relationship with the business over time. Experiences are delivered through a range of touch points and mechanisms, some owned and controlled internally by the brand and some outside it.

In other words, a brand is composed of many aspects, particularly external and internal, involving complex and subjective variables such as emotions, experiences and beliefs that are interrelated and integrated with the brand's mission, value and strategy. However, how can designers make sure that all touch points are integrated in order to give the best experience to the consumer?

A common approach utilised by brand managers and designers to build a strong and powerful brand is the model of Customer-Based Brand Equity (Keller 2001). As shown in Figure 2, brand equity has six components that form a pyramid in terms of levels of engagement with the brand. For example, resonance is the top level of brand equity,

reflecting the intensity of the relationship between consumers and the brand. At this level, the brand becomes more subjective but also more human, as it involves relationships, connectivity and conversations. Thus, if considering Farnham and Newbery's (2013) four points of value, engagement, expression and strategy, there is a connection between each of these points and the levels of brand equity. For example, brand resonance could involve all four points, but particularly engagement, as resonance reflects an action, instead of just attitudes. That is, brand equity moves from attitudes to behavioural actions. With this in mind, it is possible that each experience with the brand has different levels of interaction. For example, it is possible that consumers might start through brand awareness, moving towards attitudes and finally to engagement. This suggests that the consumer journey is always in movement. The challenge, however, is to understand the role of technology in this movement.

When expanding the resonance level, there are four sub-components identified by Keller (2001); these are loyalty, attachment, community and engagement. Curiously, for each of these sub-components, it is possible to identify technological applications:

- Loyalty stands for purchase repetition, which reflects a sense of quantity (e.g. how often consumers buy products, how many interactions consumers have with the product, etc.). Gamification is one way to encourage loyal behaviours. For example, loyalty programs reward consumers by their constant product use, such as the acquisition of points in different flights or points when you purchase a cup of coffee. With this, systems have the ability to calculate the amount of consumer interactions and transform them into points and rewards
- Attachment means that consumers have a strong emotional link with brands. This emotional link can be reflected on User Experience design processes (UX). As mentioned by Hassenzahl (2008), UX is about understanding feelings and experiences that people have with technologies, particularly because people interact with these technologies in order to find pleasure, social conversations and insights. That is, once brands and technologies merge, brand managers and designers should pay attention to UX features. In this case, this emotional attachment could be understood by pragmatic (e.g. manipulation) and hedonic (e.g. pleasure, stimulation, identification, etc.) qualities of the brand or product (Hassenzahl 2005)
- Community is about social identification around the brand. (Muniz and O'Guinn 2001) explain that brand community can emerge from the collective association with brand values, in which they can share information about the brand and communicate with other consumers. With the growth of the presence of brands in social media (e.g. Facebook pages, Twitter, Instagram, forums, blogs, etc.), brand communities are getting a real voice
- Engagement is about personal investment and involves loyalty, attachment and community. That is, engagement could be augmented by the support from social media, user experience design and gamification, for example.

In both Keller's (2001) and Farnham and Newbery's (2013) work, engagement is the strongest level of brand equity. However, can technology influence engagement?

Engagement can be mediated by technology. In fact, elements like having a sense of control, challenge or aspects of novelty and feedback could enhance engagement in digital environments (O'Brien and Toms 2008). For example, challenges in games are crucial in order to build engagement, whereas having a sense of control is strongly related to usability and user experience (O'Brien and Toms 2008). Engagement is also similar to the concept of game immersion. That is, in games, engagement is just the first level of game immersion, which goes through a stage of emotional attachment and a level of total immersion (i.e. presence) (Brown and Cairns 2004). The concept of immersion can also be augmented by technology. As Brown and Cairns (2004) mentioned, Virtual Reality could trigger game immersion. Considering this, it is possible to ask: Can emerging technologies like Virtual Reality promote a smooth transition from brand awareness to resonance and higher levels of engagement? Can games and emerging technologies combine awareness and meaning, moving the consumer journey towards engagement? What would be the state of brand experience if consumers could experience the brand in each level of brand equity?

