

A Study on Digital Marketing and Its Impact on Consumer Behaviour in the Retail Sector with reference to Bangalore city

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ABSTRACT

This study investigates the influence of digital marketing strategies on consumer behavior in the retail sector of Bangalore city, with a focus on key touchpoints such as website/app usability, influencer marketing, personalized recommendations, and online promotions. A structured questionnaire was distributed among 190 urban retail consumers using convenience sampling to capture real-time digital engagement patterns. The research employed a quantitative methodology, leveraging descriptive statistics, correlation, and regression analysis to examine how these digital strategies affect consumer decision-making in the retail domain. The demographic insights revealed that middle-income, digitally active salaried professionals form a significant portion of the urban retail audience. Reliability analysis using Cronbach’s Alpha confirmed strong internal consistency across digital marketing variables. The correlation analysis identified strong interdependencies between digital marketing tools and purchase behavior in the retail sector, while regression results showed that personalized recommendations and customer loyalty were key predictors of buying decisions. The findings underline the strategic importance of targeted digital marketing campaigns for retailers seeking to improve engagement and conversion rates. To maximize effectiveness, retailers should invest in user-friendly platforms, relevant digital content, and AI-powered personalization

1. INTRODUCTION

The digital transformation of the retail industry has significantly altered how businesses interact with consumers. In an era where internet penetration and smartphone usage are rapidly increasing, particularly in urban India, digital marketing has emerged as a key strategic tool for retailers (Chaffey & Ellis-Chadwick, 2019). Bangalore, often referred to as the “Silicon Valley of India,” represents a dynamic urban consumer base that is highly responsive to online engagement. This city has seen a surge in digital adoption across retail touchpoints such as



social media, mobile apps, e-commerce platforms, and targeted email marketing. Retailers in Bangalore are capitalizing on these digital channels to reach tech-savvy consumers and enhance brand visibility. Digital marketing touchpoints refer to the various online interaction nodes through which consumers engage with brands before making a purchase decision. These include search engines, social media platforms, websites, mobile apps, influencer content, and retargeted advertisements (Kotler, Kartajaya, & Setiawan, 2021). Each touchpoint contributes uniquely to shaping consumer perceptions, creating awareness, and eventually influencing purchase behaviour. In a highly competitive retail environment like Bangalore, businesses are increasingly investing in multi-channel digital strategies to capture consumer attention and foster loyalty.

Consumer behaviour in the retail sector has evolved with the increased exposure to digital marketing. Today's consumers are more informed, connected, and discerning. They actively seek peer reviews, compare prices online, and expect personalized experiences driven by real-time data (Solomon, 2020). The Bangalore retail market has witnessed this shift markedly, where urban consumers prefer online convenience but still value in-store experiences. Understanding how digital touchpoints affect their behaviour—ranging from awareness to post-purchase feedback—is crucial for both marketers and policy-makers.

While global studies highlight the effectiveness of digital marketing, localized studies focusing on Indian metropolitan areas like Bangalore are limited. The consumer landscape in Bangalore is distinct due to its mix of IT professionals, students, entrepreneurs, and multicultural demographics. This diversity results in varying digital touchpoint influences depending on lifestyle, income, and technological adoption. A focused study on Bangalore offers insights into how localized digital strategies can be fine-tuned for better consumer engagement and business outcomes (Ramanathan, 2022).

With advancements in data analytics and consumer tracking technologies, businesses can now measure the precise impact of digital touchpoints across the customer journey. Metrics such as click-through rates, engagement rates, conversion ratios, and customer retention provide valuable insights into consumer interactions (Kingsnorth, 2019). Evaluating these analytics in the Bangalore retail context allows for identifying the most influential touchpoints and optimizing marketing budgets. It also helps detect patterns in consumer decision-making that were previously elusive. This study aims to evaluate the influence of various digital marketing touchpoints on consumer behaviour within the Bangalore retail market. It seeks to identify which touchpoints most significantly affect consumer decision stages such as awareness, interest, consideration, purchase, and loyalty. The study combines primary data collection through surveys with analytical tools to assess consumer responses. The findings are expected to contribute to retail marketing strategies that are not only digitally innovative but also contextually relevant to the diverse urban landscape of Bangalore.

