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Usage of AI in Market Orientation, Learning Orientation And Technological Orientation On Organisational Performance: An Empirical Study Of Banking Sector Of India

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This study aims to empirically validate the significance of Artificial Intelligence (AI) in market orientation (MO), technological orientation (TO), and learning orientation (LO) and its effects on the organizational performance (OP) of the banking sector. It is clear from the previous literature that learning, market, and technological orientation play a noteworthy role in augmenting the performance of banking companies by cultivating the capabilities of organizational members in-depth, inspiring active learning, and producing new knowledge. Explanatory research methods and a quantitative research strategy were used in the study. The responses from 256 respondents were utilized as the data source, and the questionnaire was self-administered. To assess the proposed hypotheses and find answers to the research questions, an investigation was carried out using Smart PLS software. The outcomes of the investigation revealed that the usage of AI in market and technological orientations has a strong and positive effect on OP, whereas LO has no significant or lesser effect on OP. As a result, it is strongly advised that the banking sector implement and configure market and technological orientations as a source of competitive advantage to attain superior performance in the banking sector.

Introduction

In today's competitive world, a strong banking sector is regarded as the foundation for the economic progress of any nation. Due to globalization and the dynamic nature of the banking sector, it faces numerous challenges in its day-to-day banking operations. In the twenty-first century, we enter the digital world of AI, where the field of MO, LO and TO, could significantly benefit by the artificial intelligence (AI) and improve the performance of the banking sector. It provides the sources of data, improves the timely data management and solves the complex and sophisticated algorithms. Integration of technology with AI is helpful in communication between types of businesses, consumers, the nature of websites, and brands. By using AI, user become more inclined in their buying behavior as it makes a personalized user experience. It is easy for customers as well as organizations to identify their target customers to identify which channel or place should be used for selling their services or buying products by using AI.

Both of them has increases the working of banking sector. Furthermore, to meet the requirements of customers and of the global market, each country's banking industry must achieve strategic competitiveness by implementing more valuable resources and tools (Acar et al., 2013). To achieve a competitive advantage, the banking sector uses various strategic techniques. MO, LO, and TO are strategic techniques that may improve organizational performance. The usage of AI tools in all strategic Techniques may enhance organisational performance. These orientations entail both strategy creation, referred to as content, and strategy implementation, referred to as process (Chaffee, 1995; David, 1989). Since Miles and Snow (1978) developed four strategic orientations for family-owned firms, these strategic orientations were innovation, learning, and market which attracted the attention of scholars.

Numerous empirical research has examined whether and how MO, LO, and TO affect OP, but no definitive result has been reached as of yet. Much evidence about classifications and the positive effects of strategic orientations on business performance abound, both nationally and internationally (Egan and Shipley, 1995; Pearce and Carland, 1996; 2005; Talukdar et al., 2005; Babakus et al. 2009) In a similar way, Langerak (2003) concludes after reviewing 51 relevant studies published in international publications that it is still debatable how and when market orientation has a positive impact on organizational performance. However, while there are several studies on the manufacturing sector and on various other sectors, where majority of research has dealt with the creation and carrying out of strategies rather than their impact on OP. No research has been unearthed about strategic orientations in the backdrop of the Indian financial sector.

Banking is a business in which the degree of flexibility in service qualification is low, and workers' initiative in presenting those services is lower than in other industries (**Lovelock, 1996**). Therefore, it can be said that the banking industry is adversely affected in developing outstanding individual service performance, even though direct client relations are actively pursued.

Thus, the theoretical foundation of this research can be established in the contents of customer and entrepreneurship orientations in the setting of learning orientation for the improvement in the organizational as well as service performance of the banking sector. In this context, the goal of this study is to contribute to the literature by simultaneously analyzing market, learning, and entrepreneurial orientations and testing their link with OP in the banking industry.

The paper's novelty lies in its exploration of how strategic orientations, specifically MO, LO, and TO, impact OP within the banking sector. Through empirical research and examination of the relationships between these strategic orientations and OP, the study contributes to filling gaps in existing literature. Furthermore, the focus on the banking sector in India provides a unique perspective on the challenges and opportunities for incorporating these strategic orientations to enhance OP. Additionally, the study emphasizes the interconnectedness of these strategic orientation components and their combined positive effects on bank performance, highlighting the importance of a holistic approach toward strategic orientation within the banking industry.

