

AUGMENTED REALITY AND ITS IMPACT ON THE RETAIL INDUSTRY

by

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1. ABSTRACT:

‘Customer is God’ is regarded as one of the golden rules of the Retail Industry because their success and survival wholly depends on the customer’s loyalty, satisfaction and trust with the business.’ As a result, with the objective of retaining and expanding its customer base to stay afloat in the competitive world, Augmented Reality is proving to be an invaluable tool for the Retail Industry. Moreover, with the Covid-19, retailers have opted to go online which has further directed them more to Augmented Reality. By keeping this in mind, the paper aims to understand the need for the incorporation of Augmented Reality in Retail Industry, to discuss the ways in which Augmented Reality would be beneficial if implemented, to put forth some real-world examples of Augmented Reality Shopping, to examine the potential obstacles and legal issues of Augmented Reality in the Retail Industry, to focus on the redefinition of the Augmented Reality in the Covid-19 pandemic and lastly to lay emphasis on the future and the way forward for Augmented Reality

2. INTRODUCTION:

Augmented Reality is a technology of the next-gen that augments (adds to) or superimposes digital information in the real environment. In simple words, this means that with Augmented Reality, visual elements, graphics, sound elements and sensory projects are introduced and put over a natural existing environment.

When it comes to Online Shopping, apart from it having its perks of giving us the comfort of shopping from home, it has not proven to be as effective as Offline Shopping. One of the major reasons for it is the customers being unable to take a look and experience the products and be

able to interact with the shopping assistants. Hence, in order to be able to address issues like this, the Retailers felt a need to incorporate Augmented Reality which would be able to facilitate a robust shopping experience by providing the customers with an effective way to access its products and make purchases without any uncertainty.

Thus, in order to provide an in-store experience to its consumers at the comfort of their home, with the incorporation of Augmented Reality, Online Retailers are able to provide 3D visualizations of products which enables the consumers to be able to understand how the chosen product would look in their space or fit their body. This gives a feeling of reassurance to the consumers and aids in eliminating any kind of doubt or uncertainty in their mind with respect to the product. Hence, Augmented Reality not only provides for a 'digital twin of a product' but also a 'try before you buy digital experience.'

3. ANALYSIS/ FINDINGS:

1. What was the biggest challenge faced by the Online Retailers which led to their dire need of incorporating Augmented Reality in Online Shopping?

INCREASE IN THE COST OF RETURNS:

In today's time, consumers are very well-versed with the whole concept of Online Shopping. They ensure that they get the most out of their online shopping experience but this at times results into an expense on the Online Retailers. This means that not only are the customers buying but they are also returning on an average of three products every month. This has led to a magnificent increase in the cost of returns. While consumers expect the retailers to provide returns for free, the retailers realised that their margins tend to get squeezed because of processing 'free' returns. Hence, in order to bring about a reduction in the returns, the retailers identified that the integration of Augmented Reality with Online Commerce Platforms would provide for a two-fold advantage of not only maximising the probability of them being reassured of their purchase, thus reducing the cost of returns but also leading to an elimination between buying of product and consumer viewing.¹

Augmented Reality is that kind of a technology that has the ability to visualise a virtual representation of products in 3D. This approach if implemented provides for an experience just

¹ ENGINE CREATIVE, <https://www.enginecreative.co.uk/blog/augmented-reality-shopping-and-the-future-of-retail/> (last visited Nov 23, 2020).

like that of shopping in a physical store as it enables the consumers to interact with the products by trying them out, scaling them and being able to visualise them in their own intended environments. This helps the consumers make better judgment as their issues with respect to the size of clothing, colour of the product, the dimension of the furniture etc. gets resolved by being able to view and try the same by just sitting at home without having to visit the physical store. Moreover, although in today's time customers get to access the reviews, pictures of the product shared by others and product specifications but with this information shopping seems incomplete and non-satisfactory as the consumer is unable to visualize the same product in his environment. Hence, this approach would boost the confidence of the consumers, provide them with better satisfaction and give them the reassurance that their chosen product would fit well which would thus bring down the number of returned products and reduce its cost that the Online Retailers are expected to incur thus, creating a win-win situation for the retailers and the consumers.

