# PRICE TRANSPARENCY ISSUES AND TREATING CUSTOMER FAIRLY BY E-COMMERCE FIRMS IN INDIA 

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#### Abstract

The Indian E-commerce industry is growing rapidly due to outbreak of pandemic, rapid increase in use of smartphones and access to high speed internet have resulted in customers looking for convenience by making online purchase thereby saving time and cost. Technology plays an inevitable role in helping ecommerce firms maximize their profit by analyzing customer behavior online, making recommendations and providing personalized pricing. This paper will focus of understanding and analyzing the present scenario in the online retail space to explore the following concerns which is a point of discussion in this field. Are customers really being treated fairly by ecommerce firms? Are customers guided to make purchase through recommendation engines and personalized pricing and end up paying more as firms are able to identify their willingness to pay more? This provides a qualitative study to answer these questions.


Keywords: Treating customers fairly; personalized pricing; regulation; data protection; security

## INTRODUCTION

E-commerce involves buying and selling of things over internet. Factors such as outbreak of pandemic, increased penetration of smartphones, lower cost of network connectivity and firms expanding reach across all tiers of cities have enable a seamless flow of ecommerce activities. Urbanization, nuclearization of families, growth in income, consumers shift in attitude such as looking for convenience and saving cost and time have resulted in a massive growth in the Indian ecommerce industry (BCG 2017). E-commerce market is poised to touch USD 150Bn by 2022 with ecommerce services segment including travel, digital payments, digital learning, cab services, movie tickets, food delivery contributing to USD 40-50Bn and ecommerce products segment including consumer electronics, apparels, FMCG, luxury, appliances, grocery contributing to USD 45-50Bn by 2022 (PwC, 2021).Amazon, one of the leading ecommerce firms has combined its global scale and resources to understand the local market in depth and
acting Glocally to provide customer centric online shopping experience (Forbes 2018). In order to enable easy delivery of products, the company has also deployed Artificial Intelligence, it has also expanded its network of fulfilment centers and has an innovative initiative for on-boarding assistance to third party sellers.

The Indian ecommerce sector is considered to be a dumping ground due to unfair trade practices. Even though the Indian government is taking anti-dumping policy measures due to overseas funding, ecommerce firms are able to sell their products at a price much lower than the actual price of the manufacturer (CAIT website). In addition to India being a dumping ground, e-tailers are involved in predatory pricing policy and offering different prices to different customers for profit maximization and also try to expel brick and mortar shops from the retail trade, this could be evident from the precision marketing and targeted advertisements being made directly to individual customers. The e-commerce firms are able to provide real-time personalized pricing.

In addition to these issues that directly impact the end customers, issues like companies selling goods to thousands of individuals registered as members other than wholesalers under the FDI norm of Wholesale cash and carry model is yet another classic example of uneven playing field. This has created a situation where the wholesaler of one particular commodity is not bound by any rules to make purchase of any other commodity of his choice even though he is not dealing with that commodity. Hence there comes a need to protect self-organized traders and small retailers to compete with organized retail.In addition to these challenges, the e-commerce firms face the following challenges such as SQL injection, price manipulation, and cross-site scripting and distributed denial-of-service attack (DDOS) attack (PwC TechWorld, 2018).

## LITERATURE REVIEW

In order to increase customer loyalty and maximize profits, companies need to ensure personalized smart customer experience (Roy, 2017). Techniques such as personalized pricing, dynamic pricing, algorithmic pricing, recommendation engine, precision marketing, AI for finding address for delivery are widely been used by every ecommerce companies and have changed the way customers do shopping (Hoffman and Novak, 2015; Wünderlich et al., 2013). Deployment of smart technologies in online retail space helps companies offer an enhanced customer experience, efficiency in firm's operations, reduction in cost and maximized business profits (Renko and Druzijanic, 2014).

## Personalized pricing

This refers to the practice where companies use customer information that are collected based on voluntarily provided data or interpreted or perceived about the customers behavior or characteristics, that can be used to fix different prices to different consumers, and also based on what the companies think the customer is willing to pay (FCA, UK,2018). This could lead to price discrimination (Borgesius and Poort, 2017). (Odlyzko 1996, 2003) and (Baker et al.
2001) were the earliest researchers to use the term of online price discrimination. Amazon offered different prices to different customers (BBC News 2000).

Price discrimination could be at different degrees first-, second-, and third-degree (Pigou 1932). First-degree price discrimination happens when each buyer is charged a different price depending on the customers' willingness to pay. Next level, second-degree price discrimination happens when the price discrimination is based on the quantity bought by the buyer and not on the consumer behavior. Whereas in third-degree price discrimination, different prices are given to different groups or types of buyers.