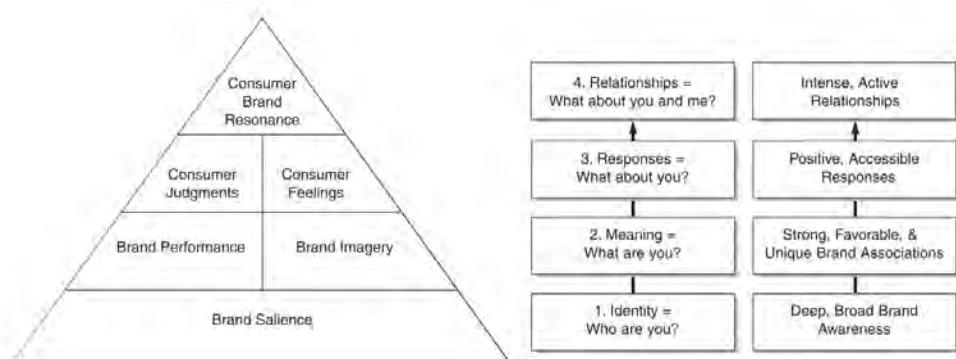


Figure 2 Customer-based brand equity (Keller 2001)

Brand experience

Experiences around brands could take the form of images or the projection that brands have upon people's lifestyles, influencing consumer behaviour through mental concepts (Hultén 2011). This aspect is one of the pillars of multi-sensory brand experience, developed by Hultén (2011) as a way to understand the human characteristic behind experiences people have with brands, including sensory experiences and self-fulfilment. In this scenario, the sensory part of the brand evokes extremely high and engaging relationships between consumers and brands. What Hultén (2011) explains is that the brand experience becomes the brand image through sensors, sensations and sensory expressions (Hultén 2011, p.263), such as, for example, the sense of smell that would give an atmospheric sensation to the consumer and end up building sensory expressions like brand signature. The multi-sensory characteristic of the brand promoted by Hultén (2011) explores the multi dimensions of the brand, showing that brands are part of human lives in different levels.

It is important to remember, however, that brand experience could go beyond sensory design. Brand experience is also composed of sensory, affective, intellectual and

behavioural dimensions (Brakus et al. 2009). This suggests that brand experience incorporates actions, knowledge and understanding. That is, the experience is not passive. On the contrary, consumer experience involves co-creation and participation (van Doorn et al. 2010).

The experience that people have with the brand plays a huge role in the overall brand equity. This suggests that brand experience is a core element of a successful brand. However, the challenge is to understand how designers could manage and monitor such brand experiences.

One way to promote positive experiences to consumers is through consumer engagement using different brand touch points (Newbery and Farnham 2013). The idea of including touch points and a consumer journey behind the brand opens the door to sensory design and service design (Zomerdijk and Voss 2010). In this case, the brand could function as a service, mapping the consumer journey since the decision to buy a product until the decision to buy it again. With this, the brand experience could be seen as non-stop activity, functioning like a cycle and augmented by multi-sensory experiences. However, how can technology sustain this cycle? Is the consumer always back to the same level of interaction with the brand?

Consumer journey

Brand experience functions as a journey that consumers have around the several points of interaction with the brand. These points of interactions are the touch points of the brand (Zomerdijk and Voss 2010; Newbery and Farnham 2013). If considering the whole consumer journey, it is possible to separate this process into three stages: pre-purchase, purchase and post-purchase. This aspect was introduced by Davis and Dunn (2002) in a brand experience wheel, which functions as a cycle through several touch points related to each consumer stage (see Figure 3). Thus, for example, in the pre-purchase stage, consumers interact with advertising strategies and the company's website, while in the purchase stage there is a strong presence of sales strategies and in the post-purchase phase consumers are introduced to loyalty programs. Thus, it is possible to underline touch points that would have the presence of technology like website, advertising, newsletters and loyalty programs. However, since consumers are embracing and adopting pervasive technologies, like mobile phones, it is possible that the connection between consumer and brand is more constant than ever. Considering this, in a digital context, it is possible that brands could use technology to manifest strategy, value, expression and engagement through digital experiences. Yet, there is still little understanding on how can technology contribute to a virtual brand design, particularly if considering new and emerging technologies. What would be the state of brand experience if the touch points in the pre-purchase stage were still present in the purchase and post-purchase stage?



Figure 3 Brand touch point wheel (Davis and Dunn 2002)

Brand experience and engagement in the digital world

With the constant use of digital devices by consumers, there is a strong influence of technology in each of those touch points from brand experience. Considering that people and businesses are also increasingly adopting emerging technologies such as Internet of Things (IoT), Virtual Reality (VR) and Artificial Intelligence (AI), it is possible that brands are becoming more human, more interactive, more pervasive and more multi-sensorial.

