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The Strategic Impact of Artificial Intelligence on Business Innovation and Firm Performance: A Resource-Based View Approach

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ABSTRACT

Purpose: This study explores how Artificial Intelligence (AI) improves firm performance by encouraging innovation in business models using the (RBV) theory. It examines how AI adoption boosts firm outcomes, with (BMI) acting as a bridge, and how IT strategy and data privacy concerns influence (moderate) this relationship.
Design/methodology/approach: Information was obtained from 314 managers employed in both Islamic and conventional banks in Punjab, Pakistan. A technique called (PLS- SEM) was used to analyze the data.
Results: The findings indicate that AI enables firms to improve by transforming the way they conduct their business (via innovation). This effect improves even when there is a good IT strategy. Nevertheless, in the case of fear of data protection and privacy, the effectiveness of AI can be lower.
Practical Implications: Businesses are advised to treat AI as an important strategic resource in innovation and to earn a competitive advantage. AI requires effective IT strategies and optimal use of data so that companies can obtain the best results. Policymakers should also address privacy risks.
Originality/Value: This study contributes to existing knowledge by demonstrating how AI enhances business performance through innovation, underpinned by RBV theory. This study presents a new model that elucidates the indirect and conditional impacts of AI on the modern digital business landscape.
Keywords: Artificial intelligence, Business model innovation, Firm performance, IT strategy, and safety & Privacy.

1. INTRODUCTION

AI refers to the use of machines to perform tasks that usually require human thinking, such as learning, reasoning, and decision making. AI employs organized data to enhance business functioning. Although AI is not new, recent innovations have enhanced its strength and usefulness across most industries (Ransbotham et al., 2018). AI assists firms in developing new and intelligent business models that sustain innovation and achieve sustainable success (Boitnott, 2019). Business model innovation has emerged as a significant research subject, particularly in the case of firms that remain competitive (Sosna et al., 2010; Wirtz et al., 2010). Researchers further highlight that external forces such as changes in markets and emerging technologies force firms to become innovative in their models (Foss & Saebi, 2017). The latest advancements in AI have created more opportunities for companies to expand and improve (Biedima et al., 2023; Okoliko et al., 2023). The use of AI maximizes the reliability and precision of business optimization undertakings when used in decision-making (Battisti et al., 2022). Currently, AI is used effectively in the optimization of business performance because it is a new stimulus, makes the processes faster, and enables an enterprise to make more informed decisions. A good illustration is eBay, which runs an AI-driven machine translation to improve efficiency.

This transformation has also brought forth innovations in the way information is dealt with and in the firm's business model as a whole (Akter et al., 2022). Likewise, studies indicate that contemporary firms are now shifting their attention towards new business models founded on digital technology, such as AI and circular economy concepts (Jankovic & Curovic, 2023). Firms are increasingly employing Artificial Intelligence (AI) to examine data, enhance their internal processes, and provide improved services to customers. In addition, these actions ensure that their strategies encourage long-term sustainability strategies (Díaz & Neubert, 2022; Duan et al., 2019). Currently, data privacy, security, and fairness in artificial intelligence (AI) systems are gaining importance. New advanced tools, such as generative AI, can now generate realistic text, images, and sound (Bolick & Da Silva, 2024). For instance, (LLMs) are trained on large collections of online content using advanced neural networks to generate responses similar to human writing (Chang et al., 2024). As the use of AI grows, it plays a key role in business decision making and encourages companies to redesign their business models to remain competitive (Dwivedi et al., 2021).

To benefit fully, firms must understand how AI creates value and learn how to manage it effectively (Mikalef & Gupta, 2021), Modern businesses should see their models not just as internal systems, but as part of a larger network involving suppliers, customers, and technology. In industries, such as manufacturing, many companies

are moving toward AI-based circular business models that focus on reducing waste and increasing productivity. This change requires new practices, tools, and skills (Mikalef & Gupta, 2021). A good illustration is the World Wide Web, which was created without the provision of high privacy protection, although it is freely accessible (Pawlicka et al., 2023). To conclude, how huge efficiency, decision-making, and innovation. Nevertheless, to responsibly use it, ethical concerns such as data protection or the danger of uncontrolled use of AI will have to be addressed by companies as well. A fundamental method to achieve AI integration safety and fairness is the key pillar of long-term success (Pawlicka et al., 2023). Although the adoption of (AI) has been increasing in various industries and is gaining presence in innovative business model initiatives, there is insufficient insightful knowledge on how AI impacts firm performance of firms (Hussain et al., 2025). This study bridges this gap, with the (RBV) theory to investigate the connection between AI uptake, BMI, and Firm Performance (Terziovski, 2010). Previous studies have paid little attention to how well AI-related performance outcomes align with a firm's IT strategy. Such a focus deficiency opens spaces to investigate how AI can be utilized to build better bridges between departments and enhance innovation in business. The investigation of these cross-functional relations can contribute to the enhancement of firms' strategies and allow them to gain a competitive advantage in the rapidly changing modern world. Key questions for exploration

RQ1: Does the use of AI in business affect BMI?

