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## THE TITANIC IMPACT OF ARTIFICIAL INTELLIGENCE IN E-COMMERCE: STATISTICS AND FACTS

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### Abstract

*This is macro- era of Artificial intelligence (AI) and Machine Learning (ML). There is terrific collision of ML on high society as walled with technology. ML and AI helps us in Exploring, Arranging, and finding appropriate statistics. In the present day, all E-commerce titans like Amazon, Flipkart & Shopify Myntra standing on the spin edge of AI and ML. Artificial Intelligence is certainly taking over the cosmos. AI is universally now, specifically in e-commerce sphere AI is making its influence. This study interpreting on impact of Artificial intelligence in E-Commerce. Intended to denote the statistical facts applicable to this realm..*

**Keywords:** Artificial intelligence, E-Commerce, Machine Learning, Natural Language Processing, Amazon Web Services.

### Introduction

The economy has been seeing extraordinary levels of digitization over the half century, imposing an active and organizational transformation in businesses from traditional organisation methods to digitally driven organization approaches to maintain constancy and permanency. While the economic outcomes of priced internet access are widespread, the retail industry has exhibited the effect of it in the outline of a dramatic shift in habitué preferences toward prioritizing accessibility and dependability over everything else when it comes to procuring. Utmost businesses have implemented, either significantly or progressively, E-commerce mostly to preserve a competitive improvement in the marketplace. AI is gaining reputation in the machinery era as one of the most talented next generations

technologies. AI is an advanced and complex software system. AI systems continuously work of popular products and services such as Netflix, Amazon, Flipkart and, naturally, Google. In the past few years, though, AI has lined its way into marketing, helping products to enhance every step of the purchaser. AI perform things like inspired decision -making, information processing, speech recognition machine learning has applications in marketing.

### Artificial Intelligence

Artificial intelligence uses the computing power of machines to imitate the human mind's problem-solving and decision-making abilities. This is a technology that is known for exhibiting human behaviour. Unlike traditional computer programs that to perform tasks based on inputs, AI tools can reason with data, sense opportunities, and adapt to

different scenarios like the human mind.

**Machine Learning**

Machine learning depends on data and algorithms to perform actions and make predictions. It is a continually learning tool that produces more accurate outputs when it exposed to more data. The more information it gathers the better it becomes in predicting outcomes. It performs analysis based on the input data independent of any human interference.

**Objectives of the Study**

1. To recognize the existing condition of E-commerce
2. To investigate the power of AI in E-commerce

**Scope of the Study**

The scope of the study is to find out influence of AI in E-commerce. An authentic effort has to incorporate all the attribute connecting to the analysis. For this determination, analysis of how AI impact E-commerce now a days.

**Literature Review**

As per current era study, perceptions on the role of AI in e-commerce. Last few years offered to the e-commerce eon with its speedy growth. At the same time the high-tech developments gave rise to different strategies This investigate tries at detecting the instruments used in e-commerce, able to enhance marketing elevations. Managerial and marketing activities have been associated in the relevant body of intelligence that can improved using AI. E-commerce urgently needs to source its own statistics information and transmitted data to obtain economical vantage. In the domain of e-commerce, AI expertise has also achieved satisfactory results. AI has become an essential steering force for the improvement of e-commerce. This labelled

the e-commerce advancement state and scenario of AI technology, analyses the present situation of the usage of AI in commerce.

In personal assistant of AI, great significance on the e-commerce advancement. Elements designed to render affirmative value to buyers within the e-commerce environment and even though the AI/ML systems have upheld their pyramid of benefits within this industry. E-commerce organizations have produced business commitment schemes that over artificial intelligence (AI) to boost their production and competence. Studies have supervised on the influences of AI on the operating ability of E-commerce business which points to a positively. This describes the associations of artificial intelligence (AI) in e-commerce business aspects and influences that AI is an essential module for improving business situation in E-Commerce. Paramasivan. C (2019), Digital financial inclusion involves the deployment of the cost-saving digital means to reach currently financially excluded and underserved populations with a range of formal financial services suited to their needs that are responsibly delivered at a cost affordable to customers and sustainable for providers. DFI involves many intermediates intuitions, banks, NGO’s and public.

**Research Methodology**

The aim of the investigation is to examine the AI in E-commerce. The information used both secondary data. It designed pertaining to the impact of the study. Secondary data is the base of the paper. Data gathered from sources. The secondary data grouped from authorized arithmetical sources as well as published books, journals, research papers, magazines, and newspapers.

*Statistical Data AI footprints in E-commerce*

Eighty percent of all client communications have managed by AI	2020
The AI in the e-commerce market valued at USD 4.06 billion in MarketWatch	2020
8 in 10 businesses have implemented AI as a customer service solution or plan	2020
Eighty-five percent of client interactions in eCommerce have succeeded without an individual	2021
120,000 stores using AI technology for offer personalization – Juniper Research.	2022
Thirty-six percent of merchants use AI to provide customers with highly personalized online experiences – IBM.	2023
International payments on AI in eCommerce estimated to attain over \$8 billion by	2024
Personalized recommendations, which use AI, account for up to eCommerce site revenues- Brilliance.	30%
consumers are willing to shop more often and spend more with retailers that are better at	49%

personalizing experiences	
Top-tier eCommerce companies have already implemented AI and machine learning platforms	28%

**AI Marketing Benchmark Report 2023**

Marketers have used AI in their marketing activities	61.4%
The AI tool most often used by marketers is Jasper.ai	32.8%
AI for content production.	44.4%
The optimistic view that AI enhance their marketing efforts.	54.5%
It believed AI can outperform humans at their jobs	71.2%
19.2% of respondents spent more than marketing budget on AI-driven campaigns.	40%
Plan to Use AI or ML in Their Influencer Campaigns more then	60%
AI took over in terms of marketing operations, high-level strategy and decision-making tasks would leave for human marketers.	42.2%

ChatGPT accomplished a projected one hundred million monthly dynamic users in January 2023, just two months after proclamation, making it the immediate spreading in consumer application history. The main reason for non-using AI yet, (41.9%) was because of a lack of insight and an excessive cost of execution (23.7%).

**Significant role of AI in E-Commerce**

- ✓ Personalization
- ✓ Virtual Voice Assistance
- ✓ Chatbot Services
- ✓ Visual Search
- ✓ Customer Relationship Statistics
- ✓ Product Content Management
- ✓ Fake Promotions

**Benefits of AI & ML Ecommerce Business**

- ✓ Increased Conversions
- ✓ Streamlined Search Function
- ✓ Personalized Store Experience
- ✓ Improved Customer Service
- ✓ Advanced Forecasting

**Steps to Adapt AI and Machine Learning in Ecommerce**

1. Price Optimization,
2. Predictive Analysis Visual and Voice Search
3. Product Recommendation
4. Inventory Management

**Conclusion**

In an era defined by rapid digital growth, the expansive world of e-commerce is being revolutionary shaped by artificial intelligence (AI). From buyer experience to inventory management, AI's existence is shaping a new trial for unparalleled business growth and competence. The fascinating domain of AI in e-commerce statistics, exposing the stunning ability transform

traditional shopping experiences. AI in E-commerce is performing a steering role in advanced solutions and purchaser experiences. AI & ML are shaping the future of ecommerce from offering personalized products to forecasting customers' needs. AR (augmented reality) and VR (virtual reality), replicate in-store shopping experiences for the shoppers. By leveraging these technologies for ecommerce business, the true power of AI and ML in ecommerce begin, Progression Populations. Install AI-based algorithms in online stores to enable smart search, will power ECOMMERCE to improve transitions and profits.

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