

SMART SHOPPING WITH SECURE PRODUCT DELIVERY

GANESH RAVINDRA UBALE*, PRADIP S INGLE**, AWAIS KHAN*, RENUKA KYAVAL*

ABSTRACT

With the growing amount of data, the demand of big data storage significantly increases. Through the cloud center, data providers can conveniently share data stored in the centre with others. The objective of this project is to propose a real time capturing system for consumer supplies using Quick Response (QR)code in a Web Based Application. In recent years, extensive research has been carried out on vision-based automatic identification technology that recognizes image codes using smart phones to provide various services that can recognize the authenticity of any product. In this project, all product details and customers records are stored on cloud. Cloud computing provide platform to the users to store large amount of data on cloud. Using Multiplexing and De-multiplexing process encode and decode the information from single QR code with special symbols and split the data back to their QR Code pattern where these QR Code pattern can be read by QR Code Reader Application. Standard image codes like one-dimensional barcodes and two-dimensional codes with black and white patterns identifies a product for its value and basic features but does not authenticate it, moreover not every product that is identified, is used for authenticating manufacturers and warranty. So in this Project we implement the web based Smart Shopping with Secure Product Delivery using QR Code and OTP (One Time Password) Verification. If user buy any Product user get the QR code on Register Email ID and at time of Product Deliver, Courier boy scan QR Code and Send OTP on Register Mobile Number and verify and OTP Verification Deliver Product Securely.

INTRODUCTION

Globally, it has been perceived that no work can be seriously conceptualized and accomplished without examining what as of now exists in reference to it. The information of effectively settled research regions empowers us to unmistakably comprehend what is as of now lit up around there and what more research in regions distinguished is as yet being unexplored.

When we come to think about the exploration that what is so far looked into and what part is unexplored, at that point we can start objectively and deliberately. As India is new and a rising nation in internet shopping there are not very many investigations directed around there.

Research includes intensive learning of vital parameters which are vital to the examination.

Correspondence E-mail Id: editor@eurekajournals.com

Final Year, Department of Information Technology, Anuradha Engineering College, Chikhali.

^{**}Asst. Prof., Department of Information Technology, Anuradha Engineering College, Chikhali.

Each exploration creates on what has gone before and its specific flaws will be conveyed forward by somebody yet to come. The current related writing was turned out to exceptionally valuable in getting an understanding the principle goals of the exploration and in concluding the system. Internet shopping in India is in an exceptionally early stage and fewer investigations have been directed on e-buyer conduct. In spite of the fact that there are have been the shortage of web based shopping related examinations in India, Internationally in different nations different investigations did on e-buyer conduct. In India the online customer advertises is seeing an uncommon utilization blast.

In the meantime, innovation improvement has expanded limit of e-retailers to gather, store, keep up, exchange and examine immense measures of information of their web guests. The enhancements in wage elements alongside factors like ideal socioeconomics and spending designs are driving the utilization request. A few investigations have been done in this field, a writing audit was partitioned into four sections as takes after:

- I. Books & e-books
- II. Thesis & Dissertation
- III. Peer Reviewed Journals (National & International) & Conference Proceedings
- IV. Research studies, Articles, Magazines & Newspapers

LITERATURE SURVEY

The retail business has been upholding "Brilliant Shopping" for a long time by embracing different advances to improve the shopping knowledge at the retail condition. The vision of brilliant shopping guarantees is to give on-the-spot data about different rebates, plans, and so on at the tip of your finger.

The upsides of versatile business are-

- Customer fulfilment
- Cost reserve funds
- New business openings
- Time sparing
- Allow for significant benefit
- Improvement of Customer relations

While running over different innovations, for example, Online Shopping, where things are acquired online through different sites, the disadvantages experienced were –

- Fraud
- Shipping cost
- Deprives our Tangibility
- Lack of Options

In conventional shopping strategy different challenges confronted are-

- Long lines
- Huge holding up time
- Carrying overwhelming things home

Overview was led at three shops -

- Reliance Fresh
- Purti super bazaar
- Big Bazaar

Issues-

- Long lines
- Barcode filtering for every thing
- Payment issues all the time

This paper expects that the application depicted would be a model that would shape the future and there still stays much to do as far as advancement and change f the current models. Applications made ith simplicity of comprehension and the outline can be made and custom fitted to the shopping procedure to make it more compelling and easy to use, accordingly making it less demanding and helpful for the clients to do the whole shopping process with the utilization of this application.