Combined with this, games and gamification are also design strategies that utilise a variety of technological inputs to design an engaging, fun and pleasurable experience to consumers. Thus, the brand touch point wheel would be in constant movement, perhaps in a loop, in which each consumer purchase stage is merged with the touch points.

Considering those aspects, therefore, it is crucial to understand the impact and applications of games, IoT, VR and AI in the contemporary brand experience. In the next subsections we explore the influence of each of these digital experiences in brand design.

Games and brand experience

There are at least two ways to understand the application of games in order to enhance brand experience: advergames and gamification. Advergames are mainly advertising in form of games (Bogost 2007), whereas gamification is the use of game design elements in order to promote gameful experiences to people in non-leisure contexts (Deterding et al. 2011). The difference between them is that advergames function with all the game design elements, whereas gamification is a design strategy that uses "parts" of these game design elements to promote game-like interactions.

Advergames can help brands to build brand equity, particularly because of the interactivity promoted by the advergame (Deal 2005). This interactivity level has changed

since the first advergame, particularly due to technological advances. According to Bogost (2007), one of the first advergames was created in 1976. That was an Atari car racing game, sponsored by a brand). During the 1980's, different products and services started to use advergames as advertising strategy. The games were played in console platforms. In the 1990's, the Internet took a great part of the game's format. With games created in Flash™, it was easier to build different approaches, like simulations of experiences with products. Increasingly, the advergames were created to build brand awareness and new experiences in different platforms and scenarios. Due to the use of advergames to advertise brands, the game itself could be centralised around a brand message (Chen and Ringel 2001), attracting attention to interactive content through pleasurable experiences (Cauberghe and De Pelsmacker 2010). In other words, the game becomes the advertising, created around brand values and branded entertainment (Winkler and Buckner 2006). The expression of entertainment by or in conjunction with a brand appeared as a product placement strategy, particularly in TV, movies, and it is used to define branded entertainment (Lehu 2007). The entertainment and ease with brand interactions make customers familiar with the brand and develop an experience that they remember either as pleasurable, informative and useful or just fun and frivolous, something that does not trigger any desire to go ahead with a purchase either digital or physical.

Games and brands are becoming each time more pervasive. With the wide adoption of mobile games like *Pokémon Go*, the utilisation of Augmented Reality (AR) is becoming more common each time. In fact, KFC utilised a *Pokémon Go* style game to invite consumers to their stores using AR and mobile platforms (Alizila 2016). This shows that real and digital worlds are merging, which makes the brand experience more seamless. The ability of consumers to interact with the brand is called brand interactivity, which means that consumers can interact with the brand directly, facilitated by immersive technologies, such as game platforms, AR, mobile phones and others (Lee et al. 2013).

Virtual Reality and brand experience

Virtual reality is a concept that extends the idea of telepresence or in other words a sense of being "there", mediated by technology (Steuer 1992). VR creates different opportunities for different types of brands. For instance for place brands it can offer interesting experiences of a place before a visit. VR can also be incorporated as brand experience for retail outlets. However in time to come it is probable that brands will create VR/AR experiences for customers so that they can experience brands through interaction by 'physically' holding objects. Rotating them and getting a "real" feel of the style and design. It would not take too much imagination to make an interactive game of dismantling an object or playing with a particular design element. For example, McDonald's created a Happy Meal³ goggles for VR experiences, in which consumers could build their own VR goggles from the Happy Meal box and play a VR game using them with their mobile devices. This shows that VR can become an affordable technology and brands should see this as a new opportunity to develop positive brand experiences.

³ <http://happygoggles.se/en/>

Internet of Things and brand experience

Internet of Things is mainly about communication. This means that instead of human communication, everyday objects or “things” can communicate to each other through the Internet (Gershenfeld et al. 2004). Beacons could be one example of the utilisation of IoT in marketing and brand experience. For example, retail shops are utilising intelligent beacons (i.e. small devices that transmit data to other devices through Bluetooth) to send contextual messages to consumers when they visit their retail store, combining data from both online and offline shopping (Lewis 2016). If considering the brand touch points, IoT could be extremely useful in the pre-purchase stage, attracting consumers to interact with brands while making their experience more tangible and relevant; however IoT may also influence the post-purchase stage, communicating messages with consumers in order to straight the brand-consumer relationship.