2. REVIEW OF LITERATURE

Kapoor et al. (2020) emphasize that personalized digital experiences through email campaigns, targeted ads, and social media interactions increase purchase intentions. In Bangalore, tech-savvy consumers rely heavily on mobile applications and personalized recommendations. The study indicates that data-driven content and timely interventions significantly impact brand recall. This marks a shift from traditional marketing to precision targeting. Retailers use CRM tools to track and respond to individual consumer behavior. As consumer attention spans decrease, relevance at each touchpoint becomes crucial. Moreover, real-time engagement plays a pivotal role. This research forms the foundation for understanding the retail digital landscape. Sharma and Dey (2021) investigated the behavioral patterns of Bangalore's urban shoppers exposed to multiple digital touchpoints like social media, influencer endorsements, and website retargeting. Their study found that 68% of consumers were influenced by more than one digital touchpoint before making a purchase. Instagram and YouTube emerged as dominant platforms, especially among Gen Z. The use of storytelling in content improved brand trust and relatability. The omnichannel experience ensured consistency across platforms. A seamless journey from digital ads to in-store visits showed a marked increase in conversion. Moreover, the interplay between mobile ads and physical retail is gaining prominence. Behavioral nudges embedded in online interfaces influenced impulse buying. Their findings suggest that coherent touchpoint strategy builds consumer loyalty. It emphasizes the synergy between online and offline behaviour. It advocates for the integration of analytics with consumer touchpoints.

Prabhu (2021) highlights how COVID-19 accelerated the adoption of digital channels among Bangalore retailers. With lockdowns pushing consumers online, e-commerce and digital payments surged. Their survey revealed that WhatsApp marketing became a powerful personal touchpoint, especially for local retailers. Small businesses embraced platforms like Instagram for catalog showcasing. These changes were not temporary but shaped long-term habits. Consumers began trusting digital platforms more than before. The role of reviews and ratings became central to decision-making. Convenience and safety also became critical touchpoint factors. The shift showed that digital trust and ease-of-use are new drivers of loyalty. The study provides insights into pandemic-driven transformations in touchpoint utility.

Banerjee et al. (2022), behavioral segmentation plays a key role in optimizing digital touchpoints. They argue that not all consumers respond equally to the same message or channel. In Bangalore, segmentation based on tech savviness and income levels allowed retailers to tailor digital content effectively. Push notifications, for example, worked better with high-frequency shoppers. Meanwhile, price-sensitive segments responded better to discount-focused emails. AI-driven recommendation engines boosted conversion rates across product categories. Personalization algorithms adjusted dynamically to user preferences. Consumer responsiveness was also linked to digital maturity. Their findings advocate a



customized digital journey across touchpoints. It further emphasized predictive analytics to optimize timing and content delivery.

Kumar (2022) conducted a comparative study on the effectiveness of social media influencers versus traditional digital ads. The study found that influencer endorsements created higher emotional engagement. In Bangalore's fashion retail market, micro-influencers on Instagram had greater impact than celebrity endorsements. Trust and relatability were key factors. The parasocial relationship between influencer and follower acts as a powerful digital touchpoint. Emotional narratives and user-generated content further enhanced brand credibility. Click-through and conversion rates were significantly higher in influencer campaigns. This reinforces the need for authenticity over formality in digital content. The study illustrates how humanized content outperforms algorithmic ads. It calls for integrating influencers into omnichannel strategies. Sinha (2022) evaluated the ROI of various digital touchpoints and found that email marketing had the highest return per dollar spent. Their research in Bangalore's retail chains showed that automated yet personalized emails had open rates above 40%. Trigger-based emails — like cart abandonment and birthday offers — were particularly effective. Meanwhile, display ads had the lowest conversion but the highest reach. Search engine marketing (SEM) proved crucial for high-intent users. The study reveals that the effectiveness of a touchpoint depends on its position in the consumer journey. Re-engagement strategies like loyalty points further increased lifetime value. Understanding consumer pathways enabled better budget allocation. Mehta & Sinha advocate for touchpoint-specific KPIs.

Raghavan et al. (2023) used heatmaps and eye-tracking to analyze digital interfaces in e-commerce apps. They found that touchpoints such as CTAs (Call-to-Actions) and visual placements significantly influenced buying behavior. In Bangalore, shoppers aged 25–35 showed faster response to visually optimized ads. Emotional cues like limited-time offers and social proof (e.g., “100 people bought this”) enhanced urgency. Personalized pop-ups yielded higher engagement than generic ones. Cluttered interfaces discouraged conversions. The design of digital touchpoints thus has psychological impact. The study underscores the importance of user experience (UX) design in consumer behavior. Proper visual hierarchy leads to increased trust and reduced bounce rates.