## Dynamic pricing

A type of pricing strategy where firms change prices of its products and services based on the market supply and perceived demand. Dynamic pricing is usually used by firms to sell their products or services to customers, at the right time, with the right price, in order to maximize the profit. Algorithms are used for dynamic pricing by leading firms and this has led to algorithmic pricing. Dynamic pricing help firms significantly increase profit (Sahay 2007). Customers keep extending the purchase expecting further offers and discounts which leads to a complication in design of an optimal dynamic pricing system by companies (Nair 2007)

In both the type of pricing methods, technology plays a prime role in helping firms continuously adjusting prices of products and services with changing circumstances, demand and supply, without much of any cost or efforts (Palmer, 2010; Van Noort et al., 2012). These techniques have become an indispensable part of the pricing strategies of business and widely used across industries for providing personalization to customers (Neuhofer et al., 2015; Pantano and Timmermans, 2014).Algorithmic Pricing is also widely used in marketplace (Le Chen, 2016) and Amazon Buy Box algorithm has been widely examined. The distinction between each of the pricing techniques is that dynamic pricing is a practice where price changes based on variables that are not customer centric such as time of the day, festival seasons during a year, weather in a particular geography, the temperature outside, the available supply and the competitor's prices. Whereas, in personalized pricing price change is customer centric. Firms have a fair idea about customer behavior and purchase pattern.

Even though research scholars have studied various smart retail technologies such as augmented reality, shopping assistants, interactive displays, smart shopping carts, radio frequency identification systems (RFID), shopping assistant systems, near field communication systems (NFC), and augment-reality interactive technology (ART), Artificial Intelligence technology (Huang and Liao, 2015), and have given insights with respect to the factors which motivates customer to adopt new technologie, investigation of customer perception on how they are being treated fairly in spite of technology intervention is in scarce with respect to the Indian ecommerce industry. Hence the following study has been conducted to understand whether consumers are charged different price for same product. With this context Marketing Science

Institute in its Research Priorities for 2020-2022 has mentioned how customer perceive personalized price fairness. This paper also focuses on how customers react to personalized pricing during online purchase and the perception of customers for personalized pricing.

## METHODOLOGY - QUALITATIVE STUDY

A real time study was conducted to find out the current state of price discrimination by a leading ecommerce firm was done and a framework for treating customer fairly was put together. A qualitative study has been done based on the price displayed among the members of a nuclear family with a sample size of 4 during a purchase of particular model of a brand electronic consumer durable product at 2 different time periods; one during normal days and festival season of a year and following year from a leading ecommerce website.On an average with respect to an Indian middle class family, as the purchase of an electronic durable require an investment of at least a month's income, this purchase decision is influenced by the family member's opinion and views and after a well thought through and informed decision making process the customer or the household chooses a model and places an order online. An in-depth interview was done to find out the factors they considered to buy a product online was considered. Factors such as travel time to a physical store, convenience, logistics, installation, time constraint seemed to play a key role in deciding to opt an online store for purchase. The segregation of the customer was based on their digital age and purchase history (Chaffey, 2011) had been used for the study, which includes:

1. A new user of the online retail service
2. Customers who have purchased online more than or at least one purchase
3. Customer who has already made a purchase of the product. A minimum of 5 and 20 purchases are taken as a base line because considering all the tier $(1,2,3,4)$ cities an average has been arrived based on the assumption that the changing in customer purchase through online due to increased penetration of high speed internet, drop in smart phone price and changing customer mind set.

Table 1: Real-time pricing in a leading e-commerce firm in India

|  | Price displayed during |  |  |
| :--- | :--- | :--- | :--- |
| Category of online customers | Regular day <br> $\left(9^{\text {th }} \mathbf{~ J a n ~ 2 0 1 9 )}\right)$ | Festival time <br> $\left(\mathbf{1 7}^{\text {th }} \mathbf{J a n ~ 2 0 1 9 )}\right.$ | Regular day <br> $(\mathbf{2 5}$ Mar 2020) $)$ |
| Price displayed without logging in | Rs 39,200 | Rs 37,999 | Rs. 39,800 |
| Price displayed when logged in by a <br> new user | Rs. 37,999 | Rs. 37,999 | Rs. 39,800 |
| Price displayed when logged in by a <br> user who has done less than 5 purchase | Rs. 37,999 | Rs. 37,999 | Rs. 39,800 |

online
Price displayed when logged in by a user who has done more than 20
Rs.37,999 Rs.39,200 Rs. 39,800
purchases online
Price displayed when logged in by a user who has already purchased the Rs.39,200

Rs.39,200
Rs. 40,999 product few months back

The following generic and customer specific observations during normal days and festival days can be made.