Artificial Intelligence and brand experience

Technology has gained a boost from the advances on cognitive technology and Artificial Intelligence. In a report published by Deloitte (2016), showed that consumer experience has become more digital, more personal and more immersive. For example, cognitive technologies that utilise Artificial Intelligence (AI) algorithms can learn from the data, through natural language processing (NLP) and deliver a personalised consumer experience. That is, if considering Dunn and Davis (2002), model, it is possible that each touch point would be integrated to those algorithms, providing consumer data to brands. With this, the brand experience creates ramifications and becomes intelligent, just like a person would react to an action.

Another example of this application is the utilisation of chatbots, or in other words, “humanised” robots that chat with consumers through virtual chats. For instance, the Mall of America⁴ created a chatbot similar to a Facebook Messenger to talk to consumers and give them advices about what to buy during Christmas holidays. This “live” chat was designed to function just like a chat with a consultant, who would be able to help consumers to make choices. By using an interface similar to Facebook Messenger, iMessage and Whatsapp, brands are gaining voices, which are becoming each time more real. Could consumers tell the difference between a chatbot and a consultant using a messenger?

⁴ <http://elf.mallofamerica.com>

Table 1 Digital touch points and brand experiences

Digital touch point	Brand experience	Stage	Example
Games	Interaction with the brand in different devices	Pre-purchase, post-purchase	A Pokémon Go style game designed to invite consumers to KFC stores
Virtual reality	Immersive experience with the brand	Pre-purchase	Happy Meal Virtual Reality goggles created with the Happy Meal box in which consumers could experience the brand using the goggles and play an online game
Internet of Things	Constant conversation with the brand	All stages	Intelligent beacons being used in retail stores to send data to consumer's mobile phones
Artificial intelligence	Humanised brand	All stages	A live chatbot created to help consumers with their choices

The utilisation of games, IoT, VR and AI are expanding the role of the contemporary brand experience. In the examples mentioned in this section, it was possible to see a common point: that experiences are getting each time more seamless, more human and more pervasive. That is, if considering the consumer behaviour journey, how can these emerging technologies augment and sustain brand experiences? In order to address this question, we created a framework, which is presented in the next section.

A framework for brand experience in a digital world

Since the digital world is merging with reality and experiences became a commodity, emerging technologies are gaining space and changing the way people interact with brands. When studying the consumer journey of pre, post and purchase stages, these technologies could enhance the level of experience with the brand through different but integrated touch points.

Considering this, we ask:

- What will be the model of interaction pre-purchase and post purchase?

With this in mind, we introduce the framework for a spiral brand experience, based on the characteristics and applications of emerging technologies in the digital world. For that, we considered the three main stages of consumer journey: pre-purchase experience, purchase experience and post-purchase experience (Davis and Dunn 2002). The difference is that we added the challenges based on the touch points integrated with digital technologies like IoT, games, AI and VR. In addition, we introduced a concept of a spiral brand experience (see Figure 4). That is, consumers start their journey in one point, but once they go back to the first stage, this stage is different. We explain each of these stages in the next subsections.

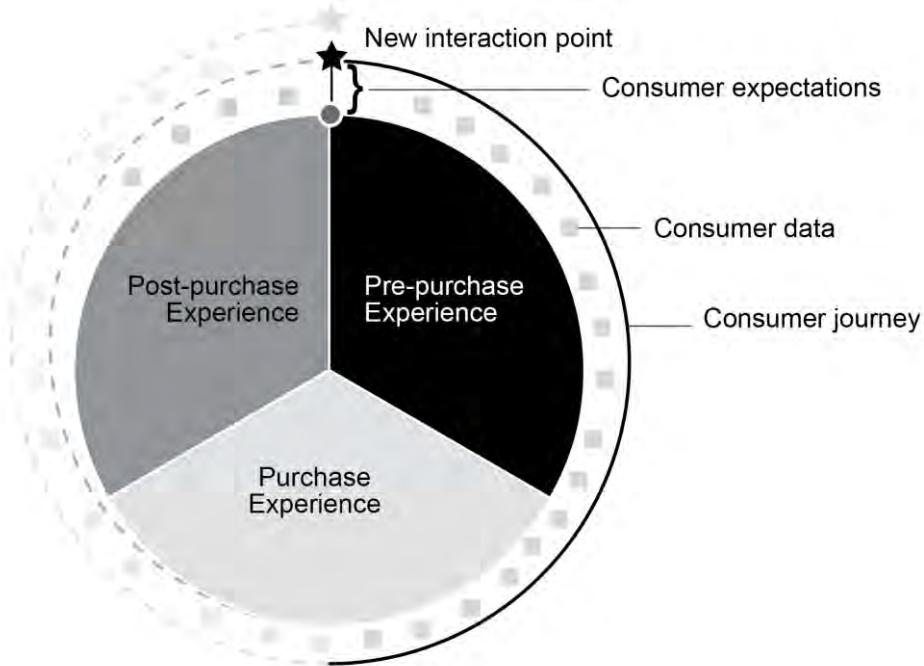


Figure 4 Brand experience spiral. Adapted from (Davis and Dunn 2002)