Theoretical Background and Hypotheses

Market Orientation (MO) and Organisational Performance (OP)

Kohli and Jaworski (1990) and **Narver and Slater (1990)** were the first who initiate the research of MO and the measurement of the effect of MO on OP. **Drucker (1954)** stated the definition of business orientation is to generate customers and the customer is the person who creates the business. Further, he added that any business has to deal mainly with two functions: marketing and innovation. According to **Narver et al., (1990)**, early marketing research concentrated on the discussion and development of marketing concepts, whereas modern research has mostly focused on the assessment of market orientation and the relationships between market orientation and other variables, such as the performance of these variables. Market orientation is a specific type of organizational culture that places a focal point on customers, rivals, and cross-functional cooperation to improve customer value and develop a competitive advantage. Furthermore, most academics recognized MO as one of the pillars of modern marketing and strategic management.

Various researchers found market orientation as a part of philosophy or strategy which emphasizes customer orientation, competitor orientation, and inter-functional coordination; while **Kohli and Jaworski (1990)** define market orientation primarily in terms of behaviors. Market orientation has several features, such as procedure, corporate culture, and competencies, and it is one of the most successful ways for an organization to deal with external changes (**Lin, 2001**).

Several researchers in the field of marketing, including **Kohli and Jaworski (1990)**, **Narver and Slater (1990)**, and **Ferdous and Polonsky (2011)**, pointed out that organizations that exhibit both internal and external market-oriented behavior perform better and are more likely to outperform opponents, which in turn results in improved organizational performance. According to the recent study conducted by **Ahmed and Othman (2017)**, organizational performance will be improved if they build a strong organizational culture by taking market orientation into account. At the same time incorporating AI In digital marketing for promoting creativity and boosting results is necessary to increase organizational performance.

Based on the discussion, following hypothesis can be framed:

H₁: Marketing orientation improves the organizational performance of the banking industry by using AI.

Learning Orientation (LO) and Organisational Performance (OP)

Numerous researches have found a connection between learning orientation and organizational creativity. For some authors (**Slater & Narver, 1995**; **Sawaeen & Ali, 2020**) there is a positive relationship between learning orientations and organizational performance. On the other hand, some claim that learning does not always lead to better performance or that there is no correlation between the two (**Crossan et al., 1999**; **Jerez, 2001**). Initially, research on learning and organizational performance stated that one of the most significant resources for developing the ability to make decisions that are aligned with the company's effectiveness is learning (**Argyris, 1976**). On the contrary, if the information is not shared or developed properly in the organization, the result would come in an inefficient manner, which in turn causes problems due to the ambiguity that persists as a consequence of the poorly structured sequence of learning practices. In another research by **Argyris and Schon (1978)**, they stated that learning orientation can improve the ability to innovate and indirectly improve organizational performance.

Sinkula et al. (1997) described the LO as a set of organizational values that actively impact knowledge development to understand, assess, accept, or reject information received by the company. It causes individuals to establish habits connected to learning dedication, open-mindedness, and shared vision. The same theory was proposed by **Hakala (2011)**, learning can be seen as the growth or acquisition of new knowledge that has the potential to affect behavior; a more rigorous perspective presupposes that learning yields new behaviors or value creation.

Therefore, shared vision, openness, and commitment to learning can be thought of as the elements of learning orientation. Furthermore, three methods are used in the management literature's discussion of strategic orientation to explain how market, technological, entrepreneurial, and learning orientations interact **H. Hakala (2011)**. The

effect of LO on OP may differ depending on the size of the company. Particularly, smaller businesses may have a lower commitment to learning than their larger rivals **Lonial (2015)**. Therefore, the organization's inclination to produce and apply information is seen as the learning orientation. Following hypothesis can be framed:

H_{2a}: Shared vision of learning orientation improves the organizational performance of the banking industry by using AI.

H_{2b}: Open-mindedness of learning orientation significantly improves the organizational performance of the banking industry by using AI.

H_{2c}: Intra-organizational knowledge sharing of learning orientation significantly improves organizational performance by using AI.

H_{2d}: Commitment to learning of learning orientation does not significantly improve organizational performance by using AI.

Technological Orientation (TO) and Organisational Performance (OP)

According to **Obeidat (2016)**, AI and technology is an important resource for connecting customers and organizations, as well as for improving the ability to acquire customer information. AI is the main source of technological orientation in the banking sector, its offers opportunities for digitization and automated processes. It is useful for setting the application for predicting stock market trend, managing credit risk and related working of online banking that improves the operational efficiency of banks and at the same time customer satisfaction level **Tajudeen Alaburo Abdulsalam et al.(2024) & Preeti Panwar (2024)**. A technically driven organization aims to obtain new and highly trailblazing technologies to devise new processes, goods, and services, even if the amount of technological advancement may have an impact on its technology adoption or development. As a result, TO is described as a firm's tendency to adopt or implement new technologies, or innovations. According to the research conducted by **Halac (2015)**, technical orientation indicates an organization's level of dedication to research and development, procurement of cutting-edge technologies, and use of updated technologies.