## Generic Observations

- The maximum discount or the offer price (A $3 \%$ decrease in price which is a discounted MRP) offered during normal day and festival season remains the same. There seems to baseline beyond which the price doesn't drop regardless of the season or customer purchase history or other customer related factors.
- For a customer who has already made a purchase of the product, there seems to be no offer or discount given.


## Customer specific observation - During Normal Days

- The discount offered on the product from MRP doesn't show up for a customer viewing the product without logging in.
- Price of the product seems to be charged higher for a user who has not logged in. Those customers who intend to just check out the online price and do not plan to make a purchase online is being displayed a $3 \%$ increased price from the offer price displayed in the website.
- For a newly registered customer the offer price seems to be $3 \%$ lesser than for a customer who has not logged in.There seems to be variation in price displayed based on the customer purchase history. There seems to be no offer provided for a customer who has already made a purchase of the product. He is shown Rs. 39,200 and not Rs. 37,999, which a 3\% (Rs. 1,201) increase in price.
- For a customer who has already purchased the product, there seems to be no offer given other than the standard discount and other price option also does not display.


## Customer specific observation - During festival seasons

- The product is offered at a price that is the maximum offer price displayed during the normal days, regardless of the user is logged in or not.
- There seems to be no additional offer for a new registered user or customer not logged in or a customer who has done a few purchases earlier.
- For a customer who seems to be a frequent buyer, the price displayed is $3 \%$ higher than price displayed without logging in during festival season.
- For a customer who has already purchased the product, there seems to be no offer given other than the standard discount and other price option also does not display.


## Price Transparency - A Major issue in personalized pricing

Price transparency is the "extent to which information about prices is available to buyers that organizes, explains, clarifies, or projects the contextual direction and/or rationale for the seller's pricing" (Hanna et al., 2019). Tanford et al., (2011) studied the influence of price transparency and influence of price on consumers online purchase decision and found to gain competitive advantage a firm should have consistent and transparent pricing if it plans to price products differently from their competitors. Price transparency tools are available in the market but are not widely used in healthcare, insurance, online vacation packages (Tanford et al., 2011). Tools such as MySmartPrice, ShopSavvy, BuyVia, Keepa, StalkOwl, Happy2Purchase, Smartpix, are available in the market to compare price of product between different ecommerce websites, track price history, notify consumers on availability and price drops (DNA India, 2017). These tools aid price transparency and assists consumers in finding out the best deals. Transparent pricing is vital in a customer driven market place like insurance, where having transparent pricing send signals about cost to consumers and producers (Hilsenrath et al., 2015). Nguyen et al., (2016) studied how consumer perceived price fairness affect transparency in pricing strategies when sharing information through online platforms and communities. This study found that consumers accept dynamic pricing practices if they are familiar with the demand based pricing information in online communities. Most of the literatures have found lack of price transparency can lead to perception of price unfairness (Nguyen et.al, 2016). Another study found consumers abandon items in online shopping cart when they see unexpected increase in price while checkout (Bolton, 2015). Eventhough there are many tools for ensuring price transparency, they do not show the lowest price on a day they capture only the highest price as shown in the below figure showing a real-time price tracking of a consumer durable good. Eventhough on $9^{\text {th }}$ Jan 2019, there are two different prices like Rs. 39,200 and Rs. 37,999 are there only the highest price of Rs.39,200 is captured by Keepa a price tracking app. Hence we suggest a conceptual framework to ensure consumer fairness of getting personalized pricing in the follow ing section.


Figure 1: Price tracking of a product

## Treating customers fairly

The framework is as shown below in Figure 2.

## Regulator

- Price discrimination
- Transparency
- Protect the interest of vulnerable customers


## Customer

- Knowledge of the product/ services features
- Willingness to pay
- Digital age
- Frequency of online purchase
- Product/ services return/ cancel rate
- Return history
- Exchange history
- Awareness of data protection, privacy, cookies, browser history
- Perception of recommendation engine results and customer reviews
- Customised reminder for repeated purchase


## Company

- Product / Services costs
- Stock levels
- Market forces
- Assessment of how much generally consumers are willing to pay
- Sales strategy
- Use of analytics for profit maximization or customer delight from data acquired
- Techniques used for capturing consumer reactions
- Adherence to regulatory changes
- Logistics efficiency and optimization
- Return and Exchange handling

Figure 2: Conceptual Framework.
When a customer is online to make a purchase, the parameters that influence his buying process are the knowledge the customer possess regarding the product and service, various brands available for the product, features and specification; to cost at which the customer can afford to pay. At the present scenario it requires the customer to logging into their account to get the product delivered to their doorstep. Thereby, the companies are able to get a track of the amount customer is willing to pay, analyze their digital age, return history, frequency of purchasing online, product/ service return or cancel rate, products and models viewed for a need. Though customers are aware of the analytics and data capture that happens under the hood, a few are in agreement with these activities that help in getting personalized service (Borgesius, Poort, 2017). But most of the cases customers consider this as a threat to privacy and data security.

