



ARTIFICIAL INTELLIGENCE AND PRIVACY OF DIGITAL CONSUMERS

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ABSTRACT

Consumer attraction and loyalty is the focus of all the business, especially in this information age digital consumers are ever-increasing. To maintain their consumer base, online businesses have started involving the use of Artificial Intelligence (hereinafter referred to as AI) to understand their consumers better and to provide them with the best experiences on their platform. AI caters to the needs of the consumers, stores their preferences, and provides them with choices based on their interest automatically. This makes the consumers engage more with the businesses as their individual need is considered. With AI, businesses capture a lot of personal data through questions regarding personal information and recording of browsing habits of consumers to maintain their consumer base. Secondly, these online business platforms through a series of emails or messages, inform, promote, and advertise about any event or sale on their respective sites, even when the consumers do not subscribe to such notifications. These techniques of consumer attraction intrude into the privacy of individuals and attract liability on part of the businesses.

In this paper, firstly, I shall discuss how businesses have adapted AI to gain consumers and how it is affecting the

economy in the context of India digital market. Secondly, through an empirical study, I will analyse consumer interests and their choice and also their awareness about consumer protection and the laws relating to it. Thirdly, I will be dealing with the privacy issues that arise from the usage of AI and the concept of digital consumerism.

What is Artificial Intelligence?

There is no one clear cut definition of Artificial Intelligence (hereinafter referred to as AI), but it means machines capable of performing tasks that require human intelligence¹. They learn from experiences, improve their capabilities, and perform cognitive tasks. They can imitate certain human-mind functions like learning, problem-solving and language interactions². AI was developed with the purpose to help humans in solving complex tasks and make advanced decisions. It also lessens hard human labour, thus making our lives comfortable and easy. AI functions by combining a large amount of data with intelligent algorithms, helping the software to learn from patterns. It combines information from different sources, analyses data and produces an explained output. Key components of AI are machine learning, deep learning, neural network, cloud computing, Natural language processing and computer vision. AI has been broadly divided into two categories, one is **Narrow AI** and the other is **Artificial General Intelligence**. **Narrow AI** involves performing a single task effectively, but they perform under constraints and limitations, which lacks even basic human intelligence, like predicting the weather. These are more currently in use, whereas

¹Artificial Intelligence, Built In, <https://builtin.com/artificial-intelligence>.

² H. Steering AI and advanced ICT's for knowledge societies: Rights, Openness, Access, and Multi-stake holder Perspective, 10(1st ed., 2019).



Artificial General Intelligence is referred to as strong AI, it has general intelligence like humans and applies this intelligence to perform tasks, like Advanced Robotics. Globally, over the years AI has developed significantly, and it is expected to grow 99.94 billion dollars by 2023 at a compound growth rate of 34.86%³. In India, the AI market, as of July 2020 has been valued at 6.4 billion dollars and is expected to potentially grow in the coming years with a major contribution to the GDP of the country⁴. AI has been adopted in various sectors in the market, like health care industries, business organisations etc., to help perform tasks and lessen the burden of human labour. E-commerce Businesses have also come up with virtual assistant AI technology like Amazon Echo, Google Assistant, Siri which aids the consumers to perform their task⁵. Consumers can control these virtual assistants with their voice and can order them to perform various tasks play music, get information, remind them about important tasks to be completed, control their smart homes, read the news to them, etc. Similarly, wearable devices like fit bits and smartwatches operate with the use of AI, which people use as healthcare tools as it helps them to check their heartbeats, records sleep durations and also suggest healthcare tips, at the same time it has other usages as well. AI is dynamic as it can perform a

variety of tasks, hence due to this character of AI it has been welcomed all across the world and in future, it is expected that its performance will be more versatile and accurate. All over the world businesses have largely adopted the use of AI. The main purpose is to improve their consumer experiences and maintain their consumer base. With Artificial Intelligence, business organizations aim to provide their consumers with quality experiences and at the same time collect consumer data through personal questions or recording of browsing habits to attract consumers.