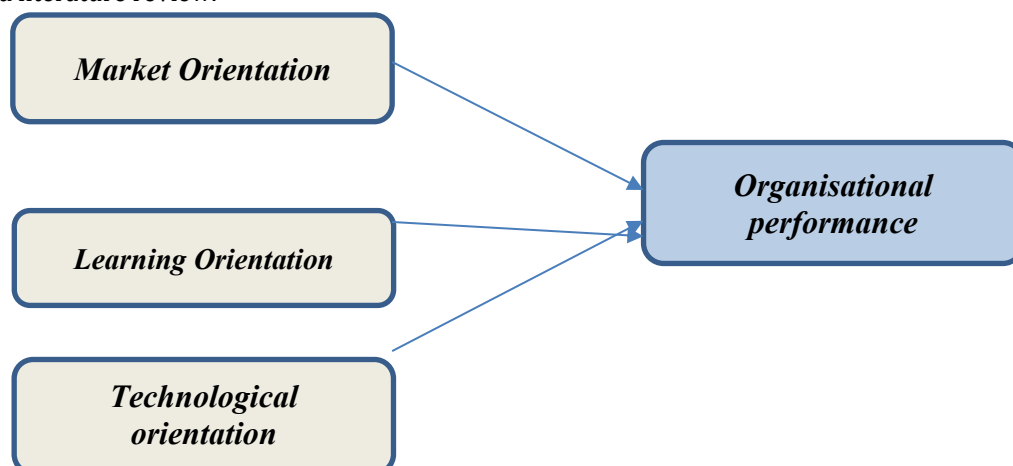
Firms that are technologically oriented, invest their resources in obtaining new and sophisticated technology as well as coming up with new processes, goods, and services. Nevertheless, the rate of progress in technology within their organization could impact their technological incorporation and/or development (**G.Y. Gao et al., 2007**).

Previous research has indicated a linkage between technology orientation and company performance (**Gatignon et al., 1997**). The significance of being technologically oriented towards innovation has been acknowledged for a considerable period (**P. Humphreys et al., 2005**). If banks incorporate AI in all their work, then it definitely reduces operational costs and improves service quality. Although the adoption rate of AI in banking is very low as compare to the developed nations (**Tajudeen Alaburo Abdulsalam et al.2024**).

However, the literature has only paid scant attention to the correlation between TO and OP (**G.B. Voss and Z.G. Voss., 2000**) not the usage of AI with regards to the technological orientation. Firms with a high technology orientation outperform their competitors when technology evolves rapidly because they can develop new processes, goods, and services to meet client demands (**G. Hamel and C.K. Prahalad, 1994**). Companies that are technology-focused and integrate customer-value innovation with technological advancements are more likely to experience enduring profitability and enhanced organizational performance. Therefore, the hypothesis can be framed:

H₃: Technological orientation significantly improves the organizational performance of the banking industry by using AI.

The following conceptual model was tested to see how the study's variables related to one another in light of the aforementioned literature review.



Conceptual Model

Research Methodology

Population, Study Area, and Sample Size

The present research is quantitative where the various variables were objectively measured. The empirical test was

performed to determine the interrelationships between the independent variables (market, learning, and technological orientations) and the dependent variable (organizational performance).

Data was collected online from the banking sector, where 12 nationalized banks lead the whole banking sector. Leading banks are Punjab National Bank (PNB), SBI, Union Bank, Canara Bank, and so on. As per the need of the study, data was collected from bank branch managers/assistant managers of banks where it is generally contemplated that each bank branch has a single branch manager responsible for the operation of the branch. The reason for targeting the bank branch managers/assistant managers was because they are the persons who strive to implement all the organizational activities after the top management. Another reason for choosing them was they are well versed and competent in their work.

To deal with the partial least square structural equation modeling (PLS-SEM), the sample size was first established using the G-Power 3.1.9.2 software (Faul et al., 2009). This software provided a minimum sample size of 107. Later, using the population as a basis, the sample size was also established using the Krejcie and Morgan (1970) method, yielding a sample size of 318. The responses were received from 256 respondents in total, an excellent response rate of 80.14%.

Demographic Profiles

Demographic profiles such as gender, age, education, and income were collected with the help of a standardized questionnaire. To gain some broad perspectives on the data gathered, this information is important. Table 1 represents the gender, age, education, and income level of respondents. According to survey results, 62.11% of respondents were male and 37.89% were female. In terms of age, 12.11% of respondents were between the ages of 25-35. Most of the respondents come under the age group of 35-45 which was 57.03% and the remaining 30.47% of respondents were above 45 years of age. As per the data about education, 63.28% of respondents have graduated and 36.72% have master's degrees. 33.59% of respondents earned between Rs. 25000 to 45000, 48.05% of respondents earned above than Rs. 45000 to 65000, rest of the employees earned more than Rs. 65000 which is 18.36%. This indicates that those whose earnings are high have contributed more positively to the organization. Hence, it can be said that the respondents were suitably fit for the data collection process for the present study.