2. Will Augmented Reality as an immersive technology have a significant impact on the retail sector?

At present, the Retail Industry is considered as a leading industrial segment responsible in holding and keeping up the global economy. In the Retail Industry, with the passage of time, the Consumers bound to get more aggressive in their demands and it becomes essential for the Retailers to come up with innovative and interactive technologies in order to keep its consumers engaged. With Augmented Reality being incorporated into various industries and showing positive results, it made the Retail Industry realise that when the consumers' shopping experience is made more interactive by embedding product customizations and providing extensive product information, they are bound to make more purchases. Hence, with Online Shopping being preferred by a large number of customers, it was the perfect time for the Retail Industry to enhance the Online Shopping experience by involving the application of Augmented Reality Technology.

In order to understand whether Augmented Reality has had a significant impact on the Retail Sector, a look at some real-world examples would help.

3D PRODUCT TRIALS

In addition to selling the products online via applications or official websites, why not come up with online trials as well? This question arose because as mentioned before, the consumers

were returning the products they purchased online quite often as they either did not fit them well, they were unhappy with their dimensions (too big or too small), the colour, design and texture seemed to be different when viewed online. This made the Retailers realise that by incorporating Augmented Reality, the products could be visualised at their home. So whatever products are being portrayed in the store, the same could appear on the bodies of the shoppers. This feature is something which has been implemented by few renowned brands in the Furniture Retail Industry, Beauty Retail Industry, Fashion and Jewellery Industry.

IKEA

This Furniture Store introduced the **Ikea Place App** which provides the consumers with a 3D preview of the product chosen by them at their intended spot. This would prove to be highly effective as it would erase all the uncertainty and deliberation which takes place at the pre-purchase phase because consumers would get an opportunity to put all the IKEA items, compare and see which furniture would look and fit best in their space.²

LOREAL'S MODIFACE

Although one can always look at videos and images of models wearing cosmetics but this way one would not be able to purchase the same. Hence, in order to be able to see yourself in place of the model, Loreal has put out Modiface to all of the Amazon users with the help of which one can digitally try lipsticks, eyeshadows etc. onto either their live photos or the ones in the photo gallery.

SEPHORA

In the year 2016, Sephora via its main app put forth **Sephora Virtual Artist** which enables the users to try on make-up products before purchasing. Generally, people don't prefer to purchase makeup online unless they are well-aware of the shade that will suit them. With the help of this technology, one gets the opportunity to try on for eg Different lipstick shades from nudes to reds and see which would match their skin tone. In order to achieve this, Sephora again has made use of Modiface.³

What is Modiface?

² TROOTECH, <https://www.trootech.com/use-cases-of-augmented-reality-in-retail-sector-2020/> (last visited Nov 23, 2020).

³ Ibid

It is an Augmented Reality Solution that first makes use of the Facial Recognition Technology in order to be able to analyse individual's skin characteristics and post that Augmented Reality Technology is applied which superimposes the digital makeup selections on the live video of your face. But being an end user, all we are required to do is enjoy this and not know the technology behind this.

GUCCI

One of the most famous and everyone's favourite luxury brand Gucci is the newest to add Augmented Reality feature to its app under the title **Try-On** that enables its consumers to put on a range of watches, sneakers, lipsticks, eyewear, hat and one of the most essential in today's time, the masks. All an individual is required to is put its smartphone camera on and swipe left or right for new products. In addition to this, it also let's one click picture of the product so that they can share the same with their family and friends and get a feedback.