Pre-purchase stage

This stage is when the consumer encounters the brand through various channels both physical and virtual. It is clear that the digital experiences that can be created have brought the customer closer to the brand than before. Websites now allow customisation of cars, design of clothes⁵ and footwear⁶, greetings cards⁷, to name a few. Other brands aim to create a brand experience through gamification and advergames.

Davis and Dunn (2002) has showed in their model that in the pre-purchase stage, websites are strong brand touch points, together with advertising strategies. With the quickly adoption of emerging technologies by companies and consumers, websites and advertising campaigns are getting more interactive and more pervasive. These technologies not only merge reality with digital, but it also increases the level of immersion that consumers have with the brand. For instance, consumers could have experiences with the brand before buying it. One example is United Airlines⁸, which created a VR experience in 360° to show their new business class features to consumers before booking a flight. This could not only help brands to build stronger links with consumers before the actual experience, but it could also provide data for market and user research, since consumers could give feedback on the virtual world. Thus, combined

⁵ www.italor.com

⁶ <https://www.shoesofprey.com/>

⁷ www.bluemountain.com

⁸ <http://thinkingbox.com/unitedairlinespolaris>

with consumer feedback, each interaction with those digital touch points, there would be important data that could inform about consumer's lifestyle and choices beforehand. At this stage, chatbots can be also utilised. For example, consumers could interact with intelligent machines that would be able to give them advices on what to buy. Another engagement platform that is becoming increasingly important is the app platform, which allows digital engagement, as well as possibility of purchases. It has become very important in the consumption of 'soft' services such as education, recreational arts, health etc.

Purchase stage

The purchase stage occurs when the consumer has already decided to buy a product. In other words, in the purchase stage the consumer has already established attitudes towards the brand. If considering the brand equity model, it should represent feelings, judgements and brand associations. At this stage, technology could function as a facilitator, in order to promote a smooth journey for the consumer. In many ways the purchase stage is changing rapidly with sites such as Amazon actually predicting a customer's behaviour and making the buying process easier. A better experience through a digital channel enhances the brand experience. New developments such as Alexa⁹ are now making ordering easier through voice recognition, providing a seamless Internet purchase experience. Companies' websites can also provide this experience. Some brands now have interfaces that connect to the Internet via mobiles, offering post purchase help on working with the brand, be it a refrigerator, vacuum device, car or even a watch. These interactions can range from YouTube information to visual explanations for better use of the product. Companies are groping with making this more personalised and some send you updates and new offerings through emails or alerts, or personalised websites. Integrated with pre-purchase experience applications, like VR shops, for example, consumers would be able to purchase products by a click in a website or touch. With advances in mobile technologies, consumers could pay for their products by touch, contactless cards or possibly paying for goods with your eyes. For example Samsung has created a retina scanner that can detect your eyes and unlock mobile payments (Bell 2016). On Apple App purchases for instance, touch id can be used to facilitate purchases.

Post-purchase

As brand resonance is a relationship, it should be sustained overtime. Technology is a perfect partner for providing brand resonance. In fact the discussion above already alludes to this. A digital interaction happens post purchase and a better seamless interaction actually provides a customer with a chance to engage with a purchased item over time and interact with the brand and build a long-term relationship. Computers and mobile devices do this all the time as a result of software updates, new features, and new add-ons. However the trend towards smart machines and devices means that this interaction can happen with a range of products and devices. IoT will play a large part in this. The growth in technology means that there is an explosive growth in information. This information is now getting so large that the human brain cannot cope with it. In fact it is likely that in the future, customers would prefer to have brands that just inform them of

⁹ <http://alexa.amazon.com/spa/index.html>

changes when necessary, but otherwise communicate with the cloud and update their facilities seamlessly, only bothering the consumer once in a while. Maybe less attention means better brand resonance. At this stage, it is possible that consumers have left their digital footprint of their relationship with the brand. That is, since their first interaction with the brand, data has been stored in digital systems and could be used to inform brands about the post-purchase stage. In addition, it is possible that brands could have access to consumer's social media, mobile phone or even physiological data (e.g. through the use of wearable technologies like smart wristbands). The access of this data informs brands about consumer's lifestyle, mood and decisions in other aspects of their lives, which may influence their relationship with the brand. That is, brands could become consumer's friends, building an emotional bond that is sustained through intelligent data analytics. In this context, gamification could still play a huge part through rewarding systems and loyalty programs. If combined with machine learning algorithms that could detect people's interactions and reward them accordingly, there is a huge potential to keep the consumer engaged over a long time.