Aggregators and their role in impacting purchasing intent of consumers

The distribution channel in the market majorly consists of producers, distributors, and consumers. Under the indirect distribution channel, there is an addition to the distribution channel, that is the role aggregators⁶. Aggregators refers to huge online business platforms consisting of multiple service producers under one brand name⁷. These platforms are either in the form of websites or mobile applications. For example, like Amazon, Uber, Swiggy etc., these platforms consist of different products from multiple service providers like local vendors etc. and connect directly with their consumers but under their respective brand

³Global AI Market Report(2020-2030)-Covid-19 growth and change, GlobeNewswire (June 4, 2020), [https://www.globenewswire.com/news-release/2020/06/04/2043624/0/en/Global-Artificial-Intelligence-Market-Report-2020-to-2030-COVID-19-Growth-and-Change.html#:~:text=The%20global%20artificial%20intelligence%20market%20is%20expected%20to%20grow%20from,\(CAGR\)%20of%2043.39%25,](https://www.globenewswire.com/news-release/2020/06/04/2043624/0/en/Global-Artificial-Intelligence-Market-Report-2020-to-2030-COVID-19-Growth-and-Change.html#:~:text=The%20global%20artificial%20intelligence%20market%20is%20expected%20to%20grow%20from,(CAGR)%20of%2043.39%25,)

⁴ Siddhartha Thomas, State of AI in India 2020, Analytics India Magazine (Sept. 8, 2020), <https://analyticsindiamag.com/report-state-of-artificial-intelligence-in-india-2020/>.

⁵ What a Virtual assistant is and how it works, Lifewire, available at <https://www.lifewire.com/virtual-assistants-4138533>.

⁶ Types of distribution channel, Economics Discussion, <https://www.economicsdiscussion.net/distribution-channel/types-of-distribution-channels/31760>.

⁷ The Aggregator model- rise, challenges, and scope of this approach in India, First Post, <https://www.firstpost.com/business/biztech/the-aggregator-model-rise-challenges-and-scope-of-this-approach-in-india-3728527.html>.



name only⁸. These aggregators focus on intent-based marketing, this involves the marketing of a product or a service based on the individual consumer interest and intent to make a purchase decision, recorded through their purchasing behaviour, and browsing habits⁹. It also focuses on external data to understand what their consumers search on external platforms or different websites. A huge amount of consumer data is collected by such business organizations not only from their platforms but from the consumer's general activities on similar platforms as well¹⁰. They further transform these data into precious commodities and use it to cater to their consumer's individual needs, for example, Netflix recommends videos based on watch history. Similarly, Amazon recommends products based on previous purchases or on most browsing habits. They have also come up with strategies like dispatch the order. They dispatch the order even before the consumer places an order. Amazon uses this strategy for Amazon fresh and Amazon Prime Products, wherein with the use of Artificial Intelligence, it forecasts the demand of the products based on the purchase intent and interest of consumers in a particular area, based on this information the groceries or prime products are already stored in the warehouse of that particular area and as soon as the consumer order for it they receive it within few hours of ordering¹¹.

With such a quick delivery mechanism in place and the added benefits of Amazon Prime Subscription, Amazon can attract far more consumers and expand its consumer base than its competitors. This is an example of how aggregators like Amazon with the help of AI collect the personal information of their consumers and transforms these data into precisions commodities for their gains.

Concept of entity resolution and its usage to influence consumers.

People in their day-to-day lives as consumers engage in various activities like surfing through multiple social media platforms, online purchases & etc, through these activities they share their credit/debit card information, location, and their interests. With the help of Artificial Intelligence, this information are stored as the data points of the consumers and are further used by businesses as touchpoints to target consumers by proving them with personalised product based on their interest and promoting products, they are likely to purchase, hence creating an opportunity for the consumers to choose their brand over their competitors¹². So much data is generated every day everywhere that tools like Google Analytics with the help of data from other external data collecting companies combine and store all the data points of every consumer through an analytical model called Entity Resolution¹³.

⁸ Ibid.

⁹What is Intent based Marketing and why is it important, Markletic, available at <https://www.markletic.com/blog/what-is-intent-based-marketing-and-why-is-it-important/>.

¹⁰ Ibid.

¹¹ Dave Chaffey, Amazon.com marketing strategy: A business case study, Smart Insights, available at <https://www.smartinsights.com/digital-marketing-strategy/online-business-revenue-models/amazon-case-study/>.

¹² 20 consumer touchpoints that will optimize your consumer journey, HubSpot, available at <https://blog.hubspot.com/service/consumer-touchpoints>.