RQ2: Do BMI affect Firm Performance?

RQ3: Does IT Strategy moderate between BMI and Firm Performance?

RQ4: Does Safety &Privacy moderate between AI and BMI?

The most significant contribution of this research is that it demonstrates how (AI) can enhance firm performance through business innovation and the efficient use of resources. It examines four significant components: AI adoption (BMI) as a mediator and IT strategy and data privacy as determinants that influence the strength of the relationship. This research describes how AI assists companies in transforming their modes of operation and generating value. This also demonstrates the following:

A good IT plan and strong data protection can enhance AI effectiveness. This study targets businesses operating in Punjab, Pakistan, where the use of AI has been on the rise. This study incorporates a study of previous research, methodology, findings, and conclusions.

2. Literature Review and Hypothesis Development

2.1 Artificial Intelligence and Business Model Innovation

According to the literature, AI, more precisely, generative AI, is transforming business models to make better decisions, become more efficient, and innovate. AI helps companies re-engineer the process they create, distribute, and record value, and it may help them stay competitive in fast-changing digital markets (Black et al., 2024; Lee et al., 2019; Teng et al., 2025). Generating AI decreases content cost and alters the position of the professional within the firm, and strategic human-AI collaboration is important in terms of long-term value creation (Kanbach et al., 2024; Roy et al., 2025). In this case, retail can take advantage of AI to increase the real-time decision-making system, customize customer service, and smart operations, producing superior agility and customer involvement (Sagio & Ekasari, 2025). Artificial Intelligence (AI) combines the concepts of human Intelligence, such as learning and reasoning, with human-made systems to perform tasks that usually require thinking. These include data analysis, risk management, and customer support (Lichtenthaler, 2019; Mikalef & Gupta, 2021). Although AI is not a new concept, businesses have only recently begun to realize their full potential in transforming operations (Wamba-Taguimdje et al., 2020). Research indicates that AI enhances aspects such as the supply chain, budgeting, and innovation, which result in BMI (Toorajipour et al., 2021). Self-learning AI is a recent development that enables businesses not to engage in manual work to constantly improve their models (Hutchinson, 2021; Radanliev & De Roure, 2022, 2023). AI assists businesses in remaining competitive, achieving efficiency, minimizing waste, and building sustainable and flexible business strategies to become successful in the

long run (Jorzik et al., 2023, 2024).

H1: There is a Positive Relationship Between AI and Business Models Innovation.

2.2 Business Model Innovation and Firm Performance

BMI is crucial in ensuring firm capabilities, operational performance and revenue that, at large, contribute to firm performance (Latifi et al., 2021). BMI, in combination with technological and strategic objectives, contributes positively to firm performance of firms (Alsaadi et al., 2025). It also allows companies to flourish in new locations and maximize their competitive advantages (Abdullahi et al., 2025). Second, the redesign of value creation, as well as delivery with the help of BMI, enables firms to address the changing needs of the markets, avoiding the need to lose the markets because of the inability to address their needs they have (Salfore et al., 2023). BMI significantly affects a firm's overall performance. According to Gatautis et al. (2019), BMI is more relevant when the firm is oriented toward efficiency. According to Chesbrough (2010), BMI helps reduce the costs involved in production and optimize the available resources. BMI can also empower companies to develop new products, diversify their products in competitive markets, and serve customers. Moreover, research demonstrates another way Artificial Intelligence (AI) helps generate firm performance, it leads to improved productivity, profitability, and efficiency (Olan et al., 2022). It is through AI that efficiency is promoted in the use of resources, streamlining of processes, and a better understanding of how customers can be controlled; hence, the resultant betterment of businesses (George & Bock, 2011). The idea of knowledge and dynamic capabilities and the identification of their connection to the topic of BMI also partly bolstered the RBV recently (Massa et al., 2017).

H2: Business Innovation is Positively Related to Firm Performance.

2.3 IT Strategy and Business Model Innovation

BMI is based on technological innovation, which enables a company to design its value-creation process and customer service. Companies have restructured their old models into more adaptable, effective, and client-centered frameworks with the assistance of digital technologies, such as (AI), big data, mobile applications, and analytics (Athaide et al., 2025; Latif & Yasin, 2025). Consider the familiar cases of Uber and Airbnb, that is, how technology can disrupt industries through real-time, real-world scalable, and convenient products. As businesses integrate digital technology with innovation in marketing, the end result is that they have business models that are more responsive and dynamic and more responsive to customer systems (Athaide et al., 2025). Technologically driven BMI also supports successful firm performance by maximizing profits, increasing market share, and improving returns on investment (Dymitrowski & Mielcarek, 2024). Positive relationships with buyers, suppliers, and research collaborators also improve the success of innovative models. A business model indicates how a company translates its strategy into action through the wise use of resources, cost savings, and new revenue streams (Lambert & Davidson, 2013; Casadesus-Masanell & Ricart, 2010; Chesbrough, 2007).