The spiral

The idea behind the brand experience spiral is that consumers start in the pre-purchase stage, going to the purchase action and the post-purchase phase, but they go beyond the cycle. Like a spiral, consumers in the pre-purchase level would not start at the same level as they have started in their first purchase, since it will not be their first experience with the brand (see Figure 4). Hence, there would be consumer expectations involved in the new level of brand interaction. Consumer expectations are related to repurchase behaviour, mediated by confirmation of expectations and satisfaction (Kim 2010). This would be a result from the difference between the first points of interaction with the brand and a new point of interaction with the same brand. This new point of interaction could reflect a loyal behaviour, suggesting that consumers would have expectations towards the brand, as they are now loyal to it. For each touch point, there is consumer data that could be integrated in order to promote a holistic experience to the consumer. In other words, it is a way to say that if consumers had positive and memorable experiences, these will trigger further behaviour, such as repurchase behaviour (Norman 2008). This means that consumers will be able to find value in each interaction with the brand. With this, the spiral is a conjunction of touch points that function like a network of data, informing brands the importance of each point of interaction with consumers.

The spiral framework functions, therefore, as a representation of the position of the emerging technologies in each brand touch point, considering the consumer journey in a holistic way. Thus, in order to expand the framework we posed four propositions for the future of digital interactions in brand experience. These are explained in the next section.

Propositions

In this section we introduce four propositions that could be used to investigate the impact of emerging technologies in contemporary brands and how brand managers could understand the applications and challenges of those technologies. Based on the arguments and discussions above, we make the following propositions as we slowly but surely become seamlessly integrated with technology:

P1: *Consumers will embrace brands that offer them a good, engaging and informative digital experience in the pre-purchase stage.*

This is based on the argument that as digital interactions become common and largely adopted, most individuals will react to the brand before purchase as discussed before and this will influence their likes or dislikes of this brand. This digital experience could encompass many forms such as AI interaction, gamification or advergaming interaction. In addition, consumers could virtually “experiment” the product before purchasing it through VR interactions.

P2: *Brands that embrace IoT and can ‘talk’ to the cloud will enhance the purchase and post purchase experience.*

The premise here is that the average individual is actually experiencing information overload in the current digital world. Any system which self manages and only needs occasional check ups will be favoured by the many. Basically customers need to be cushioned from too many tasks regarding a purchase.

P3: *Brands will become more humanised.*

Companies can now obtain large amounts of data with regards to a person and his/her preferences. Choices offered according to these preferences will ensure that the customer is kept informed and develops loyalty to the brand. With this, artificial intelligent algorithms can learn from this data and each interactive point with the brand, providing a more “human” experience to consumers.

P4: *Brands that embrace a full pre-purchase, purchase and post purchase through digital touch points will create more loyalty than companies that do not take a holistic view.*

The main principle of this proposition is the holistic and continuous characteristic of the brand experience. This is based on the framework presented in the previous section, which represents that for each brand touch point there is an outcome. For example, when consumers interact with the brand, there will be data from this interaction; at the same time brands would be able to learn from this data and deliver a relevant, consistent, contextual and personalised interaction for the consumer. This data would be stored and could be used again in order to promote more relevant interactions between consumers and brands. This holistic point of view could represent a non-stop interaction, since devices collect data from consumers in a content database. At this stage, games could help to build the first interaction (e.g. gamification, advergames, in order to build “habits”, new behaviours, brand awareness, etc.). After the “new” consumer behaviour is adopted and consumers are already engaged with the brand, they could be nudged to interact more with brands in a constant base. With this, brands will become more organic, humanised and personalised.

