5. The Impact of AI on Consumerism

Dr. Bhadrappa Haralayya

Professor and HOD,
Department of MBA,
Lingaraj Appa Engineering College Bidar,
Karnataka, India.

Abstract:

The effects of artificial intelligence on purchasing decisions are the focus of this research. This paper's focus is on the research of consumer behavior change with the assumption that AI applications will employ various types of analytics to learn more about consumers and their requirements. Research is now being conducted to analyze secondary sources like scholarly journals and published articles. According to the results of the study, using the data collected by these systems will help businesses better target and persuade customers to make purchases. In this article, we examine the effects of AI on consumer behavior and the potential influence AI will have in shaping future market trends.

Keywords: Artificial intelligence, consumer, AI, Consumer Behaviors.

5.1 Introduction:

After using AI as a reference point for more than a decade, we can now confidently declare that its intelligent implementation into the future has begun. In the future that we have, artificial intelligence will play a significant role in many different sectors. As the massive contact between consumers and companies across the buyer's journey ushers in a great deal of innovation, it stands to reason that AI will have an effect not just on industries but also on consumers' behavior and habits.

It's often believed that AI will have a greater effect on certain industries than others in the manufacturing sector. However, recent studies have indicated that AI will have a much more noticeable effect on consumers. In other words, the current purchasing behavior is being affected by artificial intelligence.

After using AI as a talking point for more than a decade, we can now confidently declare that its intelligent implementation into the future has begun. The trajectory of AI is predetermined by the present.

and it will significantly affect many different markets. The widespread engagement between consumers and companies across the entire buyer's journey promises to usher in a plethora of new developments across a wide range of industries.

Recent studies have indicated that AI will have far greater effects on consumers than on other types of industrial enterprises, contrary to popular belief. In other words, AI is already having an effect on the way that people shop today.
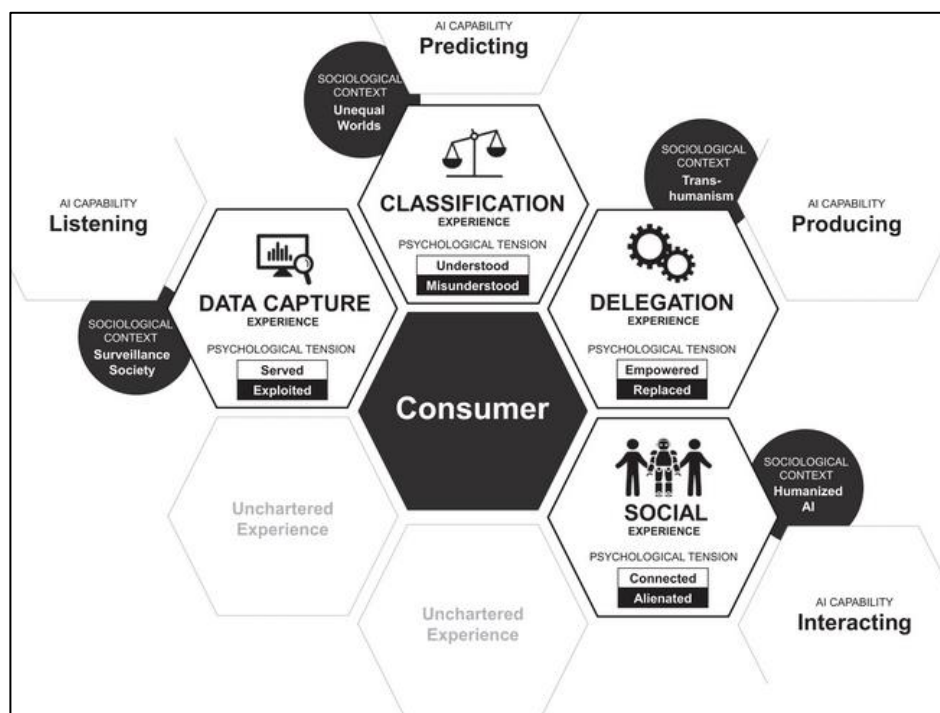

Figure 5.1 : The Consumer AI Experience

We outline potential advantages and disadvantages from the consumer's point of view for each type of experience and suggest that managers qualify their focus on advantages by paying attention to disadvantages.

For example, data capture may serve or exploit consumers, classification may understand or misunderstand them, delegation may empower or replace consumers, and social experiences may connect or alienate consumers.

Next, we take a closer look at these events, drawing out the social scientific underpinnings, management implications, and potential future lines of inquiry that have emerged from them.