Once new technologies are combined with performance measurements, companies can improve their outcomes (Mikalef & Gupta, 2021). IT strategy is an important component of this process, as it enhances the manner in which business activities are linked together, facilitates better decision-making, and facilitates overall performance (Bernal, 2016; Stam & Stanton, 2010). Firms that understand IT as a strategic asset, instead of an obvious support function, are better placed to leverage AI for growth and innovation. Further, studies indicate that the use of technology at work enhances the satisfaction and motivation of managers, which translates to ingle-flowing processes, sound operations, and improved company performance (Cascio & Montealegre, 2016; Tong et al., 2021; Barley, 2015).

H3: IT Strategy Acts as a Moderator Between Business Model Innovation and Firm Performance.

2.4 Safety & Privacy Moderating Role

Safety and privacy are critical factors in establishing trust in online settings, particularly when people exchange private information such as personal or health data. Transparency in privacy protection provides individuals with a feeling of control and enhances their comfort using technology (Chen & Chen, 2025). Ethical behavior in AI use demands properly defined safety and privacy expectations to guarantee ethical conduct and safeguard individual rights (Meyer et al., 2025). These moderators regulate the manner in which individuals trust and interact with AI systems (Martius et al., 2025). The likelihood of AI platform use by users is that they feel their data are secure (Tazi et al., 2023; Kwesi et al., 2025). Within their industry (e.g., banking), it is recommended to use reliable privacy-

enhancing capabilities (e.g., encryption, secure access, and blockchain) to prevent leaks and increase trust (Raza, 2023). Increased privacy risks with the emergence of open banking and meta-verse have necessitated regulations such as GDPR, secure APIs, and identity protection (Kopperapu, 2025; SINGH et al., 2025). Ultimately, Robust digital safety measures assist organizations in minimizing risk and earning user and stakeholder trust (Umoke et al., 2025). Privacy laws for data protect personal data from being misused by generative AI (Yoon et al., 2020). As companies evolve to keep pace with rapidly evolving technology, security and success factors come to the forefront (Alsyouf & Ishak, 2018). However, certain AI systems are highly complex and transparent, and it is difficult for users to trust them. Trust grows if individuals know how AI models arrive at their decisions (Lutfi et al., 2023).

H4: Safety and Privacy Moderate the Relationship Between AI in Business and Business Model Innovation.

2.5 BMI Mediates the Impact on AI Usage in Business and Firm Performance

Artificial Intelligence (AI) and Digital Service Innovation (DSI) are becoming a significant part of enhancing a firm's performance in terms of efficiency, value creation, and better decision-making (Monroy-Osorio, 2024; Kovacs et al., 2024). Generative AI makes companies more agile and adaptable in manufacturing (Khan et al., 2025), enables dynamic capabilities, and promotes the innovativeness of approaches in cases of public organizations (Almheiri et al., 2025). AI also improves customer service and business operations, leading to long-term success (Huang & Lin, 2025; Mishra et al., 2022). In marketing, AI helps attract and retain customers, although challenges such as employee resistance and rapid technological changes still exist (Mu & Zhang, 2025). Retail firms use digital skills and business model innovation to improve sustainability (Giang & Dung, 2025), and dynamic capabilities help them adapt quickly (Jingwen et al., 2025). AI also supports new product development and idea implementation; however, innovative efforts must remain practical and useful (Khin & Ho, 2019; Singh et al., 2024). Overall, strong business models and firm capabilities are key to turning AI and DSI into better performance results (Heikkilä et al., 2018).

H5: BMI mediates the relation between AI Usage in Business and Firm Performance.

Resource-Based View Theory

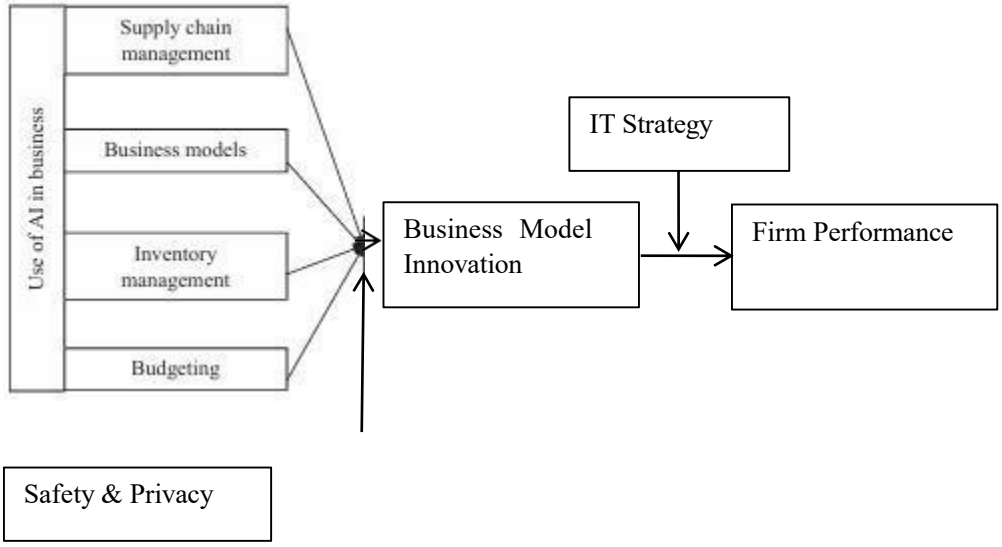

Figure 1. Research Framework
Source(s) Figure created by author's

2.6 Resource-Based View Theory (RBV) of the Firm

The (RBV) theory is widely used to explain why some firms perform better than others, even within the same industry (Barney, 2001). According to this theory, companies gain a competitive edge using unique resources that are valuable, difficult to copy, and cannot be easily replaced (Bharadwaj, 2000). These resources help firms improve their performance and stand out in the market. The RBV highlights two main ideas: gaining the right

