



The Role Of Artificial Intelligence Technology In Advancing A Suitable It Sector

¹Ms. Deepali Parag Mehta, ²CA Dr. Gajanan Pandit Wader

Research Scholar, Research Guide

Department of Accountancy,

Pillai College of Arts, Commerce & Science, Panvel, Navi Mumbai, India

Abstract: New and commercial methods have undergone tangible transformations thanks to the introduction of sophisticated machinery, digital platforms, infrastructure, and new and emerging Artificial Intelligence Technology. Artificial Intelligence Technology and machinery not only give the IT sector new opportunities, but they also have a significant impact on value capture and price generation. Research has demonstrated, for instance, how new forms and business strategies are introduced by machinery and Artificial Intelligence Technology, which go beyond sectoral. In a similar vein, the report also detailed the manner in which significant corporations have attempted to rethink and develop their new Artificial Intelligence Technology and machinery strategies and practices. The last ten or so years have seen the introduction of numerous books, formidable machinery, digital infrastructure, and technologies that have drastically changed the IT sector and had a big impact on organizations and policies. Researcher proposes, these digitally created settings can function as a shared conceptual framework that facilitates the integration of ideas from various places and the interconnectedness of problems at multiple levels. In terms of Artificial Intelligence Technology, the following factors are taken into account: product viability, customer support, progress tracking system, transparency, economical, etc. For the IT sector, on the other hand, factors were taken into account based on their yearly turnover.

Index Terms - Artificial Intelligence Technology, IT sector

I. INTRODUCTION

Recent studies in the realm of commerce have made an effort to mitigate these impacts by using specific language or tangible objects. Research has demonstrated, for instance, how new forms and business strategies are introduced by machinery and Artificial Intelligence Technology, which go beyond sectoral. In a similar vein, the report also detailed the manner in which significant corporations have attempted to rethink and develop their new Artificial Intelligence Technology and machinery strategies and practices. The last ten or so years have seen the introduction of numerous books, formidable machinery, digital infrastructure, and technologies that have drastically changed the IT sector and had a big impact on organizations and policies. In fact, the word "Artificial Intelligence Technology" is frequently used in contemporary IT sector sources to describe how the IT sector has changed or been disrupted by machines and technologies, and it also generally illustrates how modern businesses may need to entirely overhaul the industry. Overall, studies have shown that incorporating new equipment and Artificial Intelligence Technology into business operations introduces uncertainty from marketing and innovation into operations as well as processes themselves, strengthening the understanding of how individuals, groups, and collections may support creative endeavors. Recognizing the conditions and motivations behind the interest in machines and Artificial Intelligence Technology, as well as agricultural and community policies meant to bolster this state of affairs since it promotes employment development and economic expansion. We provide definitions for several key terms and an overview of recent studies from the standpoint of how the

IT sector generates digital value through the collection, utilization, and sharing of digital data. We demonstrate how the combination of these two methods can be used to pinpoint important areas of machinery and Artificial Intelligence Technology research. Our strategy complements current technological and machinery structures by highlighting new tools and social media platforms that promote information exchange and make it easier to spot chances.

II. Review of literature:

Impact Of Artificial Intelligence On Ev Industry And Perceptual Mapping In India by Dr. Ananth Sengodan in The SeyBold Report, ISSN: 1533-9211, DOI: 10.5281: Today data is the biggest source of knowledge; humans cannot absorb the amount of Information present in today's world. Artificial Intelligence is the next level of Intelligence that makes things easier and can duplicate humans to a few extents. Electric Vehicles are the upcoming largest share of the automotive industry (Zhao et al., 2021). Adhering to sustainability and budget-friendly the E.V models are developing with every possible feature that would appeal to the world. In the Indian market, there are 12 Electric cars and 195 electric scooters circulated in different parts of India. The best part of these Electronic vehicles is that it is supported by A. I feature that makes an automatic driving experience and along with that it supports navigation systems and behaviour monitoring (Mithas et al., 2020). The algorithm of Artificial Intelligence in Electric vehicles provides real-time driving monitoring and provides optimization of the energy used, which would help for the extra driving range and give riders minimal panic attacks against the low battery. Electric vehicles are available in the Indian Markets with high demand in recent years. The hike in petrol and diesel rates has increased the market shift from petrol-based and diesel-based automobiles to Electronic vehicles that are less expensive and environmentally friendly. The researcher adhered to identifying the role of Artificial Intelligence in enhancing the E.V models and how these attract more customers to stick to Electronic vehicles. Electronic vehicles are the revolutionary actions that make sustainability and technology go hand in hand to provide the customer better experience, here the researcher acknowledging the growing demand of Electronic Vehicles in the Indian market, choose the following research topic. As this area of research has limited resources and research, the researcher is bound by this topic to provide the readers with a general idea of Artificial Intelligence helping the growth of Electronic vehicles in the Indian Market. The paper would provide transparent views of battery performance and charging efficiencies of the Electric vehicle and role of machine learning helping the E.V model to be user-friendly and profitable for the business owners. The best part of these Electronic vehicles is that it is supported by A.I feature that makes an automatic driving experience and along with that it supports navigation systems and behaviour monitoring. The algorithm of Artificial Intelligence in Electric vehicles provides real-time driving monitoring and provides optimization of the energy used, which would help for the extra driving range and give riders minimal panic attacks against the low battery. The smart grid charging and access points would appeal to a more target audience in the future. The E.V models use V2G (Vehicle to a Grid), which is an additional income source for EV owners. This research paper highlights A. I used Electronic Vehicles in India. Artificial intelligence is assuming a significant part in the EV business, with applications, for example, independent driving, client conduct checking, and brilliant route frameworks. It may very well be utilised for wellbeing applications, for example, prescient gear support, driver conduct checking, and vehicle security. India's financial development is obvious for prosperous development due to various factors such as solid monetary extension, social change, rapid urbanisation, solid segment profits, and so on. India's advancement in the ease of carrying on with work records demonstrates the country's greater capacity to start and foster organisations.