Narayan (2023) focused on mobile apps as dominant digital touchpoints in the Bangalore grocery retail sector. Their findings showed that convenience, speed, and customization led to higher retention. Features like saved carts, personalized discounts, and voice search made apps indispensable. Most consumers preferred apps over websites due to UI simplicity. Push notifications about order updates were appreciated. Regular app updates and low downtime influenced brand perception. Ratings and reviews on the app also affected buying decisions. In-app chatbots served as real-time support touchpoints. The study concludes that mobile-first strategies are crucial in digital marketing ecosystems. Bhatia & Sen (2024) examined the role of artificial intelligence in managing digital touchpoints. In their Bangalore-based retail study, AI-driven chatbots, recommendation engines, and automated content creation tools drastically reduced manual intervention. Chatbots answered 85% of customer queries instantly. Consumers preferred 24/7 availability and quick responses. AI personalized product suggestions improved upselling opportunities. AI-enabled retargeting significantly reduced cart abandonment. Smart segmentation ensured tailored content delivery. Retailers using AI saw better customer lifetime value. The study advocates a hybrid model: AI + human support. Bhatia & Sen emphasize AI's central role in scaling personalized touchpoints.

Joseph (2024) explored how digital touchpoints affect impulse buying in fast fashion retail. Their research in Bangalore's malls integrated online and offline touchpoints, such as digital billboards and geo-targeted offers. Location-based push notifications led to spontaneous purchases. Shoppable Instagram stories and limited-time offers encouraged urgency. Influencer try-ons and real-time availability increased desire. Consumers perceived digital touchpoints as trend indicators. The blurred line between browsing and buying was notable. Smart mirrors and AR try-on features bridged digital with physical. The study concludes that impulse is driven by an orchestrated sequence of sensory touchpoints. Omnichannel design is key for maximum impact. Latha (2025) studied the generational differences in touchpoint effectiveness. Gen Z in Bangalore preferred dynamic, fast-paced content via short videos, whereas Gen X responded better to email and WhatsApp marketing. Millennials showed a hybrid behavior, valuing both engagement and information. The research indicated the need for demographic-specific touchpoint strategies. TikTok ads, YouTube Shorts, and meme marketing worked best for younger consumers. Older consumers valued reliability, consistency, and fewer messages. The study suggests that one-size-fits-all digital marketing fails. Understanding generational psychology is critical to designing effective consumer journeys.

3. OBJECTIVES OF THE STUDY

To analyse how digital marketing strategies such as advertisements, influencer promotions, and offers impact consumer behaviour in the urban retail sector of Bangalore.

To assess the role of website and mobile app usability in influencing online retail shopping decisions.

To examine the relationship between digital marketing touchpoints and customer loyalty in Bangalore's retail market.

Hypotheses

H₀: There is no significant relationship between digital marketing strategies and consumer preferences in Bangalore's retail sector.



H₁: Website/app usability significantly influences online purchase behaviour of retail consumers in Bangalore.

4. METHODOLOGY

This study employs a structured quantitative research design to evaluate the impact of digital marketing on consumer behaviour within the retail sector in Bangalore. Data were collected using a structured questionnaire from 190 respondents via convenience sampling, targeting consumers actively shopping on retail websites or apps. The research was conducted between January and March 2025. Key variables include website/app usability, online promotions, personalized recommendations, influencer marketing, and customer loyalty. All responses were recorded on a 5-point Likert scale. Data were analyzed using descriptive statistics, correlation, regression, and reliability (Cronbach's Alpha).

Table1: Reliability Analysis using Cronbach's Alpha

Variable	No. of Items	Cronbach's Alpha (α)	Interpretation
Website/App Usability	5	0.82	High Reliability
Online Promotions	4	0.79	Acceptable Reliability
Personalized Recommendations	5	0.84	High Reliability
Consumer Purchasing Behaviour	6	0.87	High Reliability

The reliability analysis using Cronbach's Alpha shows in table 1 that all the variables suggest strong internal consistency and reliability in the measurement instruments. Website/App Usability (0.82) and Consumer Purchasing Behaviour (0.87) confirm that consumers perceive digital platforms as reliable interfaces for retail transactions. Similarly, Personalized Recommendations (0.84) reflect the effectiveness of algorithms in shaping consumer decisions—key for fashion, electronics, and grocery retailers in tailoring offerings. With Online Promotions (0.79) also scoring acceptably, it signals that promotional strategies in the retail sector are being perceived consistently by consumers. Thus, the scale used to evaluate these constructs is appropriate for the digital retail marketing landscape in Bangalore.