resources and developing capabilities to use them effectively. Organizations invest in different types of resources to improve their task (Bharadwaj, 2000; Wade & Hulland, 2004). Nowadays, such resources also encompass the advanced technological tools such as (AI) and highly competent personnel.AI transformed the way businesses are conducted in the world by automating the repetitive tasks and providing intelligent solutions to the complexes. It enhances decision-making, accelerates operations, and enhances the competitive capability of a firm. The RBV views these technologies as important assets that contribute to business value (Madhani, 2010). Therefore, firms must not only have access to such technologies, but also learn how to apply them effectively to stay competitive (Bharadwaj, 2000; Mamonov & Triantoro, 2018).

Methodology

Cross-sectional study was done with the purpose of gathering data from 314 managers employed in Islamic banks and conventional banks in Punjab, Pakistan with the aim to investigate the effect of (AI) on firm performance with BMI as a mediator and IT strategy and data privacy as moderators. These respondents were chosen because of their core participation in the implementation of technological and strategic changes, especially those related to AI and the innovation of business models (Reim et al., 2020). The purposive sampling method was employed, and primary data were gathered with a standardized questionnaire employing a 5-point Likert scale between 1 strongly disagree and 5 strongly agree, addressing salient aspects such as AI adoption, innovation practices, strategic alignment, and privacy issues. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), which is suitable for testing complex models involving mediation and moderation, particularly with small samples and non-normal data (Becker et al., 2022). Demographic analysis of the respondents revealed that 96.18% were male and 3.82% female; 50.32% were junior managers, and 49.68% were senior managers. Education-wise, 49.36% had a bachelor's degree, 45.86% had a master's degree, and 4.78% had other qualifications.

1.1.1 Table 1 Demographics Profile (N=314)

Demographics	Category	Frequency	Percentage
Gender	Male Female	302 12	96.18% 3.82%
Hierarchy Level	Junior Manager Senior Manager	158 156	50.32% 49.68%
Education	Bachelors Masters Others	155 144 15	49.36% 45.86% 4.78%

Source(s) Author's own creation

2.7 Measurement Instruments

Five main variables were explored in this study: AI Adoption, (BMI), Firm Performance, IT Strategy, and Data Privacy & Security. The questionnaire was developed after reviewing previous research studies, and the measurement items were designed to suit the research objectives. A five-point Likert scale (1 = strongly disagree to 5 = strongly agree) was utilized to maintain the survey simplicity and reduce participant fatigue (Ur Rehman et al., 2019). AI adoption was measured using indicators borrowed from (Toorajipour et al., 2021; Burström et al., 2021; Reim et al., 2020; Preil & Krapp., 2022; Logg et al., 2019), between fields of supply chains, business models, innovation, and decision-making. Seven BMI items were borrowed from Lu et al. (2025), and nine items borrowed from Wamba et al. (2017) were used to measure firm performance. IT strategy was measured using eight items from Al-Surmi et al. (2022), focusing on efficiency and flexibility. Data security and privacy were measured using five items drawn from Ahmad et al. (2023), including trust and safety concerns regarding the application of AI.

3. Results

The empirical results of this study show that (AI) is strongly related to firm performance, business decision making, and innovation. A quantitative paradigm was adopted and data were collected from 314 bank managers. (PLS-SEM) was used to analyze the hypothesized relationships among the study variables. The analysis was carried out using Smart-PLS 4, which is appropriate for examining complicated models with numerous constructs (Ringle et al., 2022). The measurement model was verified prior to the structural model, using the two-step approach developed by (Anderson & Gerbing, 1988; Hulland, 1999). Testing of higher-order constructs was conducted according to Wetzels et al. (2009). To obtain honest responses, the respondents were guaranteed confidentiality and various scale formats were added to the questionnaire to limit response bias or structured answers.

3.1 Model Estimation

Modeling (PLS-SEM) was used in this study because it is well suited for handling complex models, relatively small sample sizes, and non-normal distribution datasets (Hair & Alamer, 2022; Becker et al., 2022). Smart-PLS 4.0, was used in this research (Ringle, Wende et al., 2022). Loadings for all indicators were beyond the cutoff of 0.50, indicating item reliability (Becker et al., 2022). Internal validity was maintained, as both Composite Reliability (CR) and Cronbach's alpha were greater than 0.70 (Hair & Alamer, 2022). Convergent validity was also maintained, as the Average Variance Extracted (AVE) for all constructs was greater than 0.50. PLS-SEM was preferred over traditional covariance-based methods because of its reliability in research with smaller samples, issues such as multicollinearity, and the ability to estimate complex relationships (Rehman Khan et al., 2022). This procedure is well established and applied across various research fields (Hair et al., 2021; Hossain et al., 2024).