GAP

In the year 2018, Gap embedded a **Dressing Room** feature because it was undergoing a decline in sales and wanted to try something creative and new which would create a buzz and attract customer's attraction. In this feature, they made use of Augmented Reality by providing opportunity to its consumers to be able to try on clothes without having to go to the store. All it required was the height and weight of the consumers and the DressingRoom would display a virtual 3D Model which would show how the mannequin would look based on your measurements. Although it was a really different approach especially in the clothing sector, but it did come with certain limitations. The most important among them was that consumers wanted to be able to try the products on their body before deciding. But when it comes to the clothing industry, they haven't yet been able to come up and understand how to fit clothes on individuals as a 3D visualization is required not only with respect to the human body joints but also the body shape.⁴

From each of these instances it can be inferred that Augmented Reality has very much paved its way into almost all the domains of the Retail Sector from furniture to beauty to fashion. With its implementation, comes some added benefits which are as follows:

⁴ Edgar Alvarez, *Gap envisions a future with augmented- reality 'dressing rooms'*, ENGADGET (Nov 21, 2020, 2:30PM), <https://www.engadget.com/2017-01-30-gap-augmented-reality-dressing-rooms.html>

1. Reduction in Returns

The Brands that implemented Augmented Reality experienced the reduction in the returned items which led to decrease in the cost of returns incurred on them. This was one of the major reasons which led to the growth of Augmented Reality in the Retail Industry. It's 'try before you buy' was successful in creating a satisfaction in the minds of the consumers at the time of their purchase.

2. Brand Loyalty

Augmented Reality provides the consumers the experience of not only virtual but also physical shopping because of its unique feature of 3D visualization. As consumers always look for change, this technology has been successful in engaging the consumers and gaining loyalty.

3. Rapid Decision Making

It's always said that 'You believe what you see' With such an interactive and innovative display of Augmented Reality, the consumers tend to make quick decisions which leads to a increase in their sales.

4. Increase in Sales

When it comes to consumers, they are most likely to purchase a product when they feel connected. Hence when the consumers get enough time to interact with an item and are able to visualize the product, the chances for them to purchase increases. With Augmented Reality and its interaction and visualization capabilities, consumers are likely to purchase more and ultimately up the sales of the retailers.

5. Elimination of Doubts

With Augmented Reality being able to let its consumers view the products digitally and in their actual size, the uncertainty and doubts in their mind with respect to estimating the product's size and other underlying features gets eliminated.

6. Saves Costs

With technologies like Augmented Reality, there is not much requirement of in-store personnel as all the work would be done in a more efficient and speedy manner by it. This not only leads to increase in the sales but also helps to bring about a reduction in the manpower.

Hence, from the examples, it can be said that a technology like Augmented Reality seems quite promising which is the reason why every brand is finding different ways to embed them in their application. And from the benefits it can be stated that if implemented it would not only prove impactful for the Retail Business but also for the Customers. As said before, it's a win-win situation for both the parties. With continuous development of disruptive technologies like these, Retailers will not only gain enormous amounts of insightful information about their customers but also be able to achieve efficiency and optimization in their supply chain. Consumers on the other hand, will obtain more convenient and tailored services.

3. How is Augmented Reality bringing about a redefinition in the Retail Industry during the pandemic?

The Covid-19 pandemic has not only had a magnificent effect on the businesses and economies, but it has also led to making the individuals realise the importance of technology. This means that the pandemic has impacted the Retail Sector due to the closing of the shopping malls, reduction in the e-commerce delivery and has also created a fear in the minds of the people to not go to such crowded places even post-pandemic for safety reasons. As a result, in such circumstances in order to reach its customers, it has been found out that technology especially the application of Augmented Reality is imperative so as to keep the businesses going.⁵ Once a nice-to-have feature, Augmented Reality has quickly become an essential technology for retailers because of the following reasons:

- a) Better Safety and Hygiene- With Covid-19 came several changes like social distancing norms, importance of sanitisation and digitisation. Hence, even with the re-opening of physical stores, every product once tried and touched by another person would have to be sanitised for safety purposes and in order to maintain hygiene, Beauty Retail Stores like Sephora have prohibited their users from trying on makeup products on their skin. In such circumstances, with Augmented Reality, a contact less and digital try on would keep the audience engaged, be of great help in their decision making and most importantly keep the business moving by retaining its customer base.⁶

