

Re-inventing Retail with Internet of Things and Engage Connected Customers to Earn Their Loyalty

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Abstract: *We are entering an era of computing technology that is the "Internet of Things"(IoT). IoT is breaking boundaries across industries disrupting the traditional ways of commerce and business and creating unprecedented opportunities globally. Retailer possess the advantage of having direct access to abundance of customer information. In order to access the information and maximize it retailers need to take advantage of the new technology and capitalize their opportunities. By investing in IoT and by developing sensors, beacons, connectivity and by using bigdata large retailers are harnessing their potential. By doing this we have access to information about the customers who use a product or a brand regularly and we can make sure that they are given the primary opportunity or some form of profit so that they get the best deals and do not leave transaction with the particular brand and this not only profits the customer but has proven that retail using IoT has increased the overall profit of a brand tremendously. The main focus of this paper is to show the use IoT instead of traditional ways of the retailer and customer connectivity to maximize the potential of retailer and make sure the customers earn their loyalty for trusting the brand.*

Keywords: Internet Of Things(IoT), Loyalty, Retail, Brand

1. Introduction

It is no mystery that the Internet of Things opens a horizon of marketing options for retailers. Billions of things are presently connected to the internet, and it is for sure that this number will reach its peak by the year 2020. The number of things that are connected to IoT is not only very large but there is a variety of different types of devices also. From Kitchen appliances to light bulbs as well as electrical sockets are connected to the internet that is implanted with sensors and that helps in transferring data and data encapsulation that provides various networks with connectivity. How can we apply it potentially, functionally, legally, and feasibly becomes the only puzzle. Even for some of the retail giants, the capability of using sensors to make customers experience purposeful, is still largely disengaged and not clearly defined. Just because new technologies have been introduced does not necessarily mean we need to put them to use. They might not work well on a long term basis. The challenge for retailers is how can they apply IoT in such a way that the customers will relate to the brand and reverberate in such a way that they are not given any other option but to stay loyal to the brand. The brand can account for customer investment made to be noteworthy and significant. Basically, the goal is to drive customer loyalty and find means such that the customer continues to interact, adapt, change and remain pertinent.

2. How IOT is Making Retail Customer Experience Better

The most difficult challenge for the retailers is to make sure that the customers will come back and customer-brand loyalty will be maintained. IoT can make it easier by increasing the customer engagement with the brand. It can also be increased by making customer shopping fast and easy process. IoT gives Seamless Customer Experiences. The growth of IoT makes it easier for us to develop a suitable, interesting, smooth and personalized way of interaction that helps in creating loyalty Example for this is there are e-

commerce applications that use dash buttons wherein we can reorder a particular item just by pushing forward the button. Beacons are used such that the customers can enter the product they are searching for in their phones which gives them a map of the store so that they can find the searched product easily. (No more desperate searching for a store person to ask which aisle something belongs in)– also, providing them with special offers along their path. Loyalty can be built using these devices that will give them a primary personalized feel and will provide the customer an experience such that ensures they keep coming back. You can't ask for more in terms of loyalty!!

2.1 How Retailers Can Use the Internet of Things to Drive Customer Loyalty

It is no mystery when we say internet of things provides a plethora of opportunities to the retail industry In the real world, every large retailer is facing a myriad of hurdles while trying to implement it in the most pragmatic way possible. Establishing relevant and customer friendly environment using sensors is still inoperative in a real world scenario. A brainteaser that is thrown to every retailer is to implement IoT in ways that can strike a ring with the customers, so that they are forced to adopt them. Thus, the objective of these drives is to set a benchmark for faith, and convenient customer interaction in feasible methods to make it harmonious.

