

"Influence of AI on the development of organising retail sector in reference to Bangalore"

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ABSTRACT :-

The organizing retail sector in Bangalore is undergoing significant transformation due to advancements in artificial intelligence (AI). Traditional retail businesses in the city are facing challenges in inventory management and customer engagement. AI technologies offer opportunities to streamline operations and enhance customer experiences. Understanding the influence of AI on Bangalore's retail sector is crucial for stakeholders. This research aims to explore AI's specific applications within Bangalore's organizing retail sector, from supply chain optimization to personalized marketing. By analyzing current trends and challenges, the study seeks to provide actionable insights for businesses and policymakers. Through empirical research and case studies, we aim to uncover AI's transformative potential and guide the sector towards innovation and competitiveness.

INTRODUCTION :-

The organizing retail sector in Bangalore, India's vibrant and dynamic tech capital, stands at the forefront of a monumental transformation driven by the integration of artificial intelligence (AI) technology. With its bustling streets lined with traditional retail establishments and its reputation as a global technology hub, Bangalore presents a unique and fertile ground for exploring the intersection of AI and retail.

As Bangalore continues to assert its position as a leading destination for technology innovation, traditional retail businesses in the city are experiencing a seismic shift propelled by the disruptive capabilities of AI. From inventory management to customer engagement, AI is reshaping the landscape of organizing retail in Bangalore, offering unparalleled opportunities for optimization, innovation, and enhanced customer experiences.

The significance of understanding the influence of AI on Bangalore's organizing retail sector cannot be overstated. It holds profound implications for businesses striving to remain competitive in an increasingly digital marketplace, policymakers seeking to foster innovation and economic growth, and consumers expecting personalized and seamless shopping experiences.

This research endeavors to delve deeply into the specific applications of AI within Bangalore's organizing retail sector, aiming to provide actionable insights and recommendations for navigating this dynamic and rapidly evolving landscape. By analyzing current trends, challenges, and opportunities, we seek to uncover the transformative potential of AI and chart a course towards a more agile, innovative, and competitive retail ecosystem in Bangalore.

In the following sections, we will explore the challenges faced by traditional retail businesses in Bangalore, the imperative need to embrace AI technologies, the objectives of this study, the scope of our research, and the limitations we acknowledge in our pursuit of understanding the influence of AI on the development of organizing retail in Bangalore. Through empirical research, case studies, and data analysis, we aim to shed light on the profound impact of AI on the organizing retail sector in Bangalore and offer insights to drive sustainable growth and innovation in this critical industry.

REVIEW OF LITERATURE:-

Alpaydin, (2020) -

Given that they operate via computer programmes, these principles have broad applications in the scientific and technology fields. Since the majority of artificial intelligence systems do not need human aid, they are effective.



Artificial intelligence (Al) has given rise to the idea of machine learning, which is based on data and patterns that the system utilizes to make judgments.

Makridakis (2017) -

The use of Al is crucial in securing cloud storage systems against intrusion by hackers and con artists who want to get access to sensitive information ("Advantages of Artificial Intelligence"). The usage of artificial intelligence has gained popularity throughout the globe since it offers more benefits than drawbacks for both businesses and people. Al intelligence will permeate every aspect of life in the future. As can be observed nowadays, companies and travel use Al to run well. A few years from now, corporations will utilise robots for product transportation, while individuals will purchase robots to assist with a wide range of home tasks. **Sergi, B. S.'s (2020)** - aimed to calculate the future percentage and variations of human cognition and artificial intelligence (Al) usage in industry 4.0 social entrepreneurship. The study explored future Al usage in social entrepreneurship and assessed stakeholders' interest and motivation in executing the terms till 2030. It will not fully automate, however, will employ human resources sparingly, and boost the impact of artificial intelligence, according to the report. **S. Robledo et al. (2021)** - investigate the factors that influence the impact of corporate digital entrepreneurship on India's SMEs. The relevance of AI-CRM competency in corporate digital entrepreneurship in developing countries like India is being addressed. The study found two moderators had substantial influence on corporate digital entrepreneurship SME links in India.