Table 1: Demographic Profiles

	Category	Frequency	Percentage
Gender	Male	159	62.11
	Female	97	37.89
Age	25-35	31	12.11
	Above 35-45	146	57.03
	Above 45	78	30.47
Education	Graduate	162	63.28
	Post- Graduate	94	36.72
Income	25000-45000	86	33.59
	Above 45000-65000	123	48.05
	Above 65000	47	18.36

Source: Prepared by the authors

Measurement Items

The measurement constructs included both dependent & independent variables adopted five items of scale. Learning orientation was measured with 12 items and all the constructs were taken from the study of Sinkula et al. (1997), and Baker and Sinkula (1999). It has been made with three more constructs namely commitment to learning, shared version, and open-mindedness.

The MO was measured with 25 questions based on the research of Kumar et al., (1998); Narver and Slater, (1990). The MO was made up of Customer orientation, Competitor orientation, inter-functional coordination, long-term horizon, and profit emphasis and each item had either four or five questions.

In the present study, short-term and long-term performance altogether has made the organizational performance. The construct of organizational performance has been adopted from the study of Lin (2001) and Steers (1975).

The construct for the Technological Orientation is also adopted from the study of Lin (2001) which has included six items.

Table no.2 represents the number of items of dependent and independent variables along with sources of literature.

Table 2: Dependent & Independent Variables

Dependent & Independent Variables	No. of Items	Adopted from
Learning Orientation	12	Sinkula et al. (1997), and Baker and Sinkula (1999)
Market Orientation	25	(Kumar et al., 1998; Narver and Slater, 1990)
Organisational Performance	6	Lin (2001) and Steers (1975)
Technological Orientation	6	Lin (2001)

Source: Prepared by the authors

Results and Interpretations

Reliability Statistics

Item Reliability

The items' variance explained through latent variables helps in estimating the item's reliability (Koufteros, 1999). The R^2 values for the individual items are depicted in the below table.

Table 3 Reliability Statistics

Variables	Item Codes (Outer Loading - Bootstrap)	Measuring Items	Item Reliability (R Squared)
Learning Orientation - commitment to learning	LOCL1 <- LOCL	Managers agree that our organization has the ability to learn new AI tools that will improve our competitive advantage.	0.739
	LOCL2 <- LOCL	"The basic values of this organization include learning as the key to improvement."	0.668
	LOCL3 <- LOCL	The sense is that employee learning of AI is an investment, not an expense.	0.715
	LOCL4 <- LOCL	Learning AI in my organization is now seen as a key factor in guaranteeing organizational survival.	0.854
Learning Orientation- Intra organizational knowledge sharing	LOIOKS1 <- LOIOKS	Learning through AI is a commonality of purpose in my organization.	0.767
	LOIOKS2 <- LOIOKS	There is total agreement on our organizational vision across all levels, functions, and divisions.	0.781
	LOIOKS3 <- LOIOKS	All employees are committed to the goals of this organization.	0.81
	LOIOKS4 <- LOIOKS	Employees view AI as partner in charting the direction of the organization.	0.702
Learning Orientation- Open-	LOOM1 <- LOOM	We are not afraid to reflect critically on the shared assumptions we have made about our customers."	0.63

mindedness	LOOM2 <- LOOM	"Personnel in this enterprise realize that the very way they perceive the marketplace must be continually questioned."	0.793
	LOOM3 <- LOOM	"We rarely question our own bias when interpreting customer information collectively."	0.879
	LOOM4 <- LOOM	"We continually judge the quality of our decisions and activities over time."	0.797
Learning Orientation- Shared vision	LOSV1 <- LOSV	"There is a good deal of organizational conversation that keeps alive the lessons learned from history."	0.709
	LOSV2 <- LOSV	"We always analyze unsuccessful organizational endeavours' and communicate the lessons learned widely."	0.718
	LOSV3 <- LOSV	"We have specific mechanisms for sharing lessons learned in organizational activities by using AI tools from department to department (unit to unit, team to team)."	0.772
	LOSV4 <- LOSV	Top management repeatedly emphasizes the use of AI tools for sharing knowledge in our company.	0.811
Market Orientation	MO1 <- MO	"Showing commitment to customers."	0.59
	MO10 <- MO	"Senior managers target opportunities for competitive advantage"	0.787
	MO11 <- MO	Various service units using AI tools and work closely together to meet customers' needs	0.788
	MO12 <- MO	Various units using AI and share business information"	0.744
	MO13 <- MO	By using AI in Business strategies are integrated between different service units	0.778
	MO14 <- MO	All service units work together to offer value to the customer by usages of AI in their day to day working	0.828
	MO15 <- MO	Different service units share resources and use AI tools	0.742
	MO16 <- MO	Adopting AI in long-term horizon in matters of profits	0.805
	MO17 <- MO	"Satisfying all key constituencies in the long term"	0.818
	MO18 <- MO	"Aiming for a positive profit margin in the long term"	0.716