⁵ Helen Papagiannis, *How AR is Redefining Retail in the Pandemic*, HARVARD BUSINESS REVIEW (Nov 23, 2020, 9:29PM), <https://hbr.org/2020/10/how-ar-is-redefining-retail-in-the-pandemic>

⁶ Meghna Saraogi, *How AR can help retailers win customers during COVID-19*, YOUR STORY (Nov 23, 2020, 5:30PM), https://yourstory.com/2020/05/ar-help-retailers-win-customers-covid-19?utm_pageloadtype=scroll

- b) Crowd less but Increase in the Sales- The use of Digital Technology goes hand-in-hand with the concept of Social Distancing. With Augmented Reality, the only thing the customers are required to do is have their smartphone devices and then just try on the products virtually without the need of going to the physical stores or requiring sales person to attend to them. This would not only ensure social distancing but also guarantee safety.⁷

Hence, the bottom line of this is that the pandemic has proved to be a catalyst for this digital transformation and the need of the hour is digitisation. As societies are going to constantly keep changing with new realities like quarantining, for every business to survive, it has to come up with innovative techniques.

4. Giving reference to the legal issues and implications associated with Augmented Reality in the Retail Industry, what will be the future of it?

When it comes to any disruptive technology, they all come with a host of legal issues and challenges. This first came into light with the success of the once popular game Pokémon Go that gave rise to issues with respect to the usage of copyrighted images, trademarks virtually and access to the personal information of consumers. With respect to the Retail Sector, the challenges it is facing or is likely to face in the future are as follows:

Security and Privacy Issues:

Under Augmented Reality one of the major issues is the lack of regulation to designate what is permitted and what is not. This means that one can make use of the technology even possessing a malicious intent. This is where issues like Privacy and Security come in. Despite the fact that ‘try before you buy’ is an experience worth enjoying and extremely convenient, it might lead to situations where instead of overlaying clothes on your body, they might overlay somebody else’s nude body instead with the intention of blackmailing or harming one’s reputation.⁸ Moreover, for the purpose of being able to provide customization features and a user- friendly experience, a lot of personal data relating to smartphone’s movement or the dimensions of the

⁷ See supra note 6.

⁸ THE APP SOLUTIONS, <https://theappsolutions.com/blog/development/augmented-reality-challenges/> (last visited Nov 23, 2020).

room is collected and stored. This would raise various privacy issues with respect to who is in charge of the data, who has the right to access it, in what way is this data going to be used and shared.

Copyright Issues:

As Augmented Reality is closely connected with contextualizing information through the overlay of text, images and other artifacts, it would in a way lead to an infringement of the copyright owner's sole rights of alteration and reproduction. That's because in Augmented Reality the consumers are made to interact with the intellectual property of third parties. And it might so happen that these brands were not willing to be associated with these kinds of Augmented Reality technology. Hence, it becomes essential to get the approval of those brands.⁹

When talking from a legal perspective, there seems to be a rise in legal issues which would very much be the sole reason for the growth of technology like Augmented Reality getting hampered and putting its future in danger. And this is because the law is still in that phase where it is still catching up with the technological advancements. There is a requirement of new legislations to be incorporated for filling in gaps in the areas of Intellectual Property Rights and their infringement, Data Protection and Consumer Protection in the Retail Sector. As a result of this, from the perspective of legal jurisprudence, technologies like Augmented Reality are still on the cutting edge.

Studies show that a technology like Augmented Reality would have a significant impact on the Retail Industry and on the Consumers but when talking about what its future would look like, these technologies would help in creating a 'buzz' and attract new customers but won't actually be a long-term solution. Moreover, technologies like this still seem to be a really abstract concept in the minds of the people and unless awareness and training on the same is not created, Augmented Reality would disappear. Its future seems uncertain because it not only requires the backing of law but also the acceptance from the public or customer's perception on the same.