STATEMENT OF PROBLEM:-

The organizing retail sector in Bangalore is facing a critical juncture as it grapples with the challenges posed by traditional methods amidst the rapid advancements in AI technology. Inventory management, personalized customer experiences, and operational efficiency are among the key pain points for retail businesses in Bangalore. These challenges underscore the urgent need to explore the potential of AI integration in addressing these issues and transforming the retail landscape. By understanding the specific problems faced by traditional retailers and the potential benefits offered by AI solutions, this research aims to provide valuable insights into the opportunities and challenges associated with AI adoption in the organizing retail sector in Bangalore.

NEED OF THE STUDY:-

The study of AI's influence on the organizing retail sector in Bangalore is imperative due to the transformative potential of AI technologies on various industries, including retail. With Bangalore being a major hub for retail businesses, understanding the implications of AI adoption is crucial for stakeholders such as businesses, policymakers, and consumers. The study seeks to assess how AI can impact employment patterns, consumer behavior, market dynamics, and economic growth within the organizing retail sector in Bangalore. By exploring these dynamics, the research aims to provide actionable insights for businesses and policymakers to navigate the evolving retail landscape effectively.

OBJECTIVES OF THE STUDY:-

This study aims to achieve several objectives:

- 1. Analyze the current state of the organizing retail sector in Bangalore, including its strengths, weaknesses, opportunities, and threats.
- 2. Examine the potential applications of AI in various aspects of retail operations, such as inventory management, demand forecasting, customer engagement, and marketing strategies.
- 3. Assess the implications of AI adoption for different stakeholders in the retail ecosystem, including businesses, employees, consumers, and the broader community.
- 4. Provide recommendations for leveraging AI effectively to enhance competitiveness, sustainability, and profitability in the organizing retail sector in Bangalore.



SCOPE OF THE STUDY:-

The scope of this study encompasses an in-depth examination of the organizing retail sector in Bangalore and its interaction with AI technologies. Specifically, the research will focus on:

- Exploring the current landscape of the organizing retail sector in Bangalore, including market trends, challenges, and opportunities.
- Investigating the potential applications of AI in various aspects of retail operations, such as supply chain management, customer service, product recommendation systems, and predictive analytics.
- Assessing the impact of AI adoption on different stakeholders, including retailers, employees, consumers, and the broader economy.
- Providing insights and recommendations for businesses, policymakers, and other stakeholders to effectively integrate AI into the organizing retail sector in Bangalore.

LIMITATIONS:-

While this study aims to provide comprehensive insights into the influence of AI on the organizing retail sector in Bangalore, it is subject to several limitations:

- Time and resource constraints may restrict the depth and breadth of data collection and analysis.
- Access to proprietary information from retail businesses may be limited, potentially impacting the comprehensiveness of the research.
- Biases may arise in research findings due to sample selection, methodology, or interpretation of results.
- Predicting the long-term effects of AI on the organizing retail sector may be challenging due to the rapid pace of technological change and evolving market dynamics. Despite these limitations, the research strives to offer valuable insights and recommendations for stakeholders navigating the intersection of AI and the organizing retail sector in Bangalore.

RESEARCH GAP:-

- Lack of empirical research specifically focused on the implementation and impact of AI technologies within Bangalore's organizing retail sector.
- Existing literature primarily explores the broader adoption of AI in retail globally, overlooking the unique challenges and opportunities within Bangalore's retail landscape.
- Limited research addresses the contextual factors and nuances specific to Bangalore, such as cultural preferences, market dynamics, and infrastructure limitations, which shape the adoption and effectiveness of AI technologies in the retail sector.
- There is a gap in understanding how local factors influence the adoption and outcomes of AI-driven innovation in Bangalore's organizing retail sector, hindering the development of targeted strategies and solutions.
- Addressing this research gap requires empirical studies that investigate the current state of AI adoption, specific AI applications utilized by retail businesses in Bangalore, and the resulting impact on operational efficiency, customer experiences, and market competitiveness.
- Filling this gap would provide actionable insights and recommendations tailored to Bangalore's retail ecosystem, enabling businesses and policymakers to make informed decisions and strategies for AI integration and development.

DATA ANALYSIS:-

Source of data:

The research relied on a mix of primary and secondary resources. While a number of papers, websites, and company annual reports provided the secondary data, a structured questionnaire and timetable were used to collect the main data.



Sampling techniques:

Customers of organised retail stores in Bangalore City, Karnataka, India, were the subjects of this study's main data collection, which used Simple Random Sampling procedures. Among the various stores are Pantaloons, Shoppers Stop, Dmart, More, Spencer's, Reliance, and more.