Impact of Technology and Digitalisation on Two-Wheeler Buying Behaviour by Dr. Marie Johnson in Naturalista Campano ISSN: 1827-7160 Volume 28 Issue 1, 2024: With the advent of technology there are many changes which is taking place in all walks of life especially in decision making. Consumer decision making is largely influenced with the introduction of technology and increased use of them by customers. Hence all kinds of organisations require to innovate new aspects to satisfy the changing need, preference and taste of consumers. The number of automobiles keeps increasing and its buying decisions, like early generation, are heavily impacted by technology as a part of a product and also as a decision making process. Technology available in automobiles which is for safety, trend and convenience also play a role in buying automobiles. Using technology in every part of life has become a lifestyle nowadays and it plays a crucial role in consumer purchasing decisions. This conceptual paper discusses various technologies and services which are impacting two-wheeler buying decisions in this internet era. Pandemic had a negative impact on every industry worldwide. The outbreak's wrath fell upon the automobile sector too. Due to the lack of semiconductor chips, manufacturing facilities were closed down, logistics systems reduced its efficiency

hence two-wheeler sales fell. However, Indian auto OEMs reported investing INR 98,700 crore in the year 2021. This has benefited the auto sector, allowing for the seamless configuration of digital transformation into their operations. For customers, companies turned to online dealerships, bookings digitally, convenient test drives, and delivery of vehicles; for OEMs, they used blockchain technology, Artificial Intelligence and machine learning, for better inventory management systems. The two-wheeler automobile sector integrated a lot of technologies into the product to gain competitive advantage and also digital transformation assists and elevates consumers to make they're not just by traditional decision making process. On time delivery and services is considered as one of the important factors for buying decisions and companies are applying machine Learning and artificial intelligence to solve the supply chain issues. Applications with AI, such as time series forecasting methods, can help for better efficiency and to accurately predict or foresee the demand for two-wheelers. Forecasting is done by looking at historical data on sales, the economy, product reviews, and competitors. One of the main problems in the global supply chain crises, delayed vehicle delivery by months owing to a lack of semiconductor chips, can be resolved with the use of artificial intelligence (AI), and it can lead to a 5–10% improvement in operational efficiency. Companies like Hero MotoCorp signed a contract with Accenture in order to take advantage of the business analytics, data warehousing, AI, and Machine learning system and digitise the supply chain platform in order to gain a more comprehensive understanding of the operations. The findings demonstrate that from the perspective of the consumer, there will be higher satisfaction with the necessary services as well as access to new and better services with the use of technology such as block chain, machine learning and artificial intelligence. It is evident from the study that the current generation is more reliable on digital platforms and online influencers and technologies that are heavily used in the product. They also believe that updated technology in two-wheelers would provide more safety, convenience and pleasure than the traditional products. Hence Technology and digital transformation plays a crucial role in consumer buying decisions and manufacturers will benefit from investing in suitable strategies for adjusting to the digital transition in terms of increased earnings, productivity, and competitiveness.

III. Objectives:

1. To comprehend Artificial Intelligence Technology in the IT sector.
2. To research the effect of Artificial Intelligence Technology on the IT sector.

IV. Hypotheses:

- H₀: Artificial Intelligence Technology has no appreciable impact on IT sector
H₁: Artificial Intelligence Technology has appreciable impact on IT sector

V. Scope:

This research study offers guidance on how the IT sector perceives the effects of Artificial Intelligence Technology. Additionally, the report sheds light on how Artificial Intelligence Technology has affected the IT sector and, ultimately, the prospects for the industry going forward.

