

The Influence of the Most Recent Technological Advancement on Retailing Industry

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Abstract

This research is about how technology influences the retailing industry and how the advancement in technology significantly enhances the prospect of retail productivity improvement. In today's context, the retailing industry needs to embrace advanced technology to keep up with the retailing trend. An advanced retail-based technology can help us to keep track and update data related to retailing. This research shows how the advancements in retail technology help the retailing industry and the impact that affect retailers and customers.

Keyword: power of technology, impact of technology towards retail, retail revolution

I. Introduction

Retailing is all about offering a wide-ranging of products or services to consumer in order to satisfy the needs of the consumer (Loo & Yazdanifard, 2013). Retailing is an activity that having a bond of connection with manufacturer and supplier (Loo & Yazdanifard, 2013). As we all know that retailing industry has been around for quite some time. Today most retail industry does not follow the traditional, more tiring ways such as stock counting, delivery status, keep tracking the stock and so on. According to Khesraw Mansoori (2010), technology has been significant in retail industries as a way to achieve goals. The reason that technology is important is mainly because it can help the retail industry to improve in certain areas such as supply chain management, customer experience, inventory management, and loss prevention. Advances in technology are enabling the retailer to forecast and make their schedule more effectively. Retail is a so called cut-throat industry where retailers will face intense competition every single day and how successful the retailer can be is all depends on how well your firm does against the competition and how well the retailers can make use of the technology in order to stay in the competition game. A heavy dependence on technology is being assimilated into all aspects of life, including how we choose to shop (Carlyle, 2012).

II. Technology gadgets and apps

Most of us today will have smartphone or even gadgets like iPad, iPhone, android phone and so on. Retailers see this point as an advantage to attract customer by using high tech gadgets and apps not only to provide convenience to customer but also the retailers. With the help of today's high tech gadgets and apps, it makes thing easier and more convenience. For some big retailers like Wal-Mart, they provide a QR code and customer can just simply use their smartphone to scan the code and they can get the basic information about the products. By scanning the QR code, the customer can have information about the retailers and the types of product they are selling or even the information of the product. Consumers can also use their smart phone or smart watches to pay. Here are some examples;

1) Smart watches

Pebble is a watch that connects to either iOS or Android devices via Bluetooth service. This small but smart watch not only can show the time but also show us know that we have message notifications, gmail notifications and surprisingly we can read the message or email directly from the watch and many other function (Dickey,2013). Meanwhile they are having fun gadgets retailers are wondering what other use of this smart watch is that you can use your smart watch to pay at Starbucks by scanning it at the register in place of the mobile device so now a anyone who forgets their wallet and mobile phone also can pay for coffee (Dickey, 2013). There is no reason why a retailer couldn't make an app to work with this smart watch (Dickey, 2013). One smaller step towards not having to pull out anything, as the watch is already on your wrist.

2) Mastercard Shop This

Mastercard shop this is a wired magazine, which is a tablet edition that allows subscribers to access their favourite magazine apps that give them the opportunity to make a purchase without ever leaving the page itself (Dickey, 2013). The concept off Shop this is about consumers can register their shipping details and their cards with Shop This and then they can buy items directly from the Wired magazine tablet edition without exiting the magazine app (Dickey, 2013). Removing the need to enter details every time you wish to purchase something removes the barriers to purchasing, and that's what Shop This enables (Dickey, 2013).

3) Self-checkout

According to an article from the international supermarket news, Turkey's Migros Turk supermarket chain is now embracing self-checkout technology from NCR ("Turkey's", 2013). Erkin Yilmaz, who is an assistant general manager of Migros Turk supermarket, said that the new self-checkouts are so popular with customers that the chain is considering a new store setup that would feature six self-checkout counters and only one traditional checkout lane ("Turkey's", 2013). He also says that "In fact, a few shoppers are so excited and they will wait to use self-checkouts even if other lanes are open with nobody in line" ("Turkey's", 2013). Wal-Mart and Target is two of the nation's highest-profile retailer's say that they are installing self-checkout lanes in stores which is a smart move that can save time for shoppers and cut labor costs for some businesses (Luna, 2013).

III. Technology drives Retail Revolution

Retailers' show that they are struggling to get people to shop on mobile phone or tablets apps as technology is improving rapidly and more customers are possessing smartphones. Globalization and relentless gains in computer technical specifications have teamed up to speed up the pace of change in retailing and as online sensations like Facebook, Instagram and Groupon proved that relatively tiny tech companies now can easily access billions of dollars (Albright, 2012). The growing calculating power of computers is on track to surpass human intelligence by 2016 (Albright, 2012).