5.2 Objectives:

- The study of consumer behavior shifts is motivated by the expectation that AI applications will employ a wide range of analytic tools to learn more about consumers and their requirements.
- Learn more about how consumers see interactions with artificial intelligence.
- To learn how demographics influence the buying habits of different types of customers (gender, age, educational level, and annual income).

5.3 Review of Literature:

Artificial intelligence (AI) is a computerized system that uses data to replicate the best human performance on a given task. Big Data, which refers to the analytical methods and schemes that make use of the information obtained by businesses from their online interactions with clients all over the world, is the single most important component of artificial intelligence.

The major characteristics of Big Data are its enormous volume, speed, and diversity; Big Data is the historical findings obtained from the internet. Release date set for 12/5/2020 on e-readers 'Mona hammed musa,' as the saying goes. science journal of economics and commerce 296 (Chaffey & Ellis-Chadwick, 2019).

Artificial intelligence (AI) processes both structured and unstructured forms of massive data. Traditional datasets fall under the category of "structured data," which includes things like demographic information, transaction records, and browser histories; this data is easily organized in a spreadsheet; and artificial intelligence can process it using complex

computations to yield accurate results in real time (Kietzmann, 2018). The majority of consumer-generated data is unstructured, making it more difficult to manage and present in a way that makes sense to humans (i.e., in spreadsheets) (Sponder & Khan, 2018) [2]

In their research, Eze and Bello adenike (2016) looked at what influences Nigerian consumers' purchasing decisions. The purpose of the research was to investigate the extent to which sociocultural factors influence consumers' clothing-buying decisions. Consumers' spending habits were found to vary with age, high income, and available funds.

According to Pornpimon kachamas, Sukree sinthupinyo, and Achara chandrachi's (2019) study, "the focus of this research is to develop an analytic tool that can support online vendors to predict behavior of the patrons according to Dentsu AISAS perspectives and the author concluded that research can collect the data from online pager about consumable goods," but the authors' actual study focuses only on non-consumable goods. [3]

Several aspects, including specification, attributes, and the consumer in the decision-making process, were the focus of a study conducted by Pinki Rani (2014) to investigate the factors influencing consumer behavior. Researchers determined that service providers in the consumer-oriented industry should employ the services of psychologists to win over customers.

Study results from Laith T. Khrais's (2020) investigation of how key changes in e-commerce technology are being used to sway consumer preference. This research shows that while AI systems have helped advance the e-commerce industry, their ethical legitimacy remains up for debate, particularly in regards to the idea of explain ability.

According to the results of the research conducted, better ML models that are more easily interpretable and intelligible should be developed so that explainable XAI systems can be put into production. [4]

Research into the role of AI in online business was conducted by Shyna K. and Vishal M. in 2017. The author discusses the role that AI reasoning plays in e-commerce and how it can be applied in different sectors of the industry.

Computerized reasoning's extraordinary ability to collect and analyze abnormally large amounts of data and recommend courses of action has revolutionized the way we live and work. This technology is currently being adopted by online businesses so that they can recognize patterns in customer browsing, purchases, credit applications, account information, etc.

The collected data at that time serves as the foundation for tailoring recommendations to each individual customer. Google and Microsoft have recently invested in new AI activities. Different online retailers have been implementing various forms of AI to better comprehend their customers and provide superior service. [5]

5.4 Research Methodology:

Through predicted correspondingly, the prepared of presenting paper with the assistance of numerous analyses, papers, journals, and sources of secondary information.

Artificial intelligence in marketing is a very new field, thus there isn't a ton of literature on the subject. Most research in this area is either in process or has not been done yet because artificial intelligence is still a relatively new field.

However, studies of AI in various domains are available and enrich our knowledge of the technology's applications in business.

5.5 Result and Discussion:

A. Descriptive Analysis:

There is a fairly even split between the sexes (56% male). The majority of respondents (51%) are above the age of 30, the majority (56%) have at least a bachelor's degree, and almost 60% have an annual income of less than 60,000 L.E. 4.2.

B. Reliability Analysis:

Cronbach's alpha can be used to compare the dependability of different constructs with varying numbers of assertions. There are two main features of this model.

Table 5.1: Reliability test for construct

Sr. No.	Constructs	Cronback's alpha	N of Items
1.	Artificial Intelligence	0.97	10
2.	Consumer Behavior	0.962	8

Table 5.1 shows that both AI and consumer behavior have very high reliability coefficients (0.971 and 0.962, respectively). Since both the Cronbach's alpha and the internal consistency based on the adjusted correlations are more than 0.5, it follows that the surveys can be trusted (Hair et al., 2014). [6]

C. Correlation Analysis:

Table 5.2: The Pearson Correlations between Constructs

	Artificial Intelligence	Consumer Behaviour
Artificial Intelligence		
Sig. (2-tailed)		
Consumer Behaviour	0.979**	
Sig. (2-tailed)		

In Table 5.2, we see that all of the constructs in the model are significantly connected to one another at the 0.01 level, and that the variables are positively correlated with one another.