The model applied first-order constructs to the outer (measurement) and inner (structural) parts. The factor loadings, AVE, and CR values were compared to test the quality of the measurement model. As can be seen from Table 2, the factor loadings for all were above 0.60, AVE values were over 0.50, and CR values were over 0.70, indicating high validity and reliability (Sarstedt et al., 2022). Figure 2 shows the first-order structure of the model used in this analysis.

1.1.2 Table 2 Convergent Validity

Item	Outer loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Supply Chain Management				
SCM1	0.646	0.939	0.939	0.521
SCM2	0.642			

SCM3	0.615			
SCM4	0.722			
SCM5	0.761			
Business Models				
BM1	0.756			
BM2	0.789			
BM3	0.638			
BM4	0.623			
BM5	0.637			
Inventory Management				
IM1	0.615			
IM2	0.708			
IM3	0.719			
Budgeting				

BT1	0.761			
BT2	0.700			
BT3	0.698			
BT4	0.761			
BT5	0.721			
Business Model Innovation				
BMI1	0.741	0.806	0.865	0.563
BMI2	0.771			
BMI3	0.732			
BMI4	0.744			
BMI5	0.762			
IT Strategy				
ITF1	0.786	0.919	0.920	0.964
ITF2	0.770			
ITE1	0.774			
ITE2	0.756			
ITE3	0.697			
ITC1	0.882			
ITC2	0.869			
ITC3	0.860			
Safety & Privacy				
SP1	0.801	0.793	0.795	0.617
SP2	0.793			
SP3	0.755			
SP4	0.791			
Firm Performance				
FIP1	0.768	0.913	0.914	0.96
FIP2	0.697			
FIP3	0.845			
FIP4	0.831			
FIP5	0.715			
FIP6	0.762			
FIP7	0.694			
FIP8	0.810			
FIP9	0.779			

Note(s) MBI6, MBI7 and S&P5, items were removed due to low outer loading values. Source(s) Author' own creation