⁹ See supra note 8.

If due consideration is given to these aspects, then Augmented Reality Models would soon become a norm as more industries and brands would hop onto this Augmented Reality bandwagon. With innovations like this, brands would not only be able to connect better with their consumers, but it would also lead to consumers making more accurate purchase decisions which would result in less returns of bulky and custom-made products which cannot be easily resold. In addition to this, the capabilities it possesses of visualization and deeper engagement, would make it a very good investment for the Retail businesses. Augmented Reality is still paving its way into the Retail Sector but if given proper attention and by taking the advantage of Covid-19, it can leave a footprint which would last forever.

4. SUGGESTIONS AND CONCLUSION:

As we have already seen that with Augmented Reality comes various legal risks and regulatory challenges. Hence, certain steps are required to be taken by the businesses in order to be able to not only protect the consumers but also themselves from these unwanted experiences. In my opinion, Augmented Reality could be implemented better if some of these approaches would be adopted:

a) Understanding and Reviewing the Existing Laws and Regulations- As there are no laws that are specifically directed to the regulation of this technology, one always looks for ways to develop new laws. However, before taking that step I feel the businesses and the governments should first review the already existing laws, rules and regulations with respect to the Intellectual Property Rights, Privacy Regulations. Many times, by just reviewing these existing rule and regulations, one would find a protection against the threats of technology.

b) Adoption of Soft Laws- Soft laws comprise of standards, codes of conduct, guidelines which are not something that can be directly enforced. These instruments come with a purpose of offering guidance, encouraging third party certification and accreditation. The intention of incorporating these soft laws is to allow the industries to self-regulate themselves and be able to quickly respond to these technological changes without having the need of going through a long regulatory process. Soft Laws can be applied by defining the scope of the issues which are to be addressed, in this context Privacy and Copyright and then develop codes of conduct and industry standards in this response.

c) Internal Privacy Policies- In order to be able to provide customizations to its consumers, the Online Retailers tend to collect a lot of personal data. This raises questions with respect to how this information is going to be used, who all will have access to it etc. For this, the companies that have adopted and are using this technology should come up with Internal Privacy Policies that not only articulate the nature of the information that's collected but also bring into light the ways in which this data would be used and shared in the future.

d) Awareness and Knowledge- When it comes to advance technologies like these, the people require some knowledge on the same otherwise they always consider such kind of things as an abstract concept and something which might happen in future. An awareness on the same is essential to be created so that consumers understand that these technologies and their implementation have real world uses right now.

e) Testing of Regulatory Approaches- Technologies like Augmented Reality require huge amounts of investment to get going. As stakeholders have their financial and reputational factors linked with this technology, it is difficult to predict what will be the result of a regulation. Hence, there are these Regulatory Sandboxes where the innovators get the opportunity to test their products and services while the government on the other hand, tests the effects of the proposed regulations on the same. This way before the product is launched into the market, the government can get a grip on this technology and come up with appropriate rules and regulations for the same.

f) In disruptive technologies like these, the government and the businesses should work together in a way that the businesses form a small team within themselves that would undertake the responsibility of monitoring and evaluating Augmented Reality Technology for its potential legal risks and challenges associated with it. And then once they monitor and receive some kind of negative reviews, the same can be then communicated to the government that can come up with codes of conduct and standards for the same.

Technical complexities and uncertainty will always remain a major barrier whenever a new technology has to be incorporated in our day-to-day lives. These issues are something that cannot be resolved alone. It requires deep partnerships and keeping in mind the lessons learned from the past technology. Hence, it can be concluded that Augmented Reality Industry is growing very steadily with more revenue increment and lower business operation cost. If

implemented correctly, it would be the future of Retail. Innovations like these need to be embraced and for continuous growth, finding of ways would remain an important area of inquiry, worthy of continued exploration.