¹³ Entity Resolution: Key to creating a master data framework, Dun & Bradstreet, <https://www.dnb.com/perspectives/master-data/business-entity-resolution-with-master-data-management.html#:~:text=Entity%20resolution%20is%20the%20process,person%2C%20or%20other%20data%20type.&text=This%20single%20version%20>



This method is adopted to understand each and every consumer's individual choices and interests, it helps the companies to sell them products of their choices, promote relevant advertisement, political campaigns, etc. For example, in the infamous Cambridge Analytica case, Cambridge Analytica, a political consulting firm involved in the political campaign for Donald Trump for the 2016 Presidential election in the United States of America, had obtained personal data of about 87 million Facebook users from their profiles through the help of Facebook¹⁴. Facebook agreed to have leaked the personal data of 87 million users to Cambridge Analytica which was further used for Donald Trump's campaign¹⁵. The data of these users was collected through a personality quiz on Facebook wherein users' interests, location, pages they liked, preferences, purchase intent, etc., were recorded to understand user's political inclination. With the help of this potential voters were manipulated and influenced to gain a maximum number of votes in their favour. The question here is not how Cambridge Analytica assisted in the campaign but how a huge platform like the Facebook leaked data of millions of its users without their consent. Users in their daily lives give away a lot of data to Facebook. From uploading their pictures to sharing their location, the places they visit, their individual

choices, etc., all these data are stored by Facebook, which keeps track of the activities of its users. Secondly, it has a feature of deactivating an account instead of permanently deleting of account, this suggests that even after a user deactivates his or her account, his data or previous activities will still be stored permanently, that is even if the users want to delete all their data, they refrain from doing it. Thirdly, Facebook allows users to log in to third-party apps, by doing this it can track the activities of its users on other platforms, hence it stores data more than that is shared on its platform. All these data are collected with the help of AI through quizzes, games, pages liked etc.

The Scenario of digital market in India

The Indian e-commerce market is growing at a faster rate, as per reports it is expected to reach 200 billion dollars by 2026¹⁶ with 850 million users by 2025¹⁷, it is also expected to surpass the United States of America to become the second-largest e-commerce market in the world by 2034¹⁸. This paradigm shift from offline consumerism to online can be attributed to the massive online campaign and marketing that these business giants have taken up, which has created a new space for consumer expectations¹⁹. Consumers find it convenient and timesaving to shop on online platforms which also ensures them faster and

from truth, from growth to risk mitigation,

¹⁴ Issie Lapowsky, How Cambridge Analytica Sparked the Great Privacy Awakening, Wired, <https://www.wired.com/story/cambridge-analytica-facebook-privacy-awakening/>, The Facebook and Cambridge Analytica scandal, explained with simple diagram, Vox, available at <https://www.vox.com/policy-and-politics/2018/3/23/17151916/facebook-cambridge-analytica-trump-diagram>.

¹⁵ Ibid.

¹⁶ Ecommerce Industry in India, India Brand Equity Foundation, (Dec 4, 2020), <https://www.ibef.org/industry/ecommerce.aspx>.

¹⁷ Bain and Flipkart foresee 350 million online shoppers by 2025, Consultancy.in, (June 29, 2020), <https://www.consultancy.in/news/3139/bain-and-flipkart-foresee-350-million-online-shoppers-by-2025>.

¹⁸ India to overtake US as world's largest e-commerce market, The Economics Times, (Dec. 5, 2016).

¹⁹ Supra 16.



cheaper services. Moreover, with major online sales like the Flipkart Big Billion Sale, Amazon's Great Indian Festivals, etc, consumers can get a good quality product at a cheaper price, hence entices them to engage more with these platforms. Then features like voice search, or search option in vernacular languages, through pictures have attracted the attention of the Indian consumers and made it easy for them to shop online. Loyalty programs like subscription services have also helped this e-commerce to create their loyalty base providing them with personalized services that makes the consumers feel special and it also helps the platforms to keep their consumers close to their websites. All of this suggest how these business organisations have entered the Indian market and created a safer place for themselves in the digital market. They have through the use of AI technology understood the Indian mindset and therefore have created strategies which will specifically cater to the Indian audience. Hence can penetrate the Indian markets. The consumers are so much attached to the platforms that give away their personal information without any hesitation to these businesses who then convert it into precious commodities for their business.