While most of these activities are done by companies with an objective of profit maximization. Companies also take into account aspects such as product/service cost, stock levels, market dynamics and competition, analyzing customer willingness to pay, technology adoption which include usage of a firms app or website, device used, their sales strategy depending on geography and ethnic groups, adherence to the local regulations and policy measures, their logistics and last mile delivery optimization and efficiency, importance to ensuring delivery of flawless and good quality product and techniques to handle exchange and return of goods to ensure an optimal and efficient offering of personalized smart customer services.

These activities should be monitored on a regular basis under the umbrella of the policies drafted and implemented by regulatory bodies and government. Regulators should ensure a fair play, protect the customers from price discrimination, search discrimination, technology intervention and ensure transparency in how price is being set and information being disclosed by firms regarding the products or services sold.

Looking at the current model of working, customers must be given an option to avoid personalization when they $\log$ in to their account, they should be given a confidence that no information is being concealed. In addition to this, they should also be made aware of the price other customers pay for the same product. Awareness among users that technology intervention such as cookies, crawlers trying to capture their data and being used to perform analytics and the fear of other technological intervention into their privacy are growing areas of concern. Moreover, customers also prefer to have standards that would help them protected against data capture and data privacy, counterfeit products, used or returned products, low quality products and ensuring prompt services.

When the firms offering revolve around these factors, it could be ensured that a win-win situation of firm's objective of profit maximization and customer's interest to be treated fairly will be achieved.

## RESULTS AND DISCUSSION

Customers are offered different prices based on their purchase history.Purchase history is an attribute that is being commonly used by e-commerce firms to analyze customer online behavior and arrive at personalized pricing (Gupta e.tl, 2014). But not many studies have focused on if customers are aware of the touch points which are considered to be personal data identifiers. Customers are not aware of the price differences being offered and the technology interventions happening behind while they are purchasing online. They have a superficial knowledge about cookies and few users in this study said they clear their browsing history. This has been studied by Malgieri and Custer, 2018 to understand if customers are aware of the value of the personal data being used by companies. But with reference to an Indian context has not been studied. Customers are not treated fairly. Looking at the current scenario, a user must be logged into an
account for making a purchase. He is not given an option to opt out of getting personalized services. Also the customer is not aware of the price another customer pays for the same product. Regulatory policy reforms are being undertaken by the government for ensuring transparency and treating customers fairly.A draft ecommerce policy is underway to be published to ensure transparency and regulating this sector.
A baseline offer price has been set by the ecommerce firms already beyond which no offer is given regardless of the time or season of a year. Looking at the above table it can be clear that, regardless of the time period the company offers only $3 \%$ discount above the $24 \%$ offer price. Hence it can be concluded that companies have a baseline offer price being set and this does not get influenced by customers purchase pattern. The customer who has already purchased the product does not get any further discount considering the likelihood that he may consider buying another unit in future.
Summing up, ideally a loyal customer who frequently uses the online ecommerce website for purchase, must have been provided with a lesser price for the product. But looking at the above Table it can be understood that customer has been shown the highest price due to his past behavior pattern. As customers are not aware of the price being paid by other customers, the impact of surge in pricing goes unnoticed. Hence in order to protect the interest of vulnerable customers, a framework covering all aspects to treat customers fairly has been suggested in the above section.

## CONCLUSION

Indian ecommerce firms are technically competent to provide each of its individual online customer with a personalised price and personalised service by analysing their data if they will be price sensitive or insensitive. This would lead to ambiguity, as to if companies are using this technique only for profit maximization or the interest of customer is protected. With around $100 \mathrm{Mn}+$ users who will be comfortable in their vernacular languages is expected to enter online shopping due the increased penetration in the use of smart phone and access to internet. It should be ensured that the Indian ecommerce sector is not considered as a dumping ground and the opinion of vulnerable customers should also be sought to ensure a seamless flow of activities by ensuring treating customers fairly.