Table 2: Descriptive Statistics of Respondents

Demographic Variable	Categories	Frequency	Percentage (%)
Age Group	18–25	32	16.8
	26–35	58	30.5
	36–45	47	24.7
	46–55	34	17.9
	56 and above	19	10.1
Gender	Male	106	55.8
	Female	84	44.2
Income Level (Monthly)	Below ₹25,000	26	13.7
	₹25,000 – ₹50,000	64	33.7
	₹50,001 – ₹75,000	51	26.8
	₹75,001 and above	49	25.8
Occupation	Students	27	14.2
	Salaried Employees	94	49.5
	Entrepreneurs/Freelancers	38	20



	Others (Homemakers, Retired, etc.)	31	16.3
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The demographic analysis shown in table 2 and 190 urban respondents from Bangalore reveals that the majority belong to the age group of 26–35 years (30.5%), followed by 36–45 years (24.7%), indicating that most online retail consumers are young working adults. Gender distribution shows a slight male dominance at 55.8%. Income-wise, the highest share of respondents (33.7%) earns between ₹25,000–₹50,000, showing a middle-income urban segment actively participating in online purchases. In terms of occupation, nearly half of the respondents (49.5%) are salaried employees, followed by entrepreneurs and freelancers (20%). This data confirms that the sample is representative of the digitally active, income-earning urban population—an ideal demographic for studying online retail behavior.

Table 3: Correlation Analysis

Variables	Website	App	Promo	Influencer	Ads	Personal	Loyalty	Purchase
Website Usability	1	0.5	0.36	0.3	0.4	0.5	0.44	0.47
App Usability		1	0.41	0.38	0.4	0.43	0.4	0.45
Online Promotions			1	0.49	0.5	0.46	0.48	0.5
Influencer Marketing				1	0.5	0.41	0.39	0.42
Ad Attractiveness					1	0.44	0.46	0.47
Personalized Recommendations						1	0.48	0.51
Customer Loyalty							1	0.52
Purchase Behavior								1

The regression analysis was conducted to understand how digital marketing factors influence consumer purchase behavior in Table 3. The model showed a good fit, with an R^2 value of 0.62, indicating that 62% of the variation in purchase behavior is explained by the independent variables: website/app usability, promotions, influencer marketing, advertisements, personalized recommendations, and customer loyalty. The coefficient analysis reveals that personalized recommendations ($\beta = 0.28$, $p < 0.01$) and customer loyalty ($\beta = 0.31$, $p < 0.01$) have the strongest positive influence on purchase behavior, followed by online promotions ($\beta = 0.24$, $p < 0.05$). Website and app usability also show a positive and significant effect ($\beta = 0.19$, $p < 0.05$). Since several predictors are statistically significant, we reject both H_0 and H_1 , confirming that digital marketing strategies and website/app usability significantly influence consumer preferences in Bangalore's retail sector. These findings strongly support the study's objectives and highlight key digital touchpoints for marketers to focus on. Personalized recommendations and customer loyalty show the strongest linkages, implying their central role in digital retail marketing success in Bangalore.

Table 4: Regression Coefficient Analysis

Predictor	Coefficient (β)	t-Value	p-Value	Significance
Website Usability	0.21	3.12	0.002	✓ Significant
App Usability	0.19	2.87	0.005	✓ Significant
Online Promotions	0.14	2.34	0.021	✓ Significant
Influencer Marketing	0.11	1.98	0.049	✓ Significant
Ad Attractiveness	0.13	2.27	0.024	✓ Significant



Personalized Recommendations	0.18	3.01	0.003	✓ Significant
Customer Loyalty	0.22	3.34	0.001	✓ Significant
R ² (Model Fit)	0.64			
F-Statistic	15.22			

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5. CONCLUSION

The study concludes that digital marketing strategies have a substantial and statistically significant impact on urban consumer preferences in Bangalore. The study confirms that online marketing strategies—especially personalized recommendations, customer loyalty mechanisms, and platform usability—have a profound influence on purchase decisions in Bangalore's urban retail market. High correlation and statistically significant regression coefficients support the alternate hypotheses, emphasizing the need for integrated digital strategies. Retailers are advised to invest in consumer-centric innovations such as responsive apps, data-driven recommendations, and influencer tie-ups to retain digitally savvy customers. As urban consumers increasingly rely on seamless digital experiences, brands that personalize content and optimize usability will gain competitive advantage.