1.1.3 First-Order Model Structure

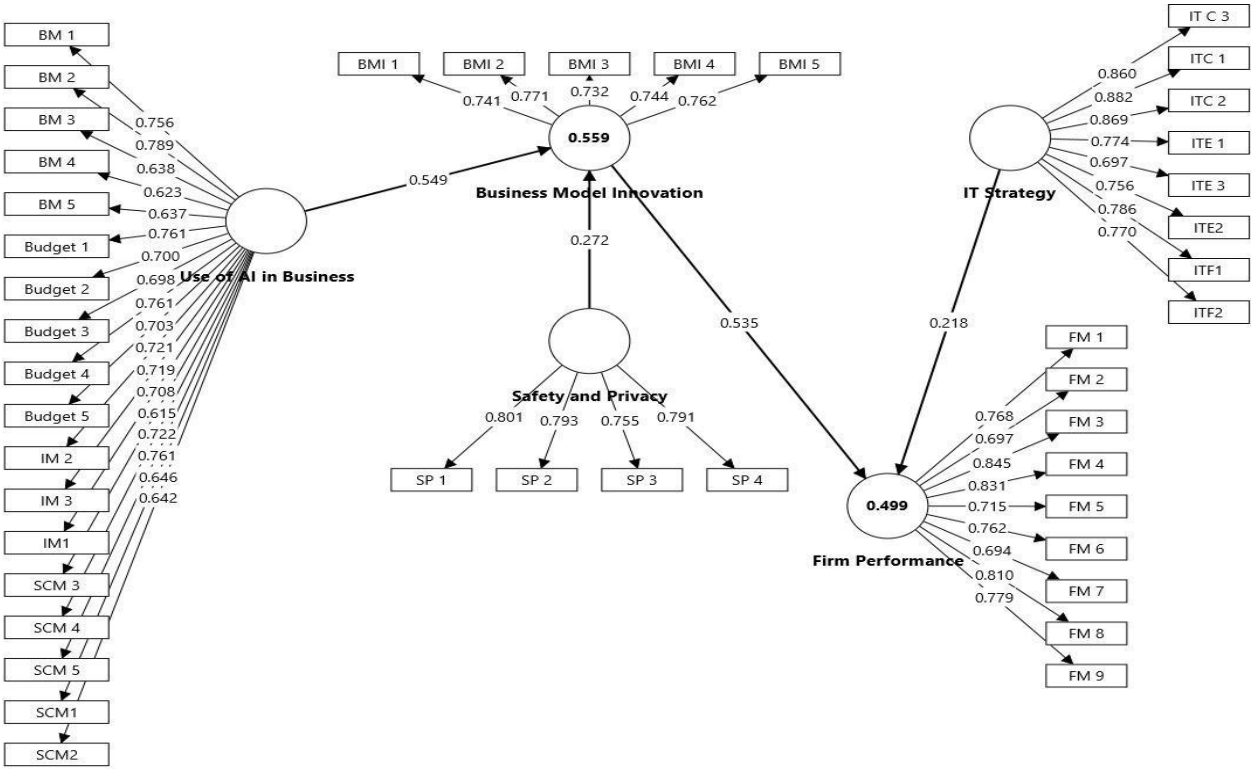

Figure 2. Measurement model
Source(s) Figure created by author's

3.2 Discriminant validity

The HTMT ratio was employed to determine whether the variables in this study were unique, the Hetero-trait Mono-trait (HTMT) ratio was employed. It is widely known as an accurate technique to check discriminant validity, which goes a great distance in confirming that all constructs measure unique ideas rather than analogous ones. If they are too analogous, two constructs will most likely lead to biased analysis. As suggested by Henseler et al. (2015), the HTMT values should be below 0.90 for sufficient discriminant validity. Five first-order constructs were empirically validated through this research: Business Model Innovation (BMI), Firm Performance (FIP), Industry 4.0, technologies (IT), Safety and Privacy (S&P), and Use of AI. The HTMT values estimated for the constructs are as follows:

Table 3: Hetero-trait Mono-trait ratio (HTMT) for first-order

	BMI	FIP	IT	S&P	USE OF AI
BMI					
FIP	0.805				
IT	0.822	0.650			
S&P	0.761	0.656	0.568		

USE OF AI	0.811	0.740	0.664	0.705	

Note(s) Business Model Innovation (BMI), Firm Performance (FIP), Information Technologies (IT), Safety & Privacy (S&P), Artificial Intelligence (AI).

Source(s) Author's own creation

All HTMT measures between the first-order constructs in this study were below the recommended threshold of 0.90, ensuring that each variable was statistically distinct, and that there was no overlap between them (Henseler et al., 2015). For example, the HTMT value between (BMI) and Information Technologies (IT) is 0.822, which suggests a high but decent correlation. However, the lowest of

0.568 between Safety & Privacy (S&P) and IT shows a clearly different relationship. As none of the HTMT values were more than 0.90, discriminant validity was assured for the model; that is, the survey items applied for each construct measured distinct concepts and were not confused with each other (Franke & Sarstedt, 2019). In summary, these findings validate that all first-order constructs are distinct and clearly defined, and make the research findings more accurate and reliable.

3.3 Predictive Relevance

Prior to hypothesis testing, we verified the effect size (f^2), coefficient of determination (R^2), and predictive validity of the model. Götz et al. (2009) stated that effect size aids in comprehending whether the independent (exogenous) variables significantly influence the dependent (endogenous) variables. According to Cohen's (2013) standards, effect sizes are small if between

0.02 and 0.15, medium if between 0.15 and 0.35, and large if above 0.35. The effect sizes of the variables in this study were higher than the minimum requirement levels, indicating significant relationships. In addition, the R^2 values for each construct indicated that the model was good at prediction; that is, it could explain the dependent variables effectively.

1.1.4 Table 4 Coefficient of determination and predictive relevance

Constructs	R^2
Business Model Innovation	0.559
Firm Performance	0.499

Source(s) Author's own creation

According to the findings in Table 4, BMI has an R^2 value of 0.559, and Firm Performance has an R^2 value of 0.499. In other words, the model described 55.9 percent of the variation in BMI and
49.9 percent of variation in Firm Performance implying moderate to large predictive accuracies (Cohen, 2013).

1.1.5 Table 5 Hypothesis testing

Hypotheses	Paths	*B-Value*	*T-values*	*P-values*	Remarks
H1	Use of AI →BMI	0.545	10.654	0.000	Yes
H2	BMI→FIP	-0.459	8.300	0.000	Yes
H3	IT →BMI →FIP	0.217	8.038	0.000	Yes
H4	S&P →USE of AI →BMI	0.015	0.953	0.343	Yes
H5	BMI →Use of AI →FIP	0.250	6.633	0.000	Yes

Source(s) Author's own creation

3.4 Structural Model

The structural model results indicated that the majority of the hypotheses in the research were confirmed. The application of AI has a significant and positive strong impact on (BMI) (H1: β = 0.545, t = 10.654), and BMI has a significant effect on Firm Performance (FIP), although it is negative (H2: β= -0.459, t
= 8.300), indicating possible short-term tradeoffs. The indirect impact of IT on FIP via BMI also had a large effect size (H3: β = 0.217, t = 8.038), which verifies BMI as a mediator. The indirect impact of Safety & Privacy on BMI via the Use of AI was not significant (H4: β = 0.015, t = 0.953), indicating a poor relationship. Finally, BMI has a positive impact on FIP through the Use of AI (H5: β = 0.250, t = 6.633), indicating the significant role in increasing innovation benefits. Generally, these findings confirm the pivotal position of AI and BMI in enhancing the performance of firms, whereas safety and privacy issues might require further input to reflect an effect.