2.2 Utility: Enable something actually useful!!!

- Utility is, first and foremost, the most important driver of IoT offering loyalty programs.
- The aim of utility was never to concentrate on the new flashy technologies and strategies
- Here Beacons can be accustomed to send messages to all the customers, whereas the objective is to enhance customer-brand interaction and make it a worthwhile experience

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Timeliness:

- The Brand must strategize such that they can associate with the customer now and sell in the future.
- Timeliness and prioritizing with the use of IoT according to customer requirements drives customer loyalty.
- Timeliness may be preferment, to the right person at the right instance. But it can also be used to fix the device under application that is to make purchase and delivery experience efficient.
- Just to make it that much easier. Again, the idea is not complicated technology deployments per say, rather intuitive ways to insert the brand first as a partner, second as a retailer. Sensors are what enable companies to do this more timely, more

2.3 Brand Identity: Stay true, and recognizable

- It's a must for every brand identity to remain genuine and easily recognizable. Today's technologies are facilitating organizations to heighten in-store experiences by creating a digital environment. It is crucial for brands to bring out the best from their brand that will imprint a long lasting memory in their consumer's mind. This is arguably even more important in IoT as companies are imposing digital engagement techniques into physical environments, where the risk of creepiness, lack of recognition, or annoyance is far higher.
- Various factors such as ease in communication, accessibility to various languages and most importantly a brand voice which is a purposeful and consistent expression of a brand through words and prose styles that engage and motivate the consumers and help the organization in building a successful relationship with the consumer based on a primary essence - trust. Incorporating existing loyalty drives into online campaigns such as mobile apps are instances of binding online activations and in-store activations. Merchants should also expand content marketing programs to in-store campaigns, as these focus on creating and distributing valuable and relevant content to attract and retain a clearly-defined audience — and, ultimately, to drive profitable customer action.
- In-store contents and various online campaigns become successful when customers easily relate to the brand voice and tone. Integration of web, mobile, and in-store useful, timely, and on-brand assistance

2.4 Really Big Data: Wealth of information

- There are a number of different types of devices connected to the internet today. Growth in the data collected by the internet is increasing day by day. These devices supply real-time, eyewitness of what customers actually do, where they are, what they like, and what they don't — all without them having to actually say a thing.
- It is crucial for retailers to be able to make use of IoT to unravel all of that data that's being produced. Retailers who are trying to build a custom system analysis can be timely, complex, and expensive. Marketers will no longer have to predict what customers will do; rather, they will just have to notice customer's actions and understand the context around a particular action. All this data can be

leveraged to design better customer experiences, right from their journey through a store all the way through to how the loyalty program perfectly targets them at the right time to encourage repeat purchases. With billions of objects constantly spewing data, IoT will only intensify the need for business intelligence solutions that can comb through this data and provide consumers with immediate and relevant communication.

2.5 Integration of web, mobile, and in-store useful, timely, and on-brand assistance

- Brands connected its online loyalty program with mobile and in-store by integrating loyalty members' online shopping carts and wishlists with its mobile app.
- The Internet of Things opens up a world of opportunities for retailers. Interactive touchscreens, beacon deployments for geo-targeted promotions, personalization or exclusiveness is just icing on the cake
- .For example mirrors can be given connectivity that will help making shopping a better experience
- IoT helps in broadening the area of communication. The main aim of any technology is to trigger the imagination
- Because web and mobile apps are central to commercial success, retailers everywhere must commit to ensuring customers always have a great user experience.
- The first (and most essential) step to achieving this retail necessity is to proactively monitor web and mobile app performance end-to-end — from the customer's screen, right through to the back-end infrastructure. This allows retailers to identify emerging problems before they impact the buyer, allowing for a seamless and problem-free experience.
- Secondly, online retailers should analyze every interaction, seeking ways to optimize performance and simultaneously increase customer satisfaction, engagement and loyalty. Modern application intelligence solutions deliver results on both these critical fronts.
- End-to-end performance monitoring of web and mobile applications. As performance is the foundation of customer experience and proactively monitoring application performance is a 'digital must,' the aim of this technology is to discover emerging problems before they impact customers. While these apps are designed to be engaged with by the masses, successful digital retailers see the value of making their offerings feel relevant and special for every single customer. As commerce architecture becomes increasingly complex, retailers must invest in solutions that are able to easily monitor all the way from each customer's interaction, to the application code and through to supporting infrastructure — all in order to deliver better and more personalized experiences.
- Application analytics. The real-time analysis and visualization of automatically collected and correlated data, application analytics further enables success in online retail: seamless convenience. Retail brands looking to compete digitally require this capability to collect and analyze the wealth of data coming in real time from these solutions, in order to better understand customers and tailor performance of key channels such as desktop and mobile web channels. Retailers can also leverage

application analytics to redesign their app in ways that improve customer engagement and make the digital experience more pleasant and convenient.