Challenges of digital consumers

Online platforms or E-commerce are extremely powerful, and they govern consumer behaviour to a large extent. In the form of cookies and otherwise, they accumulate a huge amount of information about their consumers that it becomes easy for them to manipulate their consumers into buying products or availing themselves services that they might not have done. These

websites constantly influence their consumers' interest with the help of fake messages like a particular product is doing good and that if they are not purchasing it then they are losing it to other consumers. These messages instigate the consumers to make an impulse purchase even if they do not intend to do so. They use strategies like providing the availing of service button in bright colours which would attract the consumer's attention and hiding the opt-out of service link in the drop-down menu or somewhere where is not visible easily. Secondly, widely used digital platforms like Facebook which has acquired other social media platforms like Instagram, WhatsApp, etc, it becomes difficult for users to completely abandon it. Moreover, in the absence of any other safer alternative's consumers fear that they might lose all their connection made through the platform if they abandon it²⁰. Many users also feel it more convenient to log in through their Facebook account on third-party apps instead of creating a new account each time they visit a new website. Platforms like Amazon make strategies to maintain and attract consumers by providing them with a lot of incentives like faster delivery, discounts, and personalised products etc., which wins the trust of the consumers and becomes difficult for them to switch away without a lot of personal efforts²¹. It is clear from the above discussion that huge online platforms have spread their roots all over the digital market and in the absence of any other safer alternatives, consumers are bound to opt for these platforms. Additionally, with the introduction of the Internet of Things, companies can track every movement of their

²⁰ Bhaskar Chakravoti, Why it's hard for users to control their data, Harvard Business Review, (Jan 30,

2020), <https://hbr.org/2020/01/why-companies-make-it-so-hard-for-users-to-control-their-data>.

²¹ Ibid.



consumers, this makes it fairly easy for them to manipulate their consumers' decision-making concerning purchasing behaviour and developing interest in particular product or services. Consumers are being regulated to such an extent by these online platforms, without even realising that it becomes difficult for them to make conscious decisions in the digit market. This indicates the power and control that these online platforms have over the consumers, which makes it an unbalanced ecosystem for the consumers.

Legal perspective: Relevant laws for consumers in India

CONSUMER PROTECTION ACT 2019.

This is the era of commerce and digital marketing, and there is a drastic growth in the number of digital consumers, with such significant growth, consumers face an enumerable number of challenges²². Hence to create a safe environment for digital consumers, the Government of India enacted the Consumer Protection Act, 2019 which with other consumer protection issues, specifically deals with the problems of digital consumers. This Act replaces the previous Consumer Protection Act 1986 which dealt only with offline or marketplace consumer grievances, but this act addresses and imposes strict liability on electronic service providers as well. There is a proper procedure laid down for the filing of complaint regarding any dispute and a grievance mechanism set up to address any dispute related to consumer protection, that is the Central Consumer Protection Authority which will be empowered to impose penalties and other reasonability by the Central

Government. Then in each state & district, a consumer dispute redressal commission will be set up to address consumer disputes at the state level. The Act includes six consumer protection rights (i) be protected against marketing of goods and services which are hazardous to life and property; (ii) be informed of the quality, quantity, potency, purity, standard and price of goods or services; (iii) be assured of access to a variety of goods or services at competitive prices; and (iv) seek redressal against unfair or restrictive trade practices²³. This Act brings necessary changes to the previously existing consumer protection law in India, it is progressive and ensures faster delivery of justice. The Government of India also introduced the Consumer Protection (E-commerce) Rules, 2020 to complement with Consumer Protection Act 2020. It lays down the duties and liabilities of the e-commerce platforms, it aims to bring transparency and disclosure of information by the e-commerce platforms to the consumers and prohibits unfair trade practises in the digital market²⁴. The Government of India through both the Acts aim at creating a balanced ecosystem for both the consumers and the sellers, which will help in the growth of the digital market in India potentially contributing to the GDP of the country.

PERSONAL DATA PROTECTION BILL 2019

The personal data protection bill 2019 was introduced in the Lok Sabha to particularly aim at protecting the personal data of individuals, it applies to the processing of data by the government, companies incorporated in India and Foreign companies as well, total it covers all the business under

²² Section 7(ii)(b), Consumer Protection Act, 2019.

²³ The Consumer Protection Bill 2019, PRS legislative Research.

<https://www.prsindia.org/billtrack/consumer-protection-bill-2019>.