LITERATURE REVIEW: BOOKS & E-BOOKS

ONLINE SHOPPING EVALUATION

Barnes (2013) questions the reasoning why online shopping has become so popular. Many authors (Chaing and Dholakia, 2003, Monsuwé et al., 2004 and Poulter, 2013) believe one of the key reasons is convenience. Shopping online offers pronounced convenience (Chaing and Dholakia, 2003). A key reason some consumers favour online shopping is also due to price comparisons (Monsuwé et al., 2004; Palmer, 2013). 85% of consumers compares price information online (Chaing&Dholakia, 2003), although it is not evident whether these consumers continue and purchase the products online or on the high street. Another apparent reason the internet is preferable is avoiding long queues (Poulter, 2013), yet it could be argued, the time spent checking out, paying and waiting for deliveries is more time consuming and more inconvenient than queuing. Moreover, Fitter man (2013) believes, purchasing a product in-store is instantly gratifying, there is no need to wait. Nevertheless, consumers can shop online anywhere, anytime including when exercising, cooking or cleaning (Chaing&Dholakia, 2003), and they get another boost when the parcel arrives (Eckler, 2013). With busy way of life shoppers can in any case get their retail treatment without leaving their work area, somewhat interestingly, it was likewise discovered 33% of buyers shop in bed, with 46% of individuals requested to make buys in the vicinity of 7pm and 1am (Poulter, 2013), yet in addition buyers are quick to exploit the capacity to shop 24 hours, seven days seven days. Then again, the greater part (55%) of respondents considered by Rack space (2013) confessed to getting on the web disappointment and inconvenience when buying on the web. 44% of those disappointed relinquished their shopping, this could be seen as a positive measurement for the high road, if buyers shop with them. The best disturbances were named as

muddled look at techniques (Rack space, 2013). Check out must be simple, if there are too many forms, consumers tend to abandon their shopping and go elsewhere (Adeshara, 2013). High shipping costs are also frustrating, if the delivery cost equates to more than the savings they have received consumers are likely to leave their often impulse purchases. However, shipping costs can often be eliminated using voucher code websites (Palmer, 2013). Lack of product information, unawareness of security features and few payment options are all cited as recurring frustrations regarding online shopping (Adeshara, 2013). Shim et al.(2004) distinguish how past web based shopping encounters can affect web shopping. On account of a positive result, customers are probably going to shop once more, be that as it may, those encountering dissatisfactions may dismiss the web as an effective shopping channel.

ONLINE VS. OFFLINE SHOPPING

In conventional shopping, highlights of the climate are a key factor affecting the purchaser's recognition. These highlights likewise influence whether the customer is finding the shopping knowledge pleasurable or not, as expressed by Sherman et al. (1997). Despite what might be expected, the earth in internet shopping incorporates a much smaller scope of encounters and certain innovative capacities are expected to work in such a setting. Every one of the faculties can't be utilized to see internet shopping encounters. In this way, Lunt (2000) communicated that the key clarification for customers not shopping on the web is a result of the constrained experience factors included (Dennis et al., 2007). In any case, Childers et al. (2001) asserted that internet shopping has a few benefits and collaborations which can achieve intriguing encounters (Demangeot and Broderick, 2006). Despite the fact that web based shopping has numerous advantages, there are still customers who have motivations to stay away

from it. Lee and Turban (2001) brought up that exploring sites can turn out to be dubious for customers who are not comfortable with shopping thusly and they don't put stock in the web as a sheltered hotspot for exchanges (Monsuwé et al., 2004). Such clients oftentimes gripe on components, for example, discounts, merchandise exchanges, charging issues, trade arrangements and broken items. Dellaert and Kahn (1999) watched that if buyers confront issues while shopping on the web, they just hold up eight seconds to get any reaction from the organization's framework before surrendering the buy. In any case, as opposed to the conventional shopping, physical retail condition, advertisers of web based shopping destinations for the most part set forward more point by point item data. This gives them an edge as nowadays shoppers need to know everything about an item before burning through cash on it (Chen and Chang, 2003). E-buyers are additionally ready to go for broke contrasted with disconnected customers. A few creators have discussed the dangers looked by online retailers: Rowley (1998) specified the vulnerability encompassing on the web exchanges, Forcht and Wex (1996) indicated out that associations have monitor themselves with regards to information validness and dependability, and Richards (1997) expressed that there is a deficient lawful material for internet retailing which could demonstrate unsafe if something turns out badly amid the online buy (Whysall, 2000).