The four propositions presented in this section illustrate the role that digital interactions play in developing a holistic brand experience. Thus, it is possible that with new applications of digital technologies, the brand itself would change over the time. Would brands become more human? To this extent, it is also important to mention a few challenges that might emerge in this scenario. For example, the main challenge for brand managers and designers is to build a personalised brand, instead of an automatic one, based on user data. In addition, other challenges might emerge such as data ownership,

privacy, security and ethics. Since consumers are sharing their personal data with brands, brands should be transparent about what are they doing with people's data.

Conclusions and implications

With the adoption of emerging technologies such as VR, AI, games and IoT by brands and consumers, it is possible to see a transformation in consumer behaviour, particularly at the different stages of decision-making. Taking this into account, this paper reviews the main applications and challenges posed by these technologies, with the aim of understanding the impact of digital technologies on brand experience. While observing these challenges, it is possible to notice various opportunities that technologies offer on the total brand experience, in effect transforming and informing the customer journey at each brand touch point. With this in mind, we introduced a spiral framework for brand experience, respecting the three stages of the consumer journey (pre-purchase, purchase and post-purchase), but with the addition of touch points indicating that consumers could expect more from the brand experience during their consumer journey (see Figure 4). Developing and designing a good brand experience is becoming more important as mentioned by (Davis, 2017) as he mentions that 'Despite the hype around 'personalisation' as a marketing trend, as many as 89% of brands report they cannot deliver personalised digital experiences, research by Acquia has found'. A lot seems to depend on how well personal experiences can be designed and executed.

This paper also introduced four propositions for the future of brand experience in the digital world. These four propositions embrace emerging technologies as agents of transformation, promoting a holistic brand experience through digital and real brand touch points. Challenges about data ownership, privacy, trust, transparency, security and ethics are also important points to consider. It is important, therefore, that brand managers and designers should be aware that in designing a holistic brand experience would also bring huge responsibilities for brands.

In the future, we expect that the four propositions presented in this paper could be evaluated. Future research is also needed in order to validate the framework and take it further.

Table 2 Examples of digital touch points

Example	Digital touch point	Reference
Window Wonderland	Virtual Reality	https://windowwonderland.withgoogle.com/
SEMS	Internet of Things	http://www.smart-ebikes.com/smart-ebikes/smart-e-bikes-monitor-system-sems/
KFC <i>Pokémon Go</i> style game to invite consumers to their stores using AR and mobile platforms	Games	(Alizila 2016).
Happy Meal goggles for VR experiences	VR	http://happygoggles.se/en/
Retail shops are utilising intelligent beacons	IOT	(Lewis 2016).
Mall of America created a chatbot	AI	http://elf.mallofamerica.com
United Airlines, which created a VR experience in 360°	VR	http://thinkingbox.com/unitedairlinespolaris
Alexa	AI	http://alexa.amazon.com/spa/index.html
Samsung retina scanner that unlocks mobile payments	AI	(Bell 2016).
Apps	Games/Purchases, interactivity	

References

Alizila (2016). 11.11.2016 Broll Handout 6: "Catch a Tmall Cat" AR Game KFC - Alizila. In: Alizila. <http://www.alizila.com/video/11-11-2016-broll-handout-6-catch-tmall-cat-ar-game-kfc/>. Accessed 26 Jan 2017

Bell K (2016). You can pay for things with your eyes on the new Samsung Galaxy Note 7. In: Mashable. <http://mashable.com/2016/08/02/samsung-galaxy-note-7-pay-with-your-eyes/#SiC0o6E8WkqA>. Accessed 30 Jan 2017

Bogost I (2007). Persuasive games: The expressive power of videogames, 5th edn. MIT Press (MA)

Brakus JJ, Schmitt BH, Zarantonello L (2009) Brand Experience: What Is It? How Is It Measured? Does It Affect Loyalty? *J. Mark.*, 73, 52–68.

Brown E, Cairns P (2004). A grounded investigation of game immersion. *Ext Abstr 2004 Conf Hum factors Comput Syst CHI 04* 1297. doi: 10.1145/985921.986048

Caubergh V, De Pelsmacker P (2010). Advergames. *J Advert* 39:5–18. doi: 10.2753/JOA0091-3367390101

Chen, Ringel (2001). Can advergaming be the future of interactive advertising? In: *Fast Forw. 2001*. <http://www.locz.com.br/loczgames/advergames.pdf>. Accessed 11 Dec 2013

Davis SM, Dunn M (2002) *Building the brand driven business: Operationalize your brand to drive profitable growth*. Jossey-Bass, San Francisco, CA

Davis, J.(2017). Brands Struggle to Deliver Personalised Digital Experiences, Digital Marketing Magazine. <http://digitalmarketingmagazine.co.uk/customer-experience/brands-struggle-to-deliver-personalised-digital-experiences/4273>

Deal D (2005). The Ability of Online Branded Games to Build Brand Equity: An Exploratory Study. In: *DiGRA 2005 Conference: Changing Views – Worlds in Play*.