	MO19 <- MO	Discovering and implementing new value for customers Personalization with the use of AI	0.725
	MO2 <- MO	Creating services that offer value for customers by using AI.	0.722
	MO20 <- MO	Trying to overcome any deficiency in services"	0.816
	MO21 <- MO	"Requiring rapid payback of new AI based services/facilities"	0.72
	MO22 <- MO	"Profit performance is measured for each service unit"	0.621
	MO23 <- MO	"Senior managers emphasize improved performance relative to competitors"	0.753
	MO24 <- MO	"All service units are required to be profitable"	0.69
	MO25 <- MO	"Emphasis on earning revenues sufficient to cover expenses"	0.548
	MO3 <- MO	"Understanding customers' needs"	0.601
	MO4 <- MO	"Having patient satisfaction a major objective"	0.706
	MO5 <- MO	"Measuring patient satisfaction"	0.73
	MO6 <- MO	"Providing follow-up services"	0.763
	MO7 <- MO	"People in charge of various services discuss competitor information"	0.745
	MO8 <- MO	"People in charge of various service units respond rapidly to competitors' actions"	0.77
	MO9 <- MO	"Senior managers discuss competitors' strategies"	0.745
Organisational Performance	OP1 <- OP	"Rate of sales growth"	0.733
	OP2 <- OP	"Performance of new product development"	0.805

	OP3 <- OP	"Performance of market development"	0.759
	OP4 <- OP	"Innovation capability during the process of product designing and manufacturing"	0.753
	OP5 <- OP	"Prospects of employee's career development"	0.797
	OP6 <- OP	"Investment rate of return"	0.754
Technological Orientation	T01 <- TO	"New facilities and equipment and AI can improve production and work efficiency"	0.767
	T02 <- TO	"Colleagues often bring forward many different method and AI to improve the production art and work process"	0.807
	T03 <- TO	"So much profit can generated from the newly developed product, AI tools and service"	0.83
	T04 <- TO	Taking in new technology and AI tools to improve producing art or work process	0.81
	T05 <- TO	Developing new AI tools and services that are accepted by the market	0.874
	T06 <- TO	Taking new AI tools or service items to improve the firm's operating performance"	0.834

Source: Prepared by the authors

When the value of the R square of an item is above 0.5, it contributes to the reliability of the item, but if the value is below 0.5, it shows that the variance elucidated by the error terms is higher than the item's reliability (**Hughes et al., 1986; Bollen, 1989**). The R square value of all the items in the above table is above 0.5 which indicates that the items were reliable.

Composite Reliability

If the value of composite reliability is above 0.6, then it is admissible (**Bagozzi & Yi, 1988**). From the below table, we can see that the composite reliability for all the constructs is above 0.6 which indicates that the uni-dimensionality for evaluating the composite reliability of the scale was manifested.

Constructs' Composite Reliability

Table 4: Composite Reliability

S. No.	Construct	Description	No. of variables	Composite Reliability
1	LOCL	Learning Orientation - commitment to learning	4	0.834
2	LOIOKS	Learning Orientation-shared vision	4	0.85
3	LOOM	Open-mindedness	4	0.86

4	LOSV	Intra organizational knowledge sharing	4	0.84
5	MO	Market Orientation	25	0.966
6	OP	Organisational Performance	6	0.896
7	TO	Technological Orientation	6	0.925

Source: Prepared by the authors

Validity

Convergent Validity

The convergent validity was investigated by looking at AVE as suggested by (Fornell & Larcker, 1981). The assessment can also be performed by factor loadings and significant t-statistics (Lu et al., 2007).