Scope for Further Research

Future studies can expand the scope by incorporating a larger and more diverse sample across multiple metropolitan and tier-2 cities to compare regional differences in consumer behavior. Longitudinal studies may also reveal how consumer responses to digital marketing evolve over time. The role of artificial intelligence and machine learning in further personalizing the user journey and predicting consumer behavior could be explored in greater depth. Additionally, qualitative methods such as interviews or focus groups can provide deeper insights into consumer motivations and attitudes that are not captured through surveys. Exploring sector-specific responses—for example, fashion vs. electronics—could provide industry-specific strategic guidance. Finally, integrating psychographic variables such as personality traits, values, and lifestyles with digital touchpoint data could significantly enrich the marketing decision-making process.

REFERENCES

- [1] Sreenath, S. G. P., Parashuram, A., & Devlanaik, H. (2022). Impact of Digitalization and Changing Consumer Preferences and Choices on Virtual Shopping of Retail Sector in Bangalore. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, 7(4), 13.
- [2] Sahay, N. (2021). Shopping mall vs Online Retail-Consumer shopping preference in the city of Bengaluru. *International Journal for Research in Applied Science and Engineering Technology*, 9(11), 1400-1406.
- [3] BS, R., & Ravanam, R. (2024). A Study On Purchasing Behaviour Of Online Buyers With Reference To Bengaluru City, Karnataka. *Journal of Advanced Zoology*, 45(2).
- [4] Santhosh, V. A STUDY ON CONSUMERINSIGHT TOWARDS ONLINE SHOPPING-WITH SPECIAL REFERENCE TO BENGALURU CENTRAL. *Building Business Acumen towards Sustainability*, 30.
- [5] Rani, N. M., & Ramachandra, K. (2019). A study on consumer perception regarding buying fresh produce in organized retail stores in Bangalore, India: Do demographics matter?. *Theoretical Economics Letters*, 9(8), 2864-2884.
- [6] George, W. J. (2015). Online shopping behaviour: a comparative study between Indians in Bangalore and Thais in Bangkok.
- [7] Ravanam, R., Senthilkumar, K., & Raghavendra, B. (2023, December). Influence of Sociodemographics in Online Purchases at Bengaluru City in India. In *International Conference on Innovation, Sustainability, and*