VI. Research Methodology:

The study's foundation is essentially primary data that has been critically evaluated and analysed. The IT sector is among the primary sources. In order to get pertinent data from the primary source for the researchers' guidance, a comprehensive questionnaire is created and studied in the sampled regions to determine its influence. Using the questionnaire, in-depth conversations were had with certain main data sources to gain an understanding of their perspectives, mind-sets, and behaviours. This understanding would enable the researchers to provide any necessary and helpful recommendations. Statistical tools such as tabulations, grouping, percentages, averages, testing of hypotheses, etc. are used to process the questionnaire. In terms of Artificial Intelligence Technology, the following factors are taken into account: product viability, customer support, progress tracking system, transparency, economical, etc. For IT sector, on the other hand, factors were taken into account based on their yearly turnover.

Research Area:

Researchers chose a group from the Mumbai IT sector. For the study, 100 IT sector personnel were included in the sample size. Data was gathered by researchers from both primary and secondary sources. The respondents were given 100 questionnaires by the researcher.

Limitations:

1. The investigation is restricted to a certain geographic region.
2. For the sake of a detailed investigation, other factors might be included.

Data Analysis:

The questionnaire was created by the researcher and given to the respondents. Following receipt of the questionnaire, the researcher examined it.

No.	Respondent	Distributed	Received	Validation Rejection	Net Sample
1	IT Personnel	100	95	6	89

Hypothesis Testing:

H₀: Artificial Intelligence Technology has no appreciable impact on IT sector

H₁: Artificial Intelligence Technology has appreciable impact on IT sector

Mathematically

Artificial Intelligence Technology	FREQUENCIES	Annual Turnover (in Cr)					TOTAL
		Below 10	10-20	20-30	30-40	Above 40	
	Product Feasibility	7	3	5	5	4	24
	Customer Care Support	1	5	4	2	5	17
	Progress Tracking System	2	1	1	3	4	11
	Transparency	4	9	1	2	5	21
	Economical	3	2	9	1	1	16
	TOTAL	17	20	20	13	19	89

Sr No	H ₀	H ₁	χ_{cal}	χ_{table}	p_value	Result
1	Artificial Intelligence Technology has no appreciable influence on IT sector	Artificial Intelligence Technology has appreciable influence on IT sector	28.47	26.30	7.9697E-04	Reject H₀ (i.e. Artificial Intelligence Technology has appreciable influence on IT sector)

*Here LOS: 0.05

Thus, our null hypothesis Artificial Intelligence Technology has no appreciable influence on the IT sector is concerned it's not accepted. On the other hand, we adopt our alternative hypothesis that the IT sector is significantly impacted by Artificial Intelligence Technology.

VII. Findings:

1. Product Feasibility was the most important aspect of Artificial Intelligence Technology's impact on the IT sector.
2. Another significant finding from our analysis is that, in comparison to other transformation strategies, the IT sector sees Artificial Intelligence Technology to have enormous potential.

VIII. Conclusion:

There is a strong impact of Artificial Intelligence Technology on the IT sector. New and commercial methods have undergone tangible transformations thanks to the introduction of sophisticated machinery, digital platforms, infrastructure, and new and emerging Artificial Intelligence Technology. Artificial Intelligence Technology and machinery not only give the IT sector new opportunities, but they also have a significant impact on value capture and price generation. Multiple levels of analysis, acceptance of concepts and viewpoints from other domains, and a thorough knowledge of the role that machinery and Artificial Intelligence Technology play in changing social connections and organizational structures are all necessary for research aimed at comprehending the digital economic transformation.

IX. References:

1. S. C. Gupta and V.K.Kapoor (2006). Fundamentals of Mathematical Statistics, Sultan Chand & Sons Educational Publishers, New Delhi.
2. S. C. Gupta and V.K.Kapoor (2006). Fundamentals of Applied Statistics, Sultan Chand & Sons Educational Publishers, New Delhi.
3. Impact Of Artificial Intelligence On Ev Industry And Perceptual Mapping In India by Dr. Ananth Sengodan in The SeyBold Report, ISSN: 1533-9211, DOI: 10.5281.
4. Impact of Techonolgy and Digitalisation on Two-Wheeler Buying Behaviour by Dr. Marie Johnson in Naturalista Campano ISSN: 1827-7160 Volume 28 Issue 1, 2024.
5. V. Rajgopalan (2006). Selected Statistical Tests, New Age international (P) Limited, Publishers.
6. B. L. Agrawal (2012). Programmed Statistics, New Age international (P) Limited, Publishers.