Table 5: Factor loadings and t-statistics

Items	Loadings	t-statistics	Sig.
LOCL1 <- LOCL	0.739	10.948	0
LOCL2 <- LOCL	0.668	7.824	0
LOCL3 <- LOCL	0.715	8.713	0
LOCL4 <- LOCL	0.854	17.591	0
LOIOKS1 <- LOIOKS	0.767	24.571	0
LOIOKS2 <- LOIOKS	0.781	24.085	0
LOIOKS3 <- LOIOKS	0.81	40.881	0
LOIOKS4 <- LOIOKS	0.702	17.563	0
LOOM1 <- LOOM	0.63	12.269	0
LOOM2 <- LOOM	0.793	18.266	0
LOOM3 <- LOOM	0.879	59.471	0
LOOM4 <- LOOM	0.797	29.189	0
LOSV1 <- LOSV	0.709	16.715	0
LOSV2 <- LOSV	0.718	15.322	0
LOSV3 <- LOSV	0.772	18.98	0
LOSV4 <- LOSV	0.811	33.508	0
MO1 <- MO	0.59	12.55	0
MO10 <- MO	0.787	33.514	0
MO11 <- MO	0.788	33.046	0
MO12 <- MO	0.744	31.326	0
MO13 <- MO	0.778	29.068	0
MO14 <- MO	0.828	40.276	0
MO15 <- MO	0.742	22.119	0
MO16 <- MO	0.805	35.658	0
MO17 <- MO	0.818	40	0
MO18 <- MO	0.716	18.989	0
MO19 <- MO	0.725	17.376	0
MO2 <- MO	0.722	21.231	0
MO20 <- MO	0.816	36.676	0
MO21 <- MO	0.72	19.454	0

M022 <- M0	0.621	10.542	0
M023 <- M0	0.753	21.776	0
M024 <- M0	0.69	18.795	0
M025 <- M0	0.548	9.843	0
M03 <- M0	0.601	13.158	0
M04 <- M0	0.706	20.814	0
M05 <- M0	0.73	25.119	0
M06 <- M0	0.763	31.474	0
M07 <- M0	0.745	23.063	0
M08 <- M0	0.77	29.475	0
M09 <- M0	0.745	21.634	0
OP1 <- OP	0.733	21.632	0
OP2 <- OP	0.805	31.561	0
OP3 <- OP	0.759	26.627	0
OP4 <- OP	0.753	21.972	0
OP5 <- OP	0.797	30.264	0
OP6 <- OP	0.754	26.258	0
T01 <- TO	0.767	25.734	0
T02 <- TO	0.807	30.84	0
T03 <- TO	0.83	43.862	0
T04 <- TO	0.81	30.808	0
T05 <- TO	0.874	46.975	0
T06 <- TO	0.834	39.216	0

Source: Prepared by the authors based on the data analysis, made using SMART PLS software

In the above table, the indicators show the value of factor loadings as above 0.5 which is acceptable (Bagozzi and Yi, 1988). The significant t-statistics value also displayed the convergent validity (Lu et al., 2007; Bollen, 1989).

Table 6: Average Variance Extracted (AVE)

Construct	AVE
LOCL	0.558
LOIOKS	0.587
LOOM	0.609
LOSV	0.568
MO	0.538
OP	0.589
TO	0.674

Source: Prepared by the authors based on the data analysis, made using SMART PLS software

In the above table, the values of AVE for each variable are above 0.5 which demonstrates the convergent validity (Fornell & Larcker, 1981).

Discriminant Validity

Gold et al. (2001) suggested that if the HTMT value is below 0.9, it proves that between two reflective constructs, discriminant validity has been established. In the below table, the results of the HTMT method are displayed. It indicates that the values are below 0.9 which proves the discriminant validity.

Table 7: Discriminant Validity Heterotrait - Monotrait Ratio (HTMT)

Construct	LOCL	LOIOKS	LOOM	LOSV	MO	OP	TO
LOCL							

LOIOKS	0.411						
LOOM	0.362	0.835					
LOSV	0.693	0.731	0.743				
MO	0.411	0.845	0.813	0.765			
OP	0.393	0.843	0.822	0.715	0.813		
TO	0.397	0.791	0.798	0.709	0.82	0.837	

Source: Prepared by the authors based on the data analysis, made using SMART PLS software