1) Internet – Online shopping

As we all know that today, with the advance of technology such as internet, we can have online shopping. The Internet has grown into a massive hungry beast that business is trying to tame into a profit making machine (Hartley, 2013). It is clear that the Internet is the growth area for sales. Another great advantage of online shopping is the ability to comparison shop easily. Instead going around to several different stores and trying to recall or write down details such as prices, features and quality, the shopper can simply open two or more browsers to compare more than one item at the same time. Another advantage to comparison shopping online is it gives the consumer the ability to compare items which is not available in his area. This is important because some items may only be available in certain parts of the country. Also, the increase in online shopping activities is powered by a steady stream of new online shoppers and new product category sales (Faqih, 2013).

2) Online selling price is cheaper than store selling price

The main reason that people going for online purchase is mainly because of the price is much cheaper than what they need to pay at store. Businesses that go online help retailer to reduce the costs of renting or buying a physical store and reduce employee's requirement, enabling online stores to gain a competitive advantage (Hartley, 2013). Online selling is also a way of advertising. For example, an optical shop that sell contact lens price will be much higher than an online contact lens shop. One of the famous china Taobao.com which sells almost anything like Amazon or eBay where in this online web you can find anything you want for a cheaper price. You might like a design of a branded shoe but does not want to

spend more money than you can just search in this china Taobao.com website where you can find the same design with a much cheaper price.

3) Quality Expectation

It is not only the technology of the Internet itself that has increased online purchases but it is also let the consumers view the improved quality of images and video and the number of devices in the hands of consumers allowing constant access (Hartley, 2013). Consumers can check the detail and the comment of the people who use the product. For example milktee.nu which is an online boutique which is famous for their 100% cotton t-shirt. Their t-shirt is mainly design by themselves and they sell it through online globally. They often received good comment from customer who bought their t-shirt. We not only enjoy the cheap price buying online but we can also know the quality of the product by reading description and searching for more information online.

4) Delivery services

Mostly when customers buy items online, they will have their purchase delivered by the retailer within 3 to 7 working days after a full payment is made for the product or purchases. Consumers can also track the product online to see where the product is. Customers are given a track code provided by delivery couriers such as FedEx and UPS to track the product they purchase for security and schedule purpose. Retailers have also become clearer on their websites about expected delivery times and stock availability (Hartley, 2013). Some retailers offer to send by fast courier if customers buy more than a certain amount of money. This product usually will arrive the next day and the post fees are paid by the retailers.

IV. Inventory Stock Management Software

Retailers are using back-end retail technology to check for stock availability, checking for inventory across multiple channels. Inventory is a list of goods in stock contain in a store that is still available. Efficient inventory management means that there should be constant inflow and outflow of stocks. Examples of free inventory stock management software are Pos Maid, inflow Inventory Free Edition, ABC Inventory Software, BS1 Enterprise Accounting Free Edition, Chronos eStock Card Inventory Software (Piunika, 2012). This software provides business solutions for managing inventory, sales, purchases, delivery or shipping (Piunika, 2012). Sunway college students, Kwong Siaw Chiun and Wong Thean Chee, who are now part of the college research department has develop a product called Inventory Biz which help company to manage order inventory, re-order recommendation, tracking order numbers and monitoring inventory balances (Selvaratnam, 2002). Other additional features are database back-up for archiving, customer transaction history, searching capability, structured query language (SQL) filtering tool and generating reports like gross profit analysis, monthly stock status (Selvaratnam, 2002).

V. Retail applications for mobility

As technology became more and more advance, the retailers begin to create their own application in mobile for quick and easy access to their product or store for the customer. "Mobile Internet users are growing rapidly and are anticipated to number at least 1.4 billion by 2013" (Grewal et al, 2009). For example Zalora.com which is a famous online retail boutique that sells something to wear from head to toes. We can now access to Zalora simply by downloading the application on our mobile. If you are an apple user you can just simple go to apple app store and download Zalora application. Form there you can view Zalora products easier than needing to have your laptop when you are outside.

Companies such as Groupon, has their own mobile applications which can be downloaded at your mobile banking services. For example CIMB bank has their own dedicated app that also can be downloaded, where you can access to your bank account and pay your bills conveniently and on-the-go. Christine Kapperman,

who is a deputy editor for Deputy Editor, Retail and Digital, Natural Foods Merchandiser say that she was surprised with the advance of today's technology (Kapperman, 2013). When she went into a large retailer that she has not visited in more than a year and after trying on the clothes, she choose when she wanted to pay a clerk use an iPhone in a larger rubber case housed a barcode scanner and swiped her credit card on the handheld device (Kapperman, 2013). She believes that eventually, the clerks throughout the store will carry the device for on the spot check out (Kapperman, 2013). Today smartphones and tablets do not only change the way we communicate but they are also changing retail industry virtually and physically (Kapperman, 2013).