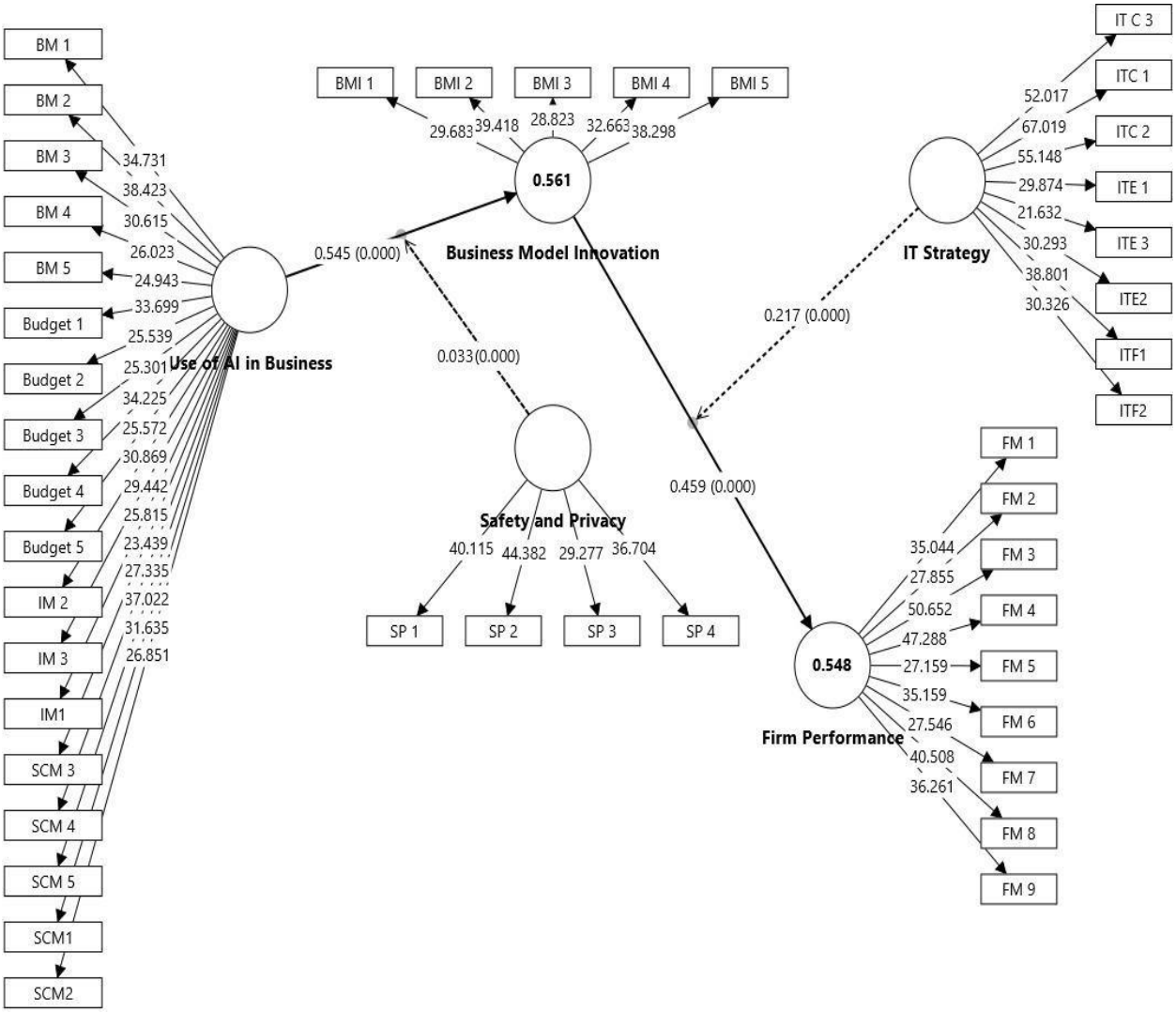

Figure 3. Structural Model
Source(s) Figure created by author's

4. Conclusions & Implications

4.1 Conclusion

This study explored how Artificial Intelligence (AI) affects (BMI) and Firm Performance (FIP) using a quantitative method based on the (RBV) theory. The results clearly show that AI plays a significant role in improving business performance, decision-making, and innovation. All five hypotheses are supported, confirming that adopting AI leads to more innovation and better operational efficiency, with BMI acting as a key link between AI and performance outcomes. The initial hypothesis verified that AI exerts a significant positive effect on BMI. Numerous firms have enhanced and reformed their models by embedding AI tools in their operations, budgeting, and supply chain functions. This finding is consistent with prior studies that detected that AI promotes an increase in innovation by offering positive data insights and the automation of procedures (Coombs et al., 2020; Kirchmer et al., 2010). Properly deployed AI assists businesses in making sound conclusions and operating more proficiently.

The second hypothesis, which states that business model innovation increases firm performance, was also validated. Businesses that spend resources on building innovative business models are likely to gain higher productivity, more robust profitability, and better competitive market positioning. These results are consistent with prior studies, which highlight that innovation is not only beneficial but also necessary to sustain long-term prosperity in competitive markets today (Wamba-Taguimdje et al., 2020). The third hypothesis proves that technologies, including IT tools, enhance the positive impact of AI when strategically applied. Companies with IT strategies that are well-aligned with their company goals have a better chance of gaining productive innovation results. This concurs with previous views that view IT as neither an ancillary function nor a strategic resource, but as a key strategic resource (Hooper et al., 2007).