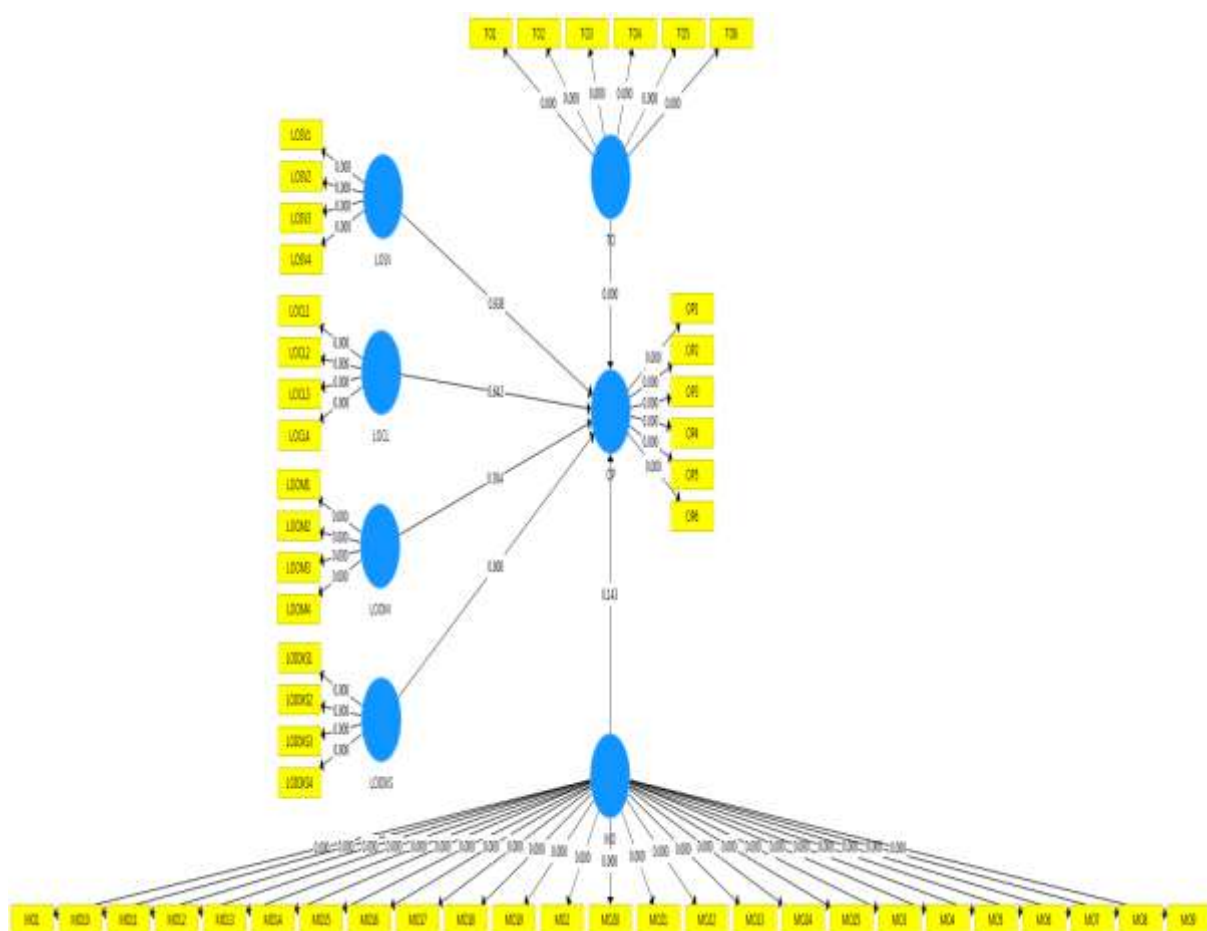
Estimating the Proposed Model

The bootstrapping method of Smart PLS software was utilized to assess the hypothesized relation between independent and dependent variables. As PLS-based SEM was utilized instead of the covariance-based technique, therefore assessment of model fit was not performed.

Testing the Effect

The relationships were analyzed through Smart PLS 3 software.

Figure 1: Proposed Model



Path Model with p Values

Source: Proposed model prepared by the authors, using SMART PLS

The table below shows the standardized parameter estimates of hypothesized relationships showing the values of beta, t-value, p-value, R^2 , and adjusted R^2 . The testing of hypotheses was performed with the help of a non-parametric method called bootstrapping.

Table 6: Hypotheses Testing

Hypothesis	Relationship	Beta	T value	P value	Result
H1	MO -> OP	-0.151	1.503	0.134	Not supported
H2a	LOSV -> OP	0.004	0.075	0.94	Not supported

H2b	LOOM -> OP	0.015	0.32	0.749	Not supported
H2c	LOIOKS -> OP	0.572	12.249	0	Supported
H2d	LOCL -> OP	0.017	0.47	0.639	Not supported
H3	TO -> OP	0.568	7.184	0	Supported

Source: Prepared by the authors based on the data analysis, made using SMART PLS software

Table 7: R² and R² adjusted values

Construct	R ²	R ² Adjusted
OP	0.857	0.854

Source: Prepared by the authors based on the data analysis, made using SMART PLS software

The above table displayed the R² and R² adjusted values in which variance in dependent variable due to independent variables was analyzed through R square adjusted values as the influence of multiple independent constructs on the dependent construct was examined. The variance in organizational performance was found higher i.e. 85.4%.