²⁴ Consumer Protection Ecommerce Rules, 2020.



its ambit²⁵. It categorises certain data like financial data, biometrics, religious or political belief into sensitive personal data²⁶ and certain data as critical personal data²⁷. It provides rights to the individuals or consumers whose data will be processed to ask the entity doing so, about how much of their personal data will be processed, can seek correction of inaccurate or incomplete personal data, erase their data and most importantly it stresses on the point of consent. If an individual withdraws his or her consent to allow for their data transfer or processing, then the business entities or other concerned body cannot use their data anymore. This puts an obligation on the entities to take the consent of the user before processing or transferring their data and requires all the entities to make organizational changes to ensure better data protection. For social media intermediaries having excess users the bill puts an obligation to include a voluntary user verification mechanism for users in India²⁸. The bill mandates that all the sensitive personal data and critical personal data will be stored in India only and cannot be transferred to other countries. Sensitive Personal data can only be transferred outside India if it fulfils the requirements similar to those under the General Data Protection Regulation. This bill also provides for the setting up of a Data Protection Authority that will help protect the interest of individuals, prevent the misuse of their data, and ensure transparency and compliance with the laws. It includes that the government can ask for any valuable non-

personal data from the business entities to share with. It further lays down punishments for those found violating any provisions under the law. the Government through this bill aims to ensure that the personal data of its citizens are protected, and it prevents misuse of the data by a business organization.

Way Forward

It is an inescapable fact that in today's time technology has become the way to the world and in future, it will only grow, which means that there will be a greater number of digital platforms and an increase in the number of online consumers. Therefore, in order to maintain a balance in the market, the Government and Business Organization at their level must understand the importance of data and ensure a safer marketplace for consumers.

1. Government

The Indian digital economy is expected to reach One trillion dollars by 2022²⁹, this means a greater number of e-commerce platforms, therefore more accumulation of data. The government of India to protect, control and prevent the misuse of its citizen's data has come up with the Personal Data Protection Bill and through this bill, the government intends to make it mandatory for all the businesses operating in India to comply with the law. This law is a positive step in ensuring better transparency and protection of the data of the citizens. It also forbids the transfer and use of sensitive information without the consent of the user.

²⁵ The Personal Data Protection Bill 2019, PRS legislative research, <https://www.prsindia.org/billtrack/personal-data-protection-bill-2019>.

²⁶ The Personal Data Protection Bill, 2019 (pending)

²⁷ Ibid.

²⁸ Supra note 24.

²⁹ V. Govindarajan, Anup Srivastav and Luminita Enache, How India Plans to Protect Consumer Data, Harvard Business Review, (Dec.18, 2019), <https://hbr.org/2019/12/how-india-plans-to-protect-consumer-data>.



the government stresses the point of consent as now the right to privacy of citizens is a fundamental right and they have the right to withdraw, erase and rectify any personal information provided to the entities. The Bill exempts the Government from its ambit for the collection of data for official purposes. The Government collects and stores data for various purposes, like Aadhar information of all the Aadhaar cardholder is stored with the Unique Identification Authority of India, then monitoring of data by the Central Monitoring System, National Social Registry, etc. Collection and storing data by these agencies are permitted by the government as it is for the welfare of the citizens. Exempting agencies without any liability is a limitation of this bill, even though data is collected to maintain a database of its citizens and for their welfare, these agencies should make the citizens aware of how their data will be used and for what purposes. In recent times the Arogya App was designed for creating awareness about Covid-19. In this app, citizens were required to provide their personal information which the central government could access. But there remains ambiguity in the minds of the citizens as there is no clarity about the period the data will stored, which all agencies have access to it and who has created the Application. In such instances the citizens expect the government to provide them with the proper information they seek under the Right to Information Act 2005 (hereinafter referred as RTI). The Right to Information act was introduced for better

accountability of the government towards the queries of the citizens. It is also said to complement the laws of privacy as both these laws strive to make the government more transparent and answerable towards its citizens. Though the RTI Act was welcomed with a positive approach it seems to slowly die over the years. As per reports, about 40-60 lakhs of RTI applications are filed every year but less than 45% of them have received information that they had sought³⁰. About 2.18 lakhs of appeals and complaints are still pending with the State Information Commission. The government has also rejected applications involving queries related to demonetisation and the recent PM-Care fund for the Covid-19 pandemic³¹. Rejection of applications and unaccountability on crucial matters have created suspicion and ambiguity in the minds of citizens about the acts of the government, and one of the reasons for the less filing of the RTI application³². Today the need is that the Government comes up with policies for the governmental agencies as well so that citizens right to information is considered and their valid queries are resolved. So that they can be assured that their data is safe with the government. This will also ensure that the government is more transparent and answerable in its approach. The government can also refer to the privacy laws of other countries, like the GDPR and embed stricter rules favourable to India. The Consumer Protection Act 2019 is also a positive step that will help the government to have stringent control over the platforms on the

³⁰ Maneesh Chibber, In 15 years In 15 years, RTI has gone from Indian citizens' most powerful tool to an Act on life support, ThePrint, (June 24, 2020), <https://theprint.in/opinion/in-15-years-rti-has-gone-from-indian-citizens-most-powerful-tool-to-an-act-on-life-support/447507/>.