Deloitte (2016). The Deloitte Consumer Review Digital Predictions 2016.

Deterding S., Dixon D., Khaled R., Nacke L. (2011.) From game design elements to gamefulness. In: *Proceedings of the 15th International Academic MindTrek Conference on Envisioning Future Media Environments - MindTrek '11*. ACM Press, New York, New York, USA, p 9

Gershenfeld N., Krikorian R., Cohen D. (2004). The Internet of things.

Hassenzahl M. (2008) User experience (UX). In: *Proceedings of the 20th International Conference of the Association Francophone d'Interaction Homme-Machine on - IHM '08*. ACM Press, New York, New York, USA, p 11

Hassenzahl M. (2005). The Thing and I: Understanding the Relationship Between User and Product. In: *Funology: From Usability to Enjoyment*. pp 1–12

Hultén B (2011). Sensory marketing: the multi-sensory brand-experience concept. *Eur Bus Rev*, 23, 256–273. doi: 10.1108/0955534111130245

Keller K.L. (2001). *Building Customer-Based Brand Equity : A Blueprint for Creating Strong Brands* *Building Customer-Based Brand Equity : A Blueprint for Creating Strong Brands*.

Kim D.J. (2010). An investigation of the effect of online consumer trust on expectation, satisfaction, and post-expectation. *Inf Syst E-bus Manag* 10, 219–240. doi: 10.1007/s10257-010-0136-2

Lee J., Park H., Wise K. (2013). Brand interactivity and its effects on the outcomes of advergame play. *New Media Soc.* doi: 10.1177/1461444813504267

Lehu J-M (2007). *Branded Entertainment: Product Placement & Brand Strategy in the Entertainment Business*. Kogan Page Publishers

Lewis P. (2016). How Beacons Can Reshape Retail Marketing – Think with Google. In: *Think with Google*. <https://www.thinkwithgoogle.com/articles/retail-marketing-beacon-technology.html>. Accessed 24 Jan 2017

Mcgonigal J.E. (2008). Engagement economy: The future of massively scaled collaboration and participation. *Technol Horizons*, 1–21.

Muniz AM, O'Guinn TC (2001). Brand community. *J Consum Res*, 27, 412–432.

Newberry P., Farnham K. (2013). *Experience Design: A Framework for Integrating Brand, Experience, and Value*. John Wiley & Sons

Norman D.A. (2008). Memory Is More Important Than Actuality. *Interactions*, 24–26.

O'Brien H.L., Toms E.G. (2008). What is user engagement? A Conceptual Framework for defining user engagement with technology. *J Am Soc Inf Sci Technol*, 59, 938–955. doi: 10.1002/asi.20801.1

Pine B.J., Gilmore J.H. (1998). Welcome to the experience economy. *Harv Bus Rev* 76, 97–105. doi: Article

Porter M., Heppelmann J. (2015). How Smart, Connected Products Are Transforming Companies. In: *Harv. Bus. Rev.* <https://hbr.org/2015/10/how-smart-connected-products-are-transforming-companies>. Accessed 30 Jan 2017

Steuer J. (1992). Defining Virtual Reality: Dimensions Determining Telepresence. *J Commun* 42:73–93. doi: 10.1111/j.1460-2466.1992.tb00812.x

trendwatching.com (2017). trendwatching.com | 5 Consumer Trends for 2017. In: trendwatching.com. <http://trendwatching.com/trends/5-trends-for-2017/>. Accessed 28 Jan 2017

van Doorn J., Lemon K.N., Mittal V. et al (2010). Customer Engagement Behavior: Theoretical Foundations and Research Directions. *J Serv Res* 13, 253–266. doi: 10.1177/1094670510375599

Winkler T., Buckner K. (2006). Receptiveness of Gamers to Embedded Brand Messages in Advergames: Attitudes towards Product Placement. *J Interact Advert* 7, 37–46.

Zomerdijk L.G., Voss C.A. (2010). Service Design for Experience-Centric Services. *J Serv Res* 13, 67–82. doi: 10.1177/1094670509351960

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