The creators have additionally talked about an approach to gauge the e-customer's trust towards e-retail organizations by investigating: the security level for Mastercards, private subtle elements of customer, and the wellbeing and reliability of the site (Merrilees and Fry, 2003). These dangers, particularly security-related, do make online organizations lose potential clients. Moreover, so as to perform e-buyer must have stable web access and they should be OK with utilizing the web. This might be an issue for the more established age who are not as certain with their specialized capacities (Kim and Park, 2005). In any case, it ought to be noticed that these conceivable dangers can be maintained a strategic distance from or decreased through gaining the essential encounters and acquiring certain aptitudes and information on PCs, the web, and shopping on the web (Li and Zhang, 2002).

WHY SHOP ONLINE

As per Grewal et al (2002), internet shopping is more effective in addressing the purchasers' needs and needs. It enables the shoppers to effectively accomplish information about the brand's item quality, accessibility, determinations and costs, and contrast that and those of another brand. This implies they would now be able to settle on more keen buying choices in a way which isn't conceivable through conventional shopping (Brown et al., 2003). Also, they can buy secretly, which is advantageous with regards to individual items that they may feel awkward purchasing in stores (Monsuwé et al., 2004). Darker and Reid (1997) watched that standard assignments like looking for basic supplies have turned out to be less demanding for clients who don't care for group and driving the trolley around the store (Brown et al., 2003). It appears that individuals these days, particularly youthful grown-ups, are ending up more cognizant about individual picture and design. For these kinds of purchasers, shopping is an engaging, delight filled movement that resembles an escape. It is vital to take note of that such customers are searching for good administration principles as well. As far as web based shopping, the buyer fulfilment will be higher if, for example, the organization has an easy to use site which influences shopping through it to appear like an animating knowledge (Strategic Direction, 2012). Online retail shops frequently showcase themselves through low cost. For instance, Amazon.com utilizes this strategy to pull in

customers from customary book shops. These low cost online retail shops are causing an awesome purchaser excess (Dobbs et al., 2013). Haubl and Trifts (2000) additionally said that when shopping on the web, purchasers can think about costs and take a gander at elective alternatives. Sites, for example, flipkart.com help in making this examination with only a couple of snaps. Besides, on web based shopping sites, buyers approach other clients' audits which can manage their buying choice (Chen and Chang, 2003). To fathom the buyers' motivations to participate in shopping on the web, it is vital to mull over the situational factors that prompt it. Wolfinbarger and Gilly (2001) inferred that the reason most customers get a kick out of the chance to make online buys is because of high openness and incredible comfort. Shopping from home spares them the exertion of voyaging on the grounds that it enables them to shop appropriate from their home. This is particularly useful for individuals who have long working hours and very little extra time to shop, as the web enables customers to shop whenever amid the 24 hours in a day. Along these lines, one of the key situational factors is the time confinement. As per Avery (1996), another factor is stability; this is found in buyers who can't go out shopping to stores because of issues, for example, an ailment or a physical handicap (Monsuwé et al., 2004). The third situational factor is topographical as it is identified with the separation customers regularly need to movement to the stores which have the things they require. Therefore, web based shopping encourages them beat this weight. For example, numerous individuals dwelling in occupied urban communities might not have the fitting transportation to movement to more moderate shops. They might be compelled to shop at the expensive town jogs on the off chance that it was not for the choice to shop on the web (Dennis et al., 2007). The following variable identifies with circumstances when a particular decent is should have been acquired and it isn't accessible in

customary shops. A case of this is hefty measured garments or shoes, accordingly web based shopping is a simple choice to get such products. How engaging options are is the last situational factor. This implies if a store in the shopper's zone is offering a similar decent. In general, accommodation is a central point which inspires customers to decide on internet shopping (Ozen and Engizek, 2014). A large portion of the present writing research with respect to accommodation has concentrated on the block and-cement customary retail condition. There has been a nearly less investigation into comfort of web based shopping. Internet retailing gives benefits as far as place and time (Gehrt et al., 2012); customers can be spared from investing energy going to swarmed shopping centres. As per Li (1999) e-purchasers are more familiar with comfort as opposed to understanding. For them, accommodation is the most critical viewpoint when influencing buys as they to have restricted time and are not as pestered by buying products without physically touching them (Li and Zhang, 2002).

EXISTING SYSTEM

Scanner tags are regularly expected for customer utilizes where utilizing a standardized tag gadget, a purchaser can take a picture of a standardized identification on an item. The standardized tag must be perused utilizing PC vision procedures and scanner tag can hold data, it influences this vision to errand in customer situations abnormally difficult. Standardized tag decoder can give the vision calculation input, and build up a dynamic procedure of the item.