³¹ K. Satish Kumar, The paradox of our rights to information and privacy, live mint, (Dec 11, 2019), <https://www.livemint.com/opinion/online-views/the-paradox-of-our-rights-to-information-and-privacy-11576085219492.html>.

³² Ibid.



digital market and create a safer environment for digital consumers. Also, the government must ensure that the laws enacted by it are properly complied by the Businesses and other authorities.

2. Business Organisation

With the growing amount of e-commerce on digital platforms, there is a paradigm shift of the consumers from offline to online market³³. At the same time, consumers now have various options and platforms to look for. Hence there is always competition among these platforms to attract the attention of a greater number of consumers. In today's time, consumers are slowly becoming more aware of their data being used by these platforms. Through documentaries and articles, consumers are understanding how they are being lured into providing their personal data which can further act as a possible threat for them. Hence consumers are getting smarter and more careful about their data. So, for organizations on digital platforms to retain consumers it is pertinent for them to assure their consumers that the data they provide is safe and is not misused by them. For example, Apple in the case of the **Federal Bureau of Investigation-Apple Encryption** dispute won the trust of its consumers by ensuring that their data is safe and not even Apple can access it. It was after this that it was able to attract and retain more consumers. In this particular case the FBI had asked Apple to decrypt an iPhone owned by one of the perpetrators in 2015 San

Bernardino attack³⁴. Since Apple does not have any feature to decrypt, they refused to do. For that the FBI filled a case requesting the court to order Apple to create a custom operating system to hack iPhones by disabling the key security features in iPhones. Apple opposed to this order stating it to be unlawful and it would pose a potential threat to the data of all its users. The Chief Executive Officer of Apple, Mr Tim Cook stood by his stand and for this, the company gained a large number of supports from its users, eventually, company was able to win the trust of the consumers³⁵. Therefore, even if Apple products are expensive than other brands in the market, the trust factor drives them more consumers. This is an example of how organizations can gain the trust of their consumers by being transparent and true to them. Business Organisation should adopt changes to ensure better protection of their consumers' data. They should adopt the process of perturbation to help preserve the useful information in the original data collected from the consumers' and at the same time reducing the opportunity for any invader to violate privacy³⁶. Moreover, the companies can synthesize data required for their marketing purposes from the original data, this will ensure the protection of the original data and prevent the loss of information.³⁷ They should make their consumers aware of how their data is being processed and how safe their data is with the organization. Companies should provide safe and secure payment mechanisms and pair up

³³ Supra 12.

³⁴ Leander Kahney, the FBI wanted a back door to iPhone. Time Cook said no, Wired, (April 16, 2019), <https://www.wired.com/story/the-time-tim-cook-stood-his-ground-against-fbi/>, Apple vs. FBI, concerning an order requiring Apple to create custom software to assist the FBI in hacking a seized iPhone, <https://epic.org/amicus/crypto/apple/>.

³⁵ See Custom letter – Apple at <https://www.apple.com/consumer-letter/>.

³⁶ Sachin Gupta and Mathew Schneider, Protecting Consumers' Privacy requires more than anonymizing their data, Harvard Business Review, (June 1, 2018), <https://hbr.org/2018/06/protecting-consumers-privacy-requires-more-than-anonymizing-their-data>.

³⁷ Ibid.



with secured platforms for payments, to prevent frauds and scams. They should consider taking the consent of their consumers before using their data for any major purposes and finally should take measures to ensure that there is no misuse of consumers personal data on their part.

One more important point would be to inculcate the use of single sign on authentication.

Single Sign on authentication

Single Sign on Authentication is an online service that will help users to log in to multiple platforms using a single login in detail that is using one username, one login Id and one password³⁸. This will simplify the process of login and will also add an extra layer of protection. It will help companies to manage privacy on their platforms as this service will reduce the security risks for consumers and vendors³⁹. Companies can strengthen their identity protection. Users can create one strong password and use it on multiple platforms, this will save reduce password fatigue and simplify password management.