VI. Technology readiness in a B2B online retail

"Twenty years ago, if you wanted to buy an item, the retailer went to the distributor, the distributor went to the manufacturer, and it was made somewhere" (Delgado, 2012). It was a well-established supply chain. Today, many retailers are designing their own products, obtaining it, having it made in China or wherever, and they've eliminated the U.S. manufacturer and U.S. distributor and cut a lot of costs out (Delgado, 2012). Bratley (2008) says that the electronically mediated interactions between business partners are increasingly replacing or transforming the more traditional methods of conducting business (Boeck et al, 2009). Evans and Wurster predicted that the Internet would represent the 'most important wave in the information revolution' (Vize et al, 2013). An important feature of your business web marketing campaign is addressing your B2B (business-to-business) opportunities. Even if businesses are your major customers, you can organize your online store in much the same way you would set up a retail store.

Business to business marketplaces have become the hottest topic in e-business, driving a future surge in revenues that could reach around \$200 trillion within 10 years. B2B marketplaces are already big in e-business, but they are set to become massive. Of all the initiatives seeking to exploit network economics, these exchanges are the frontrunners when it comes to revolutionizing the way businesses deal with each other. This change in the way business is done is even more intense in industries that are controlled by large, dominant buyers, where the use of electronic exchange platforms to conduct business-to-business (B2B) electronic commerce (e-commerce) is considered to be a powerful (Boeck et al. 2009).

VII. RFID and location tracking

RFID, a disruptive technology, and related vulnerabilities in existing supply chain applications from an ethics perspective (Zhou, 2013).With the rapidly decreasing price of the RFID tag, its adoption and utilization is increasing swiftly in various contexts including organizations for supply chain management, hospitals for various types of uses and other public sector organizations (Irani et al, 2010). RFID technology is classified as a wireless automatic identification and has data capture (AIDC) technology. AIDC technologies include bar coding, optical recognition, biometrics, card technology, touch or contact memory technology, and RFID technology (Ngai et al, 2008).

The decreasing price of the RFID tag, its adoption and utilization are increasing swiftly in various contexts including organizations for supply chain management, hospitals for various types of uses and other public sector organizations. RFID (Radio Frequency Identification) have received a huge amount of attention in recent years, with many predicting that the technology will revolutionize everything from logistics to inventory processing to the customer experience. While time will tell if these predictions hold up, the use of wireless technology to track objects is certainly promising. RFID technology has been used by thousands of companies for a decade or more. RFID was used to track assets or reusable containers within a company's own four walls, the tags could be reused (Violino, 2005).

VIII. Discussion

Technology is a somewhat an inexpensive way to improve customer service. Besides long checkout lines, two of the largest sources of customer complaints in retail establishments involve pricing problems and a lack of available store associates to help locate merchandise or answer questions. Wireless technology can help on both fronts, without requiring a retailer to hire additional staff. For example, P1 an internet company provides an online chat box in their website, where customers can ask any queries regarding to their internet service to available online customer service officials. The chat box will be on the bottom right of the website. Technology is a powerful tool in today's industry as it plays a magnificent role in helping retailers to increase their sales and also help them to be in competition with others.

The rise of a new digital shopping world can create many retail implications, mainly positive and negative implications. A negative impact would be that store closures might happen as retailers no longer need to set up physical stores when they can just sell online (click-and-mortar), eliminating the need to settle utilities and store rental fees. Meanwhile, a positive effect would be that store retailers will find ways to rethink how to create new ideas to attract customer to their store.

IX. Conclusion

In conclusion, technology is very important to the retailing industry as it plays a significant role in helping retailers to improve their business and to provide the best service for customers such as the self-checkout counters, where customers can experience different ways to pack their own groceries into the plastic bag all by themselves and not to wait for the long queues. Some retailers provide QR code on their product for the customer to scan with their smartphone if they would like to know more about the product. As technology became more and more advance, the retailers begin to create their own application in mobile for quick and easy access to their product or store for the customer. Some company like CIMB bank has their own dedicated app that can be downloaded, where you can access to your bank account and pay your bills conveniently and on-the-go. With the advancement of today's technology such as RFID which has been used by thousands of companies more than a decade. With the advancement of today technology, retailers can increase their sales and also to provide good service to the customers. Hence it shows that there is a great influence of technology in retail industry.

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