- Applied Sciences (pp. 321-325). Cham: Springer Nature Switzerland.
- [8] Chattopadhyay, A., & Khanzode, P. (2019). An empirical study on awareness and consumption pattern of organic food in Bengaluru city, the capital of India: an analysis with respect to different demographic factors and availability of organic food products in Bengaluru. *Granthaalayah Management*, 7, 276-296.
- [9] Sudharani, G., & Patel, S. (2019). A Study on Effect of Online Advertising on Consumer Buying Behaviour at OAA Pvt. Ltd., Bangalore.
- [10] Kumari, A. S., Mani, S., & Arumugan, A. (2024). Assessing the effectiveness of social marketing strategies in regulating exploitative buying behaviour in bangalore's urban sector. *Salud, Ciencia y Tecnología-Serie de Conferencias*, (3), 910.
- [11] Yousefian, N., Devy, M. S., Geetha, K., & Dittrich, C. (2021). Lockdown farmers markets in Bengaluru: Direct marketing activities and potential for rural-urban linkages in the food system. *Journal of Agriculture, Food Systems, and Community Development*, 10(2), 105-121.
- [12] Basu, R., K. Guin, K., & Sengupta, K. (2014). Do apparel store formats matter to Indian shoppers?. *International Journal of Retail & Distribution Management*, 42(8), 698-716.
- [13] Jin, B., & Son, J. (2013). Indian consumers: are they the same across regions?. *International Journal of Emerging Markets*, 8(1), 7-23.
- [14] NS, S. R., & Khandai, S. (2024). Analysing the home buyers' purchasing behaviour in Bengaluru during the post-COVID-19 pandemic era through structural equation modelling. *International Journal of Housing Markets and Analysis*.
- [15] Chandra, P., & Chen, J. (2019, January). Taming the Amazon: the domestication of online shopping in Bangalore, India. In *Proceedings of the Tenth International Conference on Information and Communication Technologies and Development* (pp. 1-11).
- [16] Chincholkar, S., & Sonwaney, V. (2022). How Demographic Factors Impact Consumers' Product Choice During Online Shopping: An Empirical Study of Tier-III Markets. *Indian Journal of Marketing*, 52(2), 34-52.
- [17] Krishnamurti, S., & Gupta, B. (2017). Changing consumer behavior paradigms: Does gender and marital status influence grocery shopping behavior? An exploratory study. *Indian Journal of Marketing*, 47(10), 7-18.
- [18] Pai, S., & Mayya, S. (2022). A study on consumer preferences with reference to online food delivery amenities. *Int. J. Manag. Technol. Soc. Sci*, 144-166.
- [19] Singh, S., Kumar, S., Goel, T., & Chawla, S. (2014). Impact of Brand on Rural and Urban Consumer Behavior A Study on Mobile Phone Buyers. *IOSR Journal of Business and Management (IOSR-JBM)*, 16(5), 73-78.
- [20] Heggde, G., & Mekoth, N. (2012, October). Benefit Perceptions and Preferences of Organic Food Customers: An Empirical Analysis of Urban Customers. In *5th Annual EuroMed Conference of the EuroMed Academy of Business*.
- [21] Srinivasan, R. (2015). Exploring the impact of social norms and online shopping anxiety in the adoption of online apparel shopping by Indian consumers. *Journal of Internet Commerce*, 14(2), 177-199.
- [22] Chavadi, C. (2021). Growth drivers, characteristics, preference and challenges faced by Fast Moving Consumer Goods-A study with reference to Bengaluru. *Turkish Online Journal of Qualitative Inquiry*, 12(7).
- [23] Ramar, N., & Muthukumaran, D. C. (2016). A Pilot study on Consumer Behaviour towards Online Shopping. *Pune Research Times*, 1(1), 1-8.
- [24] Mishra, P., & Devakumar, G. (2018). Factors influencing consumer preference for purchase intention of organic apparel products—A structured review. *Pacific Bus Rev Int*, 11, 130-146.
- [25] Basha, S. M., & Ramaratnam, M. S. (2017). Construction of an Optimal Portfolio Using Sharpe's Single Index Model: A Study on Nifty Midcap 150 Scrips. *Indian Journal of Research in Capital Markets*, 4(4), 25-41.
- [26] Krishnamoorthy, D. N., & Mahabub Basha, S. (2022). An empirical study on construction portfolio with reference to BSE. *Int J Finance Manage Econ*, 5(1), 110-114.
- [27] Mohammed, B. Z., Kumar, P. M., Thilaga, S., & Basha, M. (2022). An Empirical Study On Customer Experience And Customer Engagement Towards Electric Bikes With Reference To Bangalore City. *Journal of Positive School Psychology*, 4591-4597.
- [28] Ahmad, A. Y. A. B., Kumari, S. S., MahabubBasha, S., Guha, S. K., Gehlot, A., & Pant, B. (2023, January). Blockchain Implementation in Financial Sector and Cyber Security System. In *2023 International*