Structural Model Assessment:

Table 5.3: Structural Model Assessment

Hypotheses		Estimate	SE	CR	P	Results
H1	Consumer Behaviour ← Artificial Intelligence	.957	.010	93.54	***	supported

Parameter estimates for the research hypothesis can be seen in Table 5.3, and the results suggest that the sign of connections between the components is consistent with the expected relationship.

Furthermore, at the 0.05 level of significance, the path coefficient from AI to consumer behavior is 0.000(p-value <0.05). That's good news since it confirms the model's two fundamental assumptions are sound and lends credence to the idea that AI does really influence purchasing decisions.

Artificial intelligence has been used to find novel treatment solutions, select people for clinical trials, and monitor patients with specific illnesses all thanks to the analysis of massive data sets.
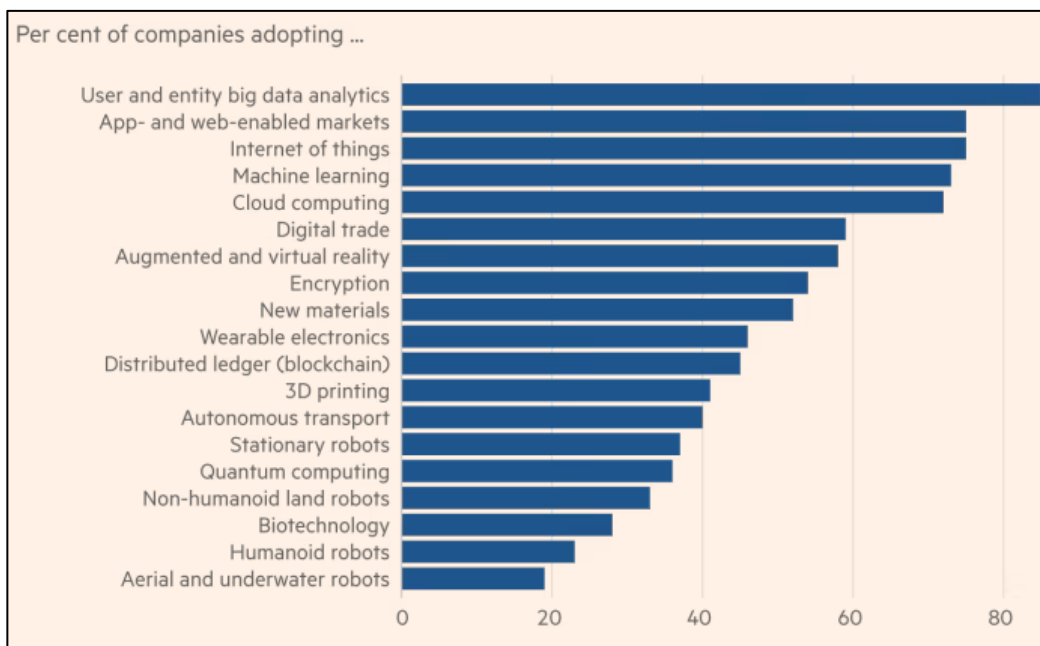

Figure 5.2: Technologies Likely to be Adopted by 2022

Source: Future of Jobs Survey 2018, World Economic Forum

Data and language analysis have been used to create translation software, online moderation, and content marketing for the consumer market. It has detected epidemics, validated research articles, and more.

Data analytics is one way it uses AI to keep its assets running well. Machine learning–based systems optimize distribution, track energy consumption, and plan and carry out maintenance in concert.