This paper has analyzed a real time nuclear family data on how price discrimination is done to different users from a single family. This emphasizes the regulators should have the ecommerce laws and policies for companies to inform people about the specific purpose of processing their data and the boundary beyond which the data collected would be taken as personal data, option to opt out from personalization. Though the product was being bought by the family, the trust and a fear of being cheated next time was evident in all the customers during the in-depth interview. Due to this factor, the company may loss it brand image and trust among its customers in the long run. Hence it becomes inevitable to lay out an overarching regulatory framework to protect the interest of customer by treating them fairly and also help companies maximize profit.

## REFERENCES

Baker, W., Marn, M., \& Zawada, C. (2001). Price smarter on the net. Harvard Business Review, 79(2), 122-127.
BBC News (2000). Amazon's old customers 'pay more'. Reterieved from http://news.bbc.co.uk/2/hi/business/914691.stm.
BCG(2015, 2017). The New Indian: The Many Facets of a Changing Consumer. Retrieved January 24, 2019, from https://www.bcg.com
Borgesius, Frederik Zuiderveen and Poort, Joost, (2017), Online Price Discrimination and EU Data Privacy Law, Journal of Consumer Policy, 40, issue 3, p. 347-366.
CAIT Article(2018). FDI in e-commerce. Retrieved from http://www.cait.in/causes/fdi-in-ecommerce
Forbes (2018). 7 Ways Amazon Is Winning By Acting 'Glocally' In India.Retrieved January 24, 2019, from https://www.forbes.com
Van Noort, H.A. Voorveld, E.A. van Reijmersdal, (2012) Interactivity in brand web sites: cognitive, affective, and behavioral responses explained by consumers' online flow experience, J. Interact. Mark.,pp. 223-234
HBR(2007). How To Reap Higher Profits with Dynamic Pricing. Retrieved from https://sloanreview.mit.edu/article/how-to-reap-higher-profits-with-dynamic-pricing/
Hindermann, Christoph Michael, (2018), Price Discrimination in Online Retail, EconStor Preprints, ZBW - Leibniz Information Centre for Economics.
Hoffman, D.L., Novak, T.P., (2015). Emergent Experience and the Connected Consumer in the Smart Home Assemblage and the Internet of Things (Available at SSRN 2648786).
MSI (2018). MSI Research Priorities, 2018-2020, Retrieved from

## https://www.msi.org/uploads/articles/MSI_RP18-20.pdf

Nair, H. (2007). Intertemporal price discrimination with forward-looking consumers: Application to the US market for console video-games. Quantitative Marketing and Economics, 5(3):239292.

Neuhofer, D. Buhalis, A. Ladkin, (2015) Smart technologies for personalized experiences: a case study in the hospitality domain, Electron. Mark., pp. 243-254
Odlyzko, A. (1996). The bumpy road of electronic commerce. In H. Maurer (Ed.), WebNet 96 World Conf. Web Soc. Proc. (pp. 443-456).
Odlyzko, A. (2003). Privacy, economics, and price discrimination on the Internet. In Proceedings of the 5th international conference on Electronic commerce (pp 355-366).
Palmer (2010),, Customer experience management: a critical review of an emerging idea, J. Serv. Mark., pp. 196-208.
Pantano, Timmermans,(2014) What is smart for retailing? Procedia Environ. Sci., pp. 101-107
Dave Chaffey (2011)., E-business \& e-commerce management: strategy, implementation and practice / - Fifth edition. Harlow, Essex, England: Financial Times Prentice Hall, an imprint of Pearson
Pigou, A. C. (1932). The economics of welfare, 1920. McMillan\&Co., London.

PwC, TechWorld (2018, 2020). Retrieved from https://www.pwc.in
R Gupta, C Pathak, (2014) A Machine Learning Framework for Predicting Purchase by Online Customers based on Dynamic Pricing, Procedia Computer Science, Volume 36, Pages 599-605
Roy, Sanjit Kumar \& Balaji, M S \& Sadeque, Saalem \& Nguyen, Bang \& Melewar, T C, 2017. "Constituents and consequences of smart customer experience in retailing," Technological Forecasting and Social Change, Elsevier, vol. 124(C), pages 257-270.
T.L. Huang, S. Liao, (2015) A model of acceptance of augmented-reality interactive technology: the moderating role of cognitive innovativeness, Electron. Commer. Res.,pp. 269-295
Wuenderlich, N.V., Heinonen, K., Ostrom, A.L., Patricio, L., Sousa, R., Voss, C., Lemmink, J.G., (2015). "Futurizing" smart service: implications for service researchers and managers. J. Serv. Mark. 29 (6/7), 442-447