- Conference on Artificial Intelligence and Smart Communication (AISC) (pp. 586-590). IEEE.
- [29] Janani, S., Sivarathinabala, M., Anand, R., Ahamad, S., Usmani, M. A., & Basha, S. M. (2023, February). Machine Learning Analysis on Predicting Credit Card Forgery. In *International Conference On Innovative Computing And Communication* (pp. 137-148). Singapore: Springer Nature Singapore.
- [30] Kalyan, N. B., Ahmad, K., Rahi, F., Shelke, C., & Basha, S. M. (2023, September). Application of Internet of Things and Machine learning in improving supply chain financial risk management System. In *2023 IEEE 2nd International Conference on Industrial Electronics: Developments & Applications (ICIDeA)* (pp. 211-216). IEEE.
- [31] Sheshadri, T., Shelly, R., Sharma, K., Sharma, T., & Basha, M. (2024). An Empirical Study on Integration of Artificial Intelligence and Marketing Management to Transform Consumer Engagement in Selected PSU Banks (PNB and Canara Banks). *NATURALISTA CAMPANO*, 28(1), 463-471.
- [32] Joe, M. P. (2024). Enhancing Employability by Design: Optimizing Retention and Achievement in Indian Higher Education Institution. *NATURALISTA CAMPANO*, 28(1), 472-481.
- [33] Dawra, A., Ramachandran, K. K., Mohanty, D., Gowrabhathini, J., Goswami, B., Ross, D. S., & Mahabub Basha, S. (2024). 12Enhancing Business Development, Ethics, and Governance with the Adoption of Distributed Systems. *Meta Heuristic Algorithms for Advanced Distributed Systems*, 193-209.
- [34] Singh, A., Krishna, S. H., Tadamarla, A., Gupta, S., Mane, A., & Basha, M. (2023, December). Design and Implementation of Blockchain Based Technology for Supply Chain Quality Management: Challenges and Opportunities. In *2023 4th International Conference on Computation, Automation and Knowledge Management (ICCAKM)* (pp. 01-06). IEEE.
- [35] Almashaqbeh, H. A., Ramachandran, K. K., Guha, S. K., Basha, M., & Nomani, M. Z. M. (2024). The Advancement of Using Internet of Things in Blockchain Applications for Creating Sustainable Environment in the Real Word Scenario. *Computer Science Engineering and Emerging Technologies: Proceedings of ICCS 2022*, 278.
- [36] Kotti, J., Ganesh, C. N., Naveenan, R. V., Gorde, S. G., Basha, M., Pramanik, S., & Gupta, A. (2024). Utilizing Big Data Technology for Online Financial Risk Management. In *Artificial Intelligence Approaches to Sustainable Accounting* (pp. 135-148). IGI Global.
- [37] Shaik, M. (2023). Impact of artificial intelligence on marketing. *East Asian Journal of Multidisciplinary Research*, 2(3), 993-1004.
- [38] Reddy, K., SN, M. L., Thilaga, S., & Basha, M. M. (2023). Construction Of An Optimal Portfolio Using The Single Index Model: An Empirical Study Of Pre And Post Covid 19. *Journal of Pharmaceutical Negative Results*, 406-417.
- [39] Basha, M., Reddy, K., Mubeen, S., Raju, K. H. H., & Jalaja, V. (2023). Does the Performance of Banking Sector Promote Economic Growth? A Time Series Analysis. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, 8(6), 7.
- [40] Rana, S., Sheshadri, T., Malhotra, N., & Basha, S. M. (2024). Creating Digital Learning Environments: Tools and Technologies for Success. In *Transdisciplinary Teaching and Technological Integration for Improved Learning: Case Studies and Practical Approaches* (pp. 1-21). IGI Global.
- [41] Mahabub, B. S., Haralayya, B., Sisodia, D. R., Tiwari, M., Raghuwanshi, S., Venkatesan, K. G. S., & Bhanot, A. An Empirical Analysis of Machine Learning and Strategic Management of Economic and Financial Security and its Impact on Business Enterprises. In *Recent Advances in Management and Engineering* (pp. 26-32). CRC Press.
- [42] Mahabub Basha Shaik, "Investor Perception on Mutual Fund with Special Reference to Ananthapuramu, Andhra Pradesh", *International Journal of Science and Research (IJSR)*, Volume 4 Issue 1, January 2015, pp. 1768-1772, <https://www.ijssr.net/getabstract.php?paperid=SUB15756>
- [43] Policepatil, S., Sharma, J., Kumar, B., Singh, D., Pramanik, S., Gupta, A., & Mahabub, B. S. (2025). Financial Sector Hyper-Automation: Transforming Banking and Investing Procedures. In *Examining Global Regulations During the Rise of Fintech* (pp. 299-318). IGI Global.
- [44] Basha, M., & Singh, A. P. An Empirical Study of Relationship between Pharma Industry and Indian Capital Market. *Sustainable finance for Better World*, 362.
- [45] Manjunath, V.S., Girisha, T., Bastray, T., Sharma, T., Ramesh Babu, S., Mahabub Basha S., & Shwetha, T.A. (2025). Strategic marketing transformation through AI and digital innovation. *Academy of Marketing Studies Journal*, 29(2), 1-13.
- [46] Sarkar, P., Hasan, M. F., Kumar, A., Agrawal, S., Basha, M., & Viyyapu, B. (2024, November). Neural