Artificial intelligence has enormous potential to improve manufacturing. If AI is used to automate preventative maintenance, the resulting output will be of higher quality and more efficiency. [7]
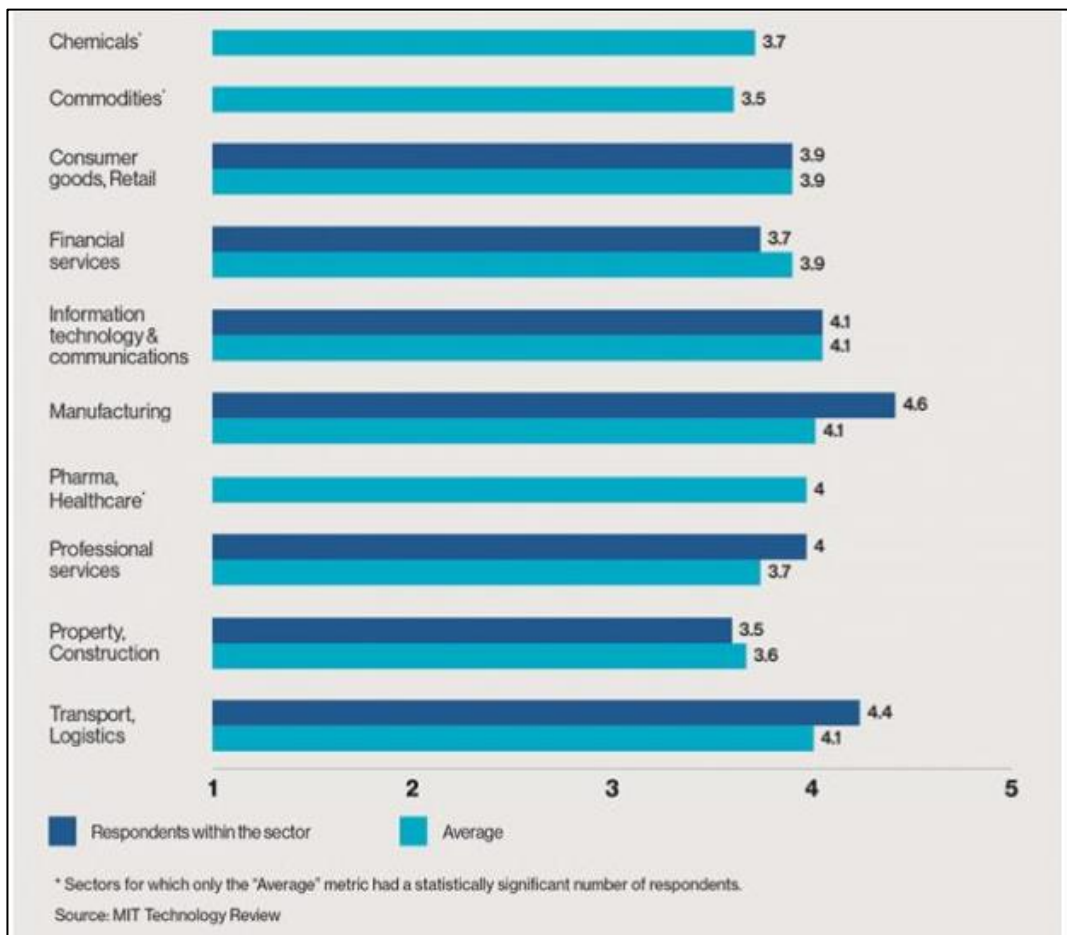

Figure 5.3: AI Impact on Industries of Asia

Machines, interfaces, and components in the factories of the future would all be linked together through the use of artificial intelligence solutions, creating what are called "smart factories" (using, for example, visual recognition).

Manufacturing processes could be improved by collecting and feeding massive volumes of data into artificial intelligence appliances. [8]

5.6 Conclusion:

Since consumers have a personal stake in the advancements made possible by AI, they naturally wonder how the technology will change their lives. Brands will improve their marketing strategies to the customer's immediate right when they have something and buy it with the data supplied by the systems. In this article, we examine the effects of AI on consumer behavior and the potential influence AI will have in shaping future market trends.

In order to stay relevant in today's ever-changing retail marketplaces, a shift toward digitalization of retail processes is essential. Artificial intelligence (AI) is one such technology that helps marketers zero in on their ideal customers.

Artificial intelligence (AI) has far-reaching implications for the marketing industry, as it will alter the ways in which customers engage with businesses. As a result, marketers need to get ready for the changes that will come with the era of artificial intelligence by learning how to use AI into their marketing efforts to better understand and influence customer behavior at each stage of the buying process.

5.7 Reference:

1. Agrawal, A., Gans, J. S., & Goldfarb, A. (2018), "Prediction machines: The simple economics of artificial intelligence", Harvard Business School Press.
2. Court D; D. Elzinga, S. mulder, and O. J. vetvik (2009), "The consumer decision journey", McKinsey Quartely.
3. Sterne J. (2017)," Artificial intelligence fpor marketing: practical applications", John Wiley & Sons Hoboken.
4. Kotler, p (2017) "Principles of marketing", Prarson education, seventh European edition
5. Shyna K and Vishal M (2017), Artificial Intelligence in E-Commerce, International Journal of Advances in Engineering & Scientific Research, 4(4), pp62-68.

6. Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. (2014). Multivariate data analysis (7th Ed.). Pearson Education Limited.

7. Sterne, J. (2017), "Artificial intelligence for marketing: Practical applications", John Wiley & Sons. Hoboken.

8. The impact of AI on business and society by Lucy Colback October 16 2020