3. Predictive Solution

We must quit using conventional pre-decided messaging practices. Retail marketers triumph by using sensors and smart screens. In the market there are many IoT based applications being put into use like security cameras, smart sensors which can be used to generate a store map and data related to the various products. Retail IoT will also inform the owner, the number of customers, the age group of people visiting the store, their ethnicity, products they searched for, the path they took as well as the customers current mood. Putting together all these information can make the brand marketing much more effective. The consumer classifies the Internet of Things into three major streams. Each of these devices uniquely contributes towards expanding customer loyalty. Companies look forward to use these devices to build their loyalty programs.

The classification is as follows:

- 1) Wearable: First the companies try to understand the kind of device they want to use, its properties, the cost and the design. Wearable such as fitness watches, smart watches help not only in providing the customer various payment options but also help in rewarding loyal customers
- 2) Beacons: Geo-locational devices like Beacons are being put into use in IoT to improve the in-store experience as well as encourage the customers to visit the store frequently and provide a personalized interaction.
- 3) Wireless: There are consumer appliances and automobile industries using wireless sensors that can be used forecast any problem, diagnose it and make sure prevention measures are taken so that malfunctioning devices can be designed better.

By integrating digital sensors and touch points with cars, appliances and even the human body, the Internet of Things is shifting the way brands and product owners communicate about the health of the devices they own. From a loyalty perspective, the diagnostic capabilities in devices such as these create a strong emotional connection with drivers by reassuring them that they will be informed before things go seriously wrong – for example, by telling them that their left back tire has low air pressure before it's visually noticeable – thereby making them feel safer and adding to the life of their car.

4. Drawbacks

While Internet of Things is adding quality of facility to improve people's lives, there is a bad side to the use these technologies. The designing and exchange of data opens new opportunities for the data collected to be compromised. The data that is collected is highly sensitive and this data being collected is increasing day by day. This data is available across a broad network which increases the risk of data breaches and could cause major danger to individuals as well as organization. Thanks to IoT, data security risks could

compromise important public systems. Therefore, vigilantly safeguarding this information is a major concern, and the investments to ensure that this happens will be a major cost to consider. Not only do the enterprise or brand have to be concerned about the sensitive information getting into the hands of wrong and unwanted people, but marketers must also be thoughtful about the interaction with end users. The relationship with consumer is extremely sensitive and if broken the trust will be impossible to rebuild. Given the scale and the sheer personal nature of the data being collected, the impact if misused can be jarring and downright an uncomfortable experience. What companies do at the least is that the data must be cleared which helps in maintaining transparency.

5. Conclusion

The internet of things opens up a world of opportunities for retailers. Interactive touch screens, beacon deployments for geo-targeted promotions, personalized or exclusive content, gamifying in-store environments, connected mirrors for trying on clothes are just the tip of the iceberg. But what retailers must remember when applying digital to physical to drive loyalty is that the value of IoT is not rooted in the technology. The point is how retailers can think about improving, aiding, and creating more immersive experiences for their consumers. IoT just expands the menu of technologies to spur the imagination of what's possible. Internet of things is very much here, and it's opening up a huge potential for brands in all industries to capture and retain loyal customers who are genuinely enthusiastic about the products and services being offered. As brand sentiment deeply hinges upon the customer experience – centered around convenience, communication and care – companies who use the internet of things to garner greater loyalty will surely win

References

- [1] Capgemini-Internet-of-Things-Making-the-Connection- Report "How the internet of things engages consumers and benefits business" s paper has been developed as part of The Consumer Goods Forum
- [2] Joshua Cho and Diegane Dione "Enabling commerce across the Internet of Things" Accenture research, Mastercard incorporated
- [3] Ibrahim Zakaria, Baharom Abdul Rahman and Abdul Kadir Othman, "The relationship between loyalty program and customer loyalty in retail industry: A case study" IEEE in [Innovation Management and Technology Research Conference, 2012].
- [4] Swathi Sharma, "Rise of Big Data and related issues" IEEE [Indian conference, 2015 annual IEEE]

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