Empirical Study on Consumer Awareness and its Analysis

To understand the awareness among consumers, I conducted an empirical survey⁴⁰. For the study 20 individuals, across different age groups were questioned to understand their awareness about data privacy and the laws relating to it. The first question put to them was the time they spend

on the internet on an average in a week. To this, the answer varied from 12hrs in a week to all the time every single day. Second, they were asked as to what all they use the internet for, about 30% of them responded that they use it for educational work, 30% for entertainment, 5% for online shopping and 75% for all the three. Third, they were asked about their preferred type of market and the reason for the same. 70% of the individuals who responded prefer online market over the offline market because it is easy and convenient to access, good quality products at a discounted price, save time, variety of products in one platform, a wide range of options and easy to exchange. Next, they were asked about the issue of data privacy. The first question put to them was how concerned they are about their security and privacy on these platforms, 50% of the individuals responded that they very much concerned about their security and 50% of them are slightly concerned but not to a larger extent. Then about 35% of the total individuals who responded answered that have been the victim of online frauds and about 40% of such victims avoided using the application or the website, 40% of them registered a complaint with the concerned authority and 10% of them contacted the bank to close their accounts to prevent any more loss of money. They were then asked if they have been ever asked to provide their personal information on the e-commerce platforms they visited, to this 85% replied in positive, then they were asked as to how many times they refuse to give their data, to this question 40% answered that they always

³⁸ The Pros and Cons to Single Sign- On (SSO), Renovo Data- Data Protection Blog , <https://www.renovodata.com/blog/2019/01/17/single-sign-on>

³⁹ Ibid.

⁴⁰See

https://docs.google.com/forms/d/1CG0mBC4AyuIXufl41cGGsrADiw3qwiR_kS9r4HDzsVw/edit#responses.



refuse to give out their data, 50% responded that they refuse sometimes and 10% responded that they never refuse to give out their personal data to the e-commerce entities. When asked the reason for refusing to give their data, 55% of them responded that they do not trust the organizations with their data, 40% of them answered that the websites that ask for their personal data do not disclose them as to how they plan to use their data and some believed that the information asked is not proportional to the service provided by the particular websites. Thereafter they were asked the measures that they take to protect their security and data on these platforms, some replied that they check the authenticity of the website before using it, some permit data only if it is mandatory, some keep strong passwords, some of them disclose bank details only on trusted websites, refrain from giving personal data and phone numbers on any website, and use a data protection software and install antivirus, and some just avoid using the internet as much as possible. Then they were questioned on their awareness about the recent consumer protection act 2020 and the data protection bill 2019, only 40% of them are aware of the consumer protection act 2020 and 60% do not know of it, the latter question only 45% of the total individuals who responded are aware of the data protection bill 2019.

The first part of the survey involved question relating to the usage of the internet and the preference of the individuals on the types of market. From the responses, it is clear that the majority of them are a regular user of the internet and prefer online markets over offline markets. As discussed above and also observed through this survey that

convenience, versatility, cost, and timesaving are the major factors that drive consumers towards the online market⁴¹. The second part of the study involved questions relating to consumer awareness. It was observed that though the individual as consumers is concerned about their online security and data privacy, they do not take any major step to address their concern. For example, people who have been a victim of online fraud, most of them avoided using the application or website instead of filing any complaint. This indicates that maybe there is a lack of awareness about the procedure to file a complaint or that they did not want to indulge in any resolution mechanism, hence they preferred to avoid it. Instead of avoiding such frauds, consumers should take the right actions or file a complaint at the website where such fraud was committed so that the organizations are aware of it and this will also alert other consumers. Most of the individuals who responded refrain from giving their personal data because there is a lack of clarity on how their data will be processed by the companies and for this reason, they do not trust the companies with their data. This points towards the lack of trust the consumers have in the companies asking for their data and they think that companies should be more transparent and clearer about the usage of their data. This is a good sign because consumers understand that they have a right to know what happens to their personal data, at the same time most of them take precautions and measures from their own side to protect their data as far as possible, but even after that, there seems a lack of awareness among these individuals about the laws governing data privacy and consumer protection in the country. This may be because the laws are relatively new, and

⁴¹ Supra note 17.



the data privacy bill has not been passed yet but at the same time consumers should keep themselves informed about the laws so that they understand how they can address issues relating to privacy and consumer protection and the authority they can file their complaint with. This also indicates that since online consumerism is increasing in India, the government should take major initiatives to aware its citizens of the relevant laws on these issues. It is important that consumers become more aware of what they do with their data on the digital platforms and that the companies are obligated to provide them with information about the usage of their data.