The fourth hypothesis considers the roles of privacy and safety when using AI. Although AI offers many benefits, participants in studies have reservations regarding data privacy. These reservations can affect how easily and effectively companies implement AI. This refers to the need for the protection of data as well as ethics in applying the AI needed to establish trust and allow long-term sustainability of AI-driven innovation (Bartoletti, 2019). Finally, the fifth hypothesis also verifies that BMI serves as a mediator between AI and firm performance. This indicates that not AI not only enhances routine work, but also revolutionizes business models to become more innovative, customer-driven, and responsive. These changes play a central role in a sustainable competitive advantage (Ylijoki et al., 2018). In summary, this study claims that AI adoption is related to a major and positive influence on firm performance and innovation, particularly in assisting a strategic IT environment and ethical data practices. Business Model Innovation plays a crucial role in converting's the potential into real business value. With the further evolution of AI, companies that implement it safely and responsibly to respect data privacy, as well as the integration of technology into business objectives, will be in the optimal position to achieve long-term success and expand during the digital economy.

4.2 Theoretical and Societal Implications

This study adds to the (RBV) by showing that (AI) can be seen as a strategic resource for businesses. This proves that AI is not just a supportive technology but also an important intangible asset that helps companies innovate and improve performance. These results indicate that AI is valuable, scarce, and difficult to copy, thereby imparting a strong competitive advantage to companies. Today, more companies realize that AI can create real value and allow them to prosper in a competitive economy. This makes the case that AI is an agent of change, which changes the way businesses are conducted, the way they deliver, and how they interact with their clients. It also indicates that AI enables companies to transition towards smarter and more agile business models oriented in the future. By making IT strategy a factor of moderation, this research brings to light that the advantages of AI improve when it is applied to complement the overall business strategy of the company. Additionally, by scrutinizing safety and privacy concerns, this study adds a moral perspective to technology adoption. It lends strength to the emerging notion in "techno-ethics" that firms need to consider not just revenues but also their social roles when applying cutting-edge technologies such as AI.

This research is important at the societal level. This demonstrates that AI is becoming an integral component of contemporary business. AI enhances the value and functionality of goods and services by automating processes, making better decisions, and offering tailored customer experiences. As companies apply AI in budgeting, stock,

and supply chain management, their work processes are being transformed. Routine work tends to be automated, which amplifies the demand for workers who can coexist with AI, process data, and keep up with technology. This indicates the critical need for training and upskilling, particularly in developing nations and sectors hit the hardest by automation. Governments, universities, and schools must prioritize the enhancement of AI skills and digital literacy. Additionally, the use of AI tends to result in more circular and sustainable business models, particularly in manufacturing and logistics. It contributes to minimizing waste and energy consumption, aligned with global agendas such as the Sustainable Development Goals (SDGs). Governments and NGOS can employ this knowledge to encourage the use of AI for environmental and social purposes and drive the expansion of green and circular economies. However, concerns regarding the misuse of data, safety, and privacy are not simply technical issues; they are social concerns as well. If citizens perceive that AI systems jeopardize their privacy, they will oppose their usage, hindering innovation. Today, it is easier for larger and wealthier firms to adopt AI, whereas smaller businesses lag behind. This led to a digital divide. To address this, governments must consider support initiatives, including funding, collaboration, and open-source resources, to enable small and medium-sized enterprises to gain access to AI technology and remain competitive.

4.3 Managerial Implications

Artificial intelligence (AI) is currently employed in nearly every industry on the globe today, and developed and developing nations are attempting to keep pace here. This research indicates that businesses that employ AI by integrating it into their planning, strategies, and long-term vision experience improved business performance. This further articulates that AI performs better when reinforced by sound IT strategies. For this to happen, managers should ensure that their IT teams are involved in important planning and innovation discussions, instead of working separately. This also implies investing in flexible and modern IT systems that help with data analysis, AI usage, and quick decision-making. Companies can make better and faster decisions by using AI to study large amounts of data and provide useful suggestions. Ultimately, AI can improve both daily operation and long-term planning. Companies that treat AI not just as a tool but as a key part of their culture and strategy are more likely to bring real change and create lasting value.

4.4 Limitations and Future Recommendations

Although this study provides helpful insights into how AI affects businesses, it has some limitations that should be noted in future research. First, it used a cross-sectional design. Future researchers can improve this by using a longer time frame to observe how the results might change over time. The study also focuses on how AI impacts BMI and firm performance in a step-by-step process. Second, the data were collected only from banking managers, including both Islamic and traditional banks in Punjab, Pakistan. While this provides useful findings for the banking sector, it may not be applicable to other industries. Subsequently, additional industries such as manufacturing, healthcare, and logistics, as well as other areas such as Sindh, KPK, and other developing countries, could be explored. This would assist in the comparison of results in various economic and technological environments. In general, AI can change the quality of business operations by providing quick and precise information, helping to make wiser daily and long-term decisions.

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