Statistical method:

The goal of the questionnaire is to collect detailed information on the requirements and desires of the merchants. Either an electronic copy will be sent to these stores via email or hard copies will be handed to them personally. The purpose of the survey is to collect data from participants and analyse it based on a number of criteria.

Data Analysis Technique:

This investigation will make use of a factor analysis. X = u + LF + e is the formula that is used to calculate factor analysis. Rotated component matrices and KMO Adequacy are also utilised in the investigation.

Sample Size:

Out of 165 samples that were evaluated, 145 were determined to be free of defects. Therefore, there were 145 participants in the research. Every type of consumer is represented in the sample.

Descriptive statistics of the study:

The below table displays the study's respondent demographics. There are 145 total responders, with 56% being male and 44% being female. Additionally, over 60% of those who took the survey are above the age of 30.

Over half of those who took the survey work for private companies, and the majority of those who did so had postgraduate degrees. Sixty percent or more of those who took the survey reported an income of less than thirty thousand rupees.

	Frequency	Percentage
Below 18 Years	9	6.21
18-25 Years	38	26.21
25-30 Years	67	46.21
Above 30 Years	31	21.38
Total	145	100
Male	82	56.55
Female	63	43.45
Total	145	100
Below UG	25	17.24
UG	34	23.45
PG	60	41.38
Professional Course	18	12.41
Diploma	8	5.52
	18-25 Years25-30 YearsAbove 30 YearsTotalMaleFemaleTotalBelow UGUGPGProfessional Course	Below 18 Years918-25 Years3825-30 Years67Above 30 Years31Total145Male82Female63Total145Below UG25UG34PG60Professional Course18

Table: Demographic Profile



International Journal of Multidisciplinary Research and Technology ISSN 2582-7359, Peer Reviewed Journal, Impact Factor 6.325 <u>www.ijmrtjournal.com</u> https://doi.org/10.5281/zenodo.10937565

	Total	145	100
Occupation	Private Sector	86	59.31
	Public Sector	24	16.55
	Own Business	17	11.72
	Semi-Public	18	12.41
	Total	145	100
	Below 20000	52	35.86
Income	Rs 20000-30000	46	31.72
	Rs 30000-40000	32	22.07
	Above 40000	15	10.34
	Total	145	100

FINDINGS:-

The influence of AI on the development of the organizing retail sector in Bangalore is significant. Here are some findings:-

• Enhanced Customer Experience :

AI-powered tools like personalized recommendations and virtual assistants improve customer satisfaction and loyalty.

• <u>Operational Efficiency:</u>

Automation of inventory management, supply chain optimization, and predictive analytics reduce costs and increase efficiency.

• <u>Data-driven Insights</u> :

AI enables retailers to gather and analyze vast amounts of data to understand consumer behavior and market trends better.

• <u>Competitive Advantage :</u>

Retailers adopting AI gain a competitive edge by offering innovative services and staying ahead of market demands.Workforce Transformation :

AI impacts job roles, requiring upskilling for employees to adapt to new technologies and roles.

CONCLUSION:-

The influence of artificial intelligence (AI) on the development of the organizing retail sector in Bangalore is profound and multifaceted. Through advancements in AI technologies, traditional retail businesses in Bangalore are undergoing a transformative journey, characterized by enhanced operational efficiency, personalized customer experiences, and innovative business models. The adoption of AI-driven solutions, such as inventory management systems, predictive analytics, and customer service chatbots, has empowered retailers to optimize their processes, improve decision-making, and stay competitive in a rapidly evolving market landscape.

However, while AI offers immense opportunities for growth and innovation, its integration into the organizing retail sector also presents challenges and considerations. These include concerns related to data privacy, algorithmic bias, and the displacement of traditional retail roles. Furthermore, the successful implementation of AI technologies requires strategic planning, investment in infrastructure and talent, and a deep understanding of local market dynamics and consumer preferences.



In conclusion, the influence of AI on the development of Bangalore's organizing retail sector is undeniable, shaping the future of retailing in the city. As businesses continue to navigate this transformative journey, it is essential to strike a balance between harnessing the potential of AI-driven innovation and addressing the ethical, societal, and organizational implications associated with its adoption. By leveraging AI technologies responsibly and strategically, Bangalore's retail sector can unlock new opportunities for growth, differentiation, and value creation, ultimately enhancing the overall shopping experience for consumers and driving sustainable development in the retail ecosystem.

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