CONCLUSION

The world is changing and is moving more and more towards digitisation. It is now more of a technology-driven world than it was earlier. The introduction of various technologies has made human lives more convenient and easier, and it is true to say that technologies will govern the future. In this paper I have briefly discussed one of such technologies that have been adopted widely, is Artificial Intelligence. AI, as explained above, is very dynamic and functions very similarly to that of a human mind. It performs cognitive tasks that require human intelligence with precision and accuracy. This is the very reason for its acceptance across various sectors. Big companies have also adopted AI to develop personalized product like smart devices, virtual assistants, etc. These products help to perform various day-to-day activities which make human life easier and faster. Thus, the innovation of AI has proved to be helpful for humans. The next part of the paper explains how the use of AI has impacted consumerism. In this, I tried to explain the power of aggregators like Amazon in influencing consumer behaviour

by making strategies through the use of AI to attract consumers and successfully retain their consumer base. Strategies like prime delivery & personalised product recommendations have worked in their favour and have helped them to gain more control in the digital market as compared to their competitors. And through rigorous advertisement promoting the quality of their products and services, they can lure consumers into buying their products. Then I discussed the concept of entity resolution, where various data points of individuals like their personal information, political affiliations, etc, is stored in one database which helps companies to understand every consumer's individual choices and interests. This way they can cater to the individual needs of the consumers and expand their consumer base. Sometimes these user data or consumer data is exploited by business giants for their benefits, for example how Facebook helped Cambridge Analytica by providing personal data of 87 million users to help them in the 2016 presidential election campaign. This exposed the dark side of such huge platforms that lures consumers in providing their personal information which is then converted into precious commodities by these companies. This explains that with every new development there comes some serious challenges. Consumer data privacy and security is one such concern faced by consumers all over the world. In India, the digital market is growing at a faster rate, welcoming multiple e-commerce platforms to establish their businesses. Due to the increase in digital platforms, there is a shift of consumers from offline to online markets. My empirical study also suggested that most individuals prefer online markets over offline markets as it is more convenient, easy and time-saving. It is also true that online



businesses have put in efforts to make it more adaptable and convenient for the Indian consumers, like search options available in regional languages, voice search options, etc. with multiple platforms online there is a huge accumulation of data which acts as a potential threat to consumer's data. Unlike in other developed countries like the United States of America and the United Kingdom where consumers are aware of their legal rights, in India due to low literacy, there exists a lack of awareness among the consumers about legal rights. In the empirical study on consumer awareness discussed above, it was observed that when faced with any online frauds or scams, they simply avoid using the application or website instead of taking any active actions. Also, the majority of the individuals who responded, even though all of them knew about data protection and security but most of them were unaware of the laws governing it. This is the area of concern because unless consumers are themselves not aware of their rights, they will not be able to tackle the issues of data privacy and consumer exploitation. One of the major reason for such unawareness was because there was no law protecting the digital consumers, but now the government has enacted the Consumers Protection Act 2020 and the Consumer Protection (E-commerce) Rules 2020, which provides online consumers with their necessary rights, relief and a platform to file their grievances. This law is expected to ensure better protection and security of digital consumers and will prevent their exploitation by the business giants. The Personal Data Protection Bill 2019 also lays down strict guidelines to protect the interest of the individuals and punish the business or e-commerce violating any of its provisions. This is a positive step that will not only ensure a better ecosystem

for digital consumers but will also make them more aware of their rights. Companies or business organizations should modify or change their policies for better protection of their consumer data, take steps to preserve the original data provided to them and be more accountable to their consumers. The Government should also ensure that the companies comply with the required laws, create more awareness about the consumer protection laws among the citizens through the help of NGO's, etc. In the end, it is only through the cooperation and contribution of the Government, Companies and Consumers that will help ensure a better and safer online market. There is no denying that humans are growing closer and closer to technologies, with this there is an increase in the number of digital platforms and a variety of choices for consumers. Due to affordability, versatility and convenience consumers are driven more towards digital platforms and this is expected to increase more in the future. With this, there will be a greater number of challenges, but we should not let it outweigh the benefits of digital platforms instead efforts should be to amplify the benefits of new technology and digital platforms.