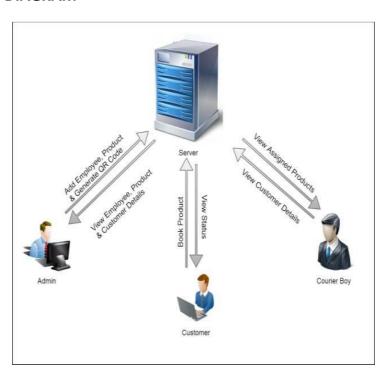
PROPOSED SYSTEM

In the proposed system, In this project, all product details and customers records are stored on cloud. Cloud computing provide platform to the users to store large amount of data on cloud. Using Multiplexing and De-multiplexing process encode and decode the information from single

QR code with special symbols and split the data back to their QR Code pattern where these QR Code pattern can be read by QR Code Reader Application. Standard image codes like onedimensional barcodes and two-dimensional codes with black and white patterns identifies a product for its value and basic features but does not authenticate it, moreover not every product that is identified, is used for authenticating manufactures and warranty, also in this Project When user buy Product from web application generate the QR code send to customer/ user

Mail id the generated QR Code is used at the Product Delivered Time. After user shopping send owner these Product to Respected Deliver Boy for Deliver this product to Request User. When Deliver Boy Reach the Destination point or Deliver Address Deliver boy ask about the QR code for Product because these product not deliver to the Unknown person and also send OTP verification code to Requested user Mobile Number after Verify OTP and QR code Delivery Boy Deliver the Product to Respected Person.-

ARCHITECTURE DIAGRAM



FUTURE ENHANCEMENTS

There is however various approaches to improve the experience of clients which are to be additionally investigated to this examination. Right off the bat, there will be requirement for the reconciliation of checkout framework with the created model, to give clients a totally new ordeal (from settling on item decisions to finding the items and looking at to evade long lines) shopping in the store there by making their retail idea a mess better. In conclusion, to join an improved security highlight on the QR codes with the goal that clients can safely filter codes and

easily perform monetary exchanges utilizing their cell phones.

CONCLUSION

As the interest for the portable shopping is expanding the prerequisite of more secure, sheltered and solid exchange is of most extreme request. Advanced cells, that have turned into an imperative piece of the present life, have diminished every one of the endeavors that are required for shopping. With camera highlight in it, the client can filter the QR code of the thing to be acquired and afterward straightforwardly

include it into the truck. There are two points of interest of it: first no compelling reason to remain in the line for quite a while in shopping centers only to scan the thing, second there will be no degree for the cheats that occur in versatile shopping. The things so far acquired by the client will be kept up in the application that can be utilized by the client in the following buy. The exchanges that will happen as often as possible with the shop's database will be made secured. This will guarantee no adjustments in the shop's database either by the client or by any unapproved client.

REFERENCES

- [1]. Ya-Lin Lee and Wen-Hsiang Tsai, Senior Member, IEEE, "A New Data Transfer Method via Signal-rich-art Code Images Captured by Mobile Devices", VOL. 25, NO. X, 2015.
- [2]. Dr. Gagandeep Nagra, Dr.R.Gopal, "An study of Factors Affecting on Online Shopping Behaviour of Consumer", International journal of scientific and research publications, Volume3,issue 6, June 2013,ISSN:2250-3153
- [3]. Constantinides, E., (2004), "Influencing the online consumer's behaviour: The web

- experiences", Internet Research, vol. 14, no. 2, pp.111-126.
- [4]. Max E. VizcarraMelgar, Luz A, Melgar Santander, "An Alternative Proposal of Tracking Products Using Digital Signatures and QR Codes", Aug. 2015.
- [5]. B. Davis, "Signal rich art: enabling the vision of ubiquitous computing," Proc. SPIE 7880: Media Watermarking, Security, and Forensics III, N. D. Memon, J. Dittmann, A. M. Alattar, and E. J. Delp III, Eds., vol. 788002, Feb. 2011.
- [6]. Udita Gangwal, Sanchita Roy, Jyotsna Bapat, "Smart Shopping Cart for Automated Billing Purpose using Wireless Sensor Networks", SENSORCOMM 2013:

 The Seventh International Conference on Sensor Technologies and Applications
- [7]. Mira Almehairi, Tariq Bhatti, "Adoption of virtual shopping: Using smart phones and QR codes, Journal of Management and Marketing Research", Volume 17 October, 2014.
- [8]. "Smart Trolley Using QR Code", International Journal of Computer Science and Information Technology Research ISSN 2348-120X (online) Vol. 3, Issue 4, pp: (218-224), Month: October - December 2015.