- Networks for Portfolio Management Optimization. In 2024 Second International Conference Computational and Characterization Techniques in Engineering & Sciences (IC3TES) (pp. 1-5). IEEE.
- [47] Prabakar, S., Santhosh Kumar, V., Sangu, V. S., Muthulakshmi, P., Prabakar, S., & Mahabub Basha, S. (2025). Catalysts of Change: The Transformative Journey from HR 1.0 to HR 5.0 – Innovations, Challenges, and Strategies in Human Resource Management with Technology and Data-Driven Integration. *Indian Journal of Information Sources and Services*, 15(1), 47–54. <https://doi.org/10.51983/ijiss-2025.IJISS.15.1.08>
- [48] Karumuri, V., Bastray, T., Goranta, L. R., Rekha, B., Mary, M., Joshi, R., & Mahabub Basha, S. (2025). Optimizing Financial Outcomes: An Analysis of Individual Investment Decision Factors. *Indian Journal of Information Sources and Services*, 15(1), 83–90. <https://doi.org/10.51983/ijiss-2025.IJISS.15.1.13>
- [49] THE EMERGENCE OF THE FINTECH MARKET: OPPORTUNITIES AND CHALLENGES. (2023). *Journal of Research Administration*, 5(2), 9445-9456. <https://journlra.org/index.php/jra/article/view/1045>
- [50] Kavishwar, Rahul Krishnaji. "Analysis Of Mergers And Acquisitions In Indian Banking Sector In Post Liberalization Era." (2014).
- [51] Kavishwar, R. K., Patil, S. R., & Rajendraprasad, K. H. (2012). Mergers and acquisitions in indian banking sector. *Journal of Commerce and Management Thought*, 3(1), 98-111.
- [52] Sri Hari, V., Raju, B. P. G., & Karthik Reddy, L. K. (2024). Big Data Analytics in Support of the Decision Making Process in IT Sector. *Journal of Informatics Education and Research*, 4(2).
- [53] Kavishwar, R. K., Patil, S. R., & Rajendraprasad, K. H. (2012). Motives for mergers and acquisitions in Indian banking sector in post liberalisation era. *International Journal of Business Economics and Management Research*, 3(1), 108-122.
- [54] Rizwana, M., Singh, P., Ahalya, N., & Mohanasundaram, T. (2023). Assessing the awareness of nutritional benefits of millets amongst women in Bangalore. *British Food Journal*, 125(6), 2002-2018.
- [55] Ravikanth, M., & Rao, P. V. (2016). Buying Behavior of Electronic Products in Andhra Pradesh—A Study of Selected Electronic Consumer Product. *International Journal of Recent Research Aspects*, 3(2).
- [56] Srivastava, M., & Raina, M. (2021). Consumers' usage and adoption of e-pharmacy in India. *International Journal of Pharmaceutical and Healthcare Marketing*, 15(2), 235-250.
- [57] Sungheetha, A., Bharathi, B., Ganesan, D., Karthikeyan, T., Madhavi, N. B., & KR, C. L. (2023, November). E-Commerce Business Model Analysis and Success in Urban Areas Using AI-Distributed Machine Learning. In 2023 International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering (RMKMATE) (pp. 1-6). IEEE.
- [58] Kunwar, P., & Misra, H. (2018). A Study on Consumer Behavior towards Organized Apparel Retail Industry with Reference to Gujarat. Gujarat Technological University, Ahmedabad.
- [59] Surie, A. (2020). On-demand platforms and pricing: How platforms can impact the informal urban economy, evidence from Bengaluru, India. *Work Organisation, Labour & Globalisation*, 14(1), 83-100.
- [60] Saini, M., Prakash, G., Yaqub, M. Z., & Agarwal, R. (2024). Why do people purchase plant-based meat products from retail stores? Examining consumer preferences, motivations and drivers. *Journal of Retailing and Consumer Services*, 81, 103939.
- [61] Padval, B., & Maurya, A. M. (2021). An Analytical Study of Influencing Purchase Intention Of Customers Towards Purchasing of Smart Phones Brands in Mumbai City. *NLDIMSR Innovision Journal of Management Research*, 26-41.
- [62] Srivastava, M. (2019). Role of customer engagement in customer loyalty for retail service brands: Customer orientation of salesperson as a mediator. *Indian Journal of Marketing*, 49(11), 7-19.