Discussions and Conclusions

In conclusion, the present research endeavoured to address many gaps that were found in the previous literature concerning the strategic orientation factors and their effects on the OP of any organization. Using empirical research, the study examined the relationship between LO, MO, and TO which affects the OP of the banking industry by usages of new AI tools.

The present research begins with an overview of numerous challenges faced by the banking sector in day-to-day banking operations. Therefore, strategic orientation which includes the usage of AI in LO, MO and TO is the need of the hour for the better performance of the banking sector which could be achieved by incorporating variables of strategic orientation such as MO, LO and TO. Based on the findings, the study concludes that the banking sector should strongly embrace each of the three components of strategic orientation for the betterment of OP since they are interconnected in the context of the Indian banking sector. This is because, depending on how broadly they are implemented, each of the three strategic orientation components has positive as well as neutral effects on the bank's performance. Hypothesis testing showed that usages of AI in MO, LO and TO do not have an equal effect on the OP of the banking sector. The findings of the hypothesis are as follows: (1) Usages of AI in marketing orientation does not significantly improve the organizational performance of the banking industry. (2) Usage of AI in Learning orientation has not significantly improved the organizational performance of the banking industry. Learning orientation is made up with namely commitment to learning, open-mindedness, shared vision, and intra-organizational knowledge sharing. Accordingly, hypotheses of LO resulted are as follows: 2(a) Shared vision of learning orientation has significantly improved the organizational performance by using AI. 2(b) Open-mindedness of learning orientation has not significantly improved the organizational performance by using AI. 2(c) Intra-organizational knowledge sharing of learning orientation has not significantly improved organizational performance by using AI. 2(d) Commitment to learning of learning orientation has not significantly improved organizational performance by using AI. Furthermore, hypothesis two resulted. (3) Technological orientation significantly improves the organizational performance of the banking industry by using AI.

The study has made a theoretical contribution to the relevant literature and highlighted significant managerial implications regarding how banks and other financial institutions can leverage their strategic attributes to increase organizational commitment, which in turn improves organizational performance.

Managerial Implications

The present study provides insights for banking institutions as well as for those institutions that are looking for improvement in their marketing strategies. The findings of the present study also support the claims made by **Kohli and Jaworski (1990)**, **Narver and Slater (1990)**, **Jaworski and Kohli (1993)**, **Han et al. (1998)**, **Baker and Sinkula (1999)**, **Lin (2001)**, and **Tse et al. (2003)** which explains the beneficial effects of market technological orientation on organizational performance, approved that technological orientation has a positive effect. The findings of this research provide more evidence that learning orientation does not exactly stimulate organizational creativity. As a result, companies need to focus on learning enhancement as a part of their routine activities. Yet, companies also need to be aware of the learning-oriented culture and drive it through the stimulation of external market knowledge, internal market culture, and learning capabilities, which is a sort of internal innovation push. (**Lin, 2001**). The conclusion holds equal significance as the perspective given by Slater and **Narver (1995)** which states that companies must operate in a learning-oriented environment to improve the organization.

Contribution toward Society

By examining how market, learning, and technological orientations impact organizational performance in the banking industry by usages of AI-based technology in day-to-day work, the study enhances our understanding of how companies can adapt and thrive in a rapidly changing environment. Paper's findings suggested that organizational

performance will be boosted by using AI based technology in learning and marketing in the banking sector, it would improve the economy by increasing consumer happiness and financial stability, ultimately leading to a more prosperous society. The research shows that focusing on new technology such as AI, can lead to innovative ideas and a competitive edge, driving economic expansion and creating new opportunities in banking. Emphasizing strategic orientation may also improve organizational practices and benefit employee well-being, job performance, and security.

This study suggested that using AI in the banking sector can assist their clients by aiding every banking transaction. As a result, customers' actions show positive attitudes and behaviors by their desire to continue using AI. Which may make banking more effective and efficient.

The study suggests that employees in the banking industry may perform better and have improved job prospects and security by using AI-based technology which is an innovative approach in banking sector. This can promote economic expansion and industrial competitiveness as AI conducts the work in less time and improves efficiency, benefiting both society and the business community.

This study is relevant for researchers interested in understanding the strategic components of organizational performance.

Limitations and Future Prospective of the Research

There are several limitations, even though this paper came up with many significant conclusions about the theory and application of strategic orientation and applicability of the variables for the betterment of organizational performance. The present paper focused on the banking sector only and not on any other sectors where strategic orientation is required for the improvement of the organization. Hence, researchers can examine some unique features of certain sectors and see how these variables of strategic orientation can affect the relationship with organizational performance.

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