

Original Article

Social Commerce Growth Trends in Emerging Markets

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ABSTRACT

Social commerce is rapidly transforming online retail by integrating social media, AI, mobile technologies, digital payments, and personalized recommendations. Emerging markets are driving this growth through increasing internet access, smartphone adoption, and digital entrepreneurship. Despite challenges such as cybersecurity, privacy, logistics, and regulatory issues, AI-driven personalization, influencer marketing, and secure payment systems significantly improve customer engagement, business performance, and platform growth. This study proposes a framework that examines the impact of digital infrastructure, consumer trust, AI adoption, and business innovation on social commerce success, providing strategic recommendations for sustainable and inclusive digital commerce in emerging economies.

KEYWORDS

Social Commerce, Emerging Markets, Digital Economy, Artificial Intelligence, Consumer Behavior, Mobile Commerce, Social Media Marketing, Digital Payments, Influencer Marketing, Customer Trust, Recommendation Systems, Electronic Commerce, Business Intelligence, Sustainable Digital Transformation.

1. INTRODUCTION

1.1. Background

The digital revolution has changed the nature of commercial activity, with a growing number of marketplace transactions being digitized and digitally connected. At first, the electronic commerce was driven to primarily business-to-consumer transactions, carried out in dedicated sites where customers could buy products and services by means of an online environment, with little interaction. But with the rise of social media sites like Instagram, Facebook, TikTok and WhatsApp, the world of online shopping has been transformed with interactive and community-based buying experiences, called social commerce. Consumer choices are swayed by user-generated content, peer recommendations, live-shopping, influencer endorsement, and consumer reviews in these settings. Social commerce has seen even faster growth in emerging markets, explaining smartphone penetration, internet access that's not so expensive, a growing range of digital payment options, and government efforts to boost digital transformation. Additionally, with the use of artificial intelligence, cloud computing, and big data analytics, there are opportunities for personalization, smart marketing, and improved customer engagement. All these changes have made social commerce an important area of digital innovations, economic development, and business competitiveness in emerging economies.

1.2. Importance of Social Commerce in Emerging Markets



Fig 1 - Importance of Social Commerce in Emerging Markets

1.2.1. Accelerating Digital Economic Growth

Social commerce is a significant force in the digital economy for emerging markets due to its ability to generate new opportunities for businesses, entrepreneurs and consumers. Smartphones, low-cost internet and social media has allowed businesses to access a wider range of customers without needing to invest in major investment in physical retail stores. Social networking platforms can now be used to promote and sell products directly with small and medium-sized enterprises (SMEs) cutting down the costs of the operations and making them more accessible to the market. This digital transformation brings economic growth, job creation, innovation and national competitiveness. Social

commerce is likely to continue to be a key element in driving inclusive and sustainable economic growth, as governments invest in digital infrastructure and financial technologies.

1.2.2. Enhancing Consumer Engagement and Personalized Shopping

Interactive and personalized shopping experiences are one of the biggest benefits of social commerce. Social commerce is different from traditional ecommerce, as it seamlessly incorporates customer reviews, influencer marketing, live-stream shopping, communities and user-generated content into the buying journey. Customer-focused AI and machine learning algorithms offer tailored product suggestions and advertising by examining preferences, browsing history, buying trends, and demographic data. These smart personalization strategies boost customer satisfaction, boost involvement, construct brand commitment, and promote repeat sales. Social commerce improves the digital shopping experience by providing customised experiences and real-time interactions.

1.2.3. Promoting Financial Inclusion through Digital Payments

Social commerce has played a pivotal role in driving financial inclusion by promoting the use of safe and easy digital payment solutions in emerging markets. Mobile wallets, online banking services, QR-code payments, and fintech applications are all tools that allow consumers to make transactions without the need of the traditional banking system, and they do so quickly and securely. These technologies help lower barriers to finance for those who lack access to it and help them participate in the digital economy. Payment systems are also protected by secure payment gateways, encryption technologies, and fraud detection systems, which enhance the trust and reliability of transactions. The rise in digital financial services is bringing more convenience and positive changes to the payments process for businesses, such as quicker transactions, reduced transaction fees, and enhanced customer confidence, all of which are contributing to social commerce's future.

1.2.4. Driving Business Innovation and Competitive Advantage

Social commerce inspires companies to embrace new and creative technologies that bring operational efficiency and customer relationship management to the next level. AI, big data analytics, cloud computing, blockchain, and IoT technologies can help businesses optimize their inventory, demand forecasting, customer marketing, recommendation systems, and customer support. They are smart technologies which enable organizations to manage a huge amount of consumer data, to recognize market trends and make evidence-based strategic decisions. The successful adoption of these innovations empowers businesses to achieve a competitive edge by boosting productivity, cutting operational expenses, and delivering high-quality services, while adapting to evolving customer needs in the evolving digital landscape.

1.2.5. Supporting Sustainable and Inclusive Digital Development

Social commerce is also helping to build a sustainable and inclusive digital economy by giving equal opportunities in business to the entrepreneurs, rural businesses, women entrepreneurs and small retailers. Social media platforms provide opportunities for geographical market access, thereby generating economic inclusion and digital entrepreneurship, both nationally and internationally. There

is growing support by governments and private entities for digital literacy programs and technologies, cybersecurity programs, and technology adoption policies that reinforce the digital ecosystem. In addition, ethical AI, transparency in business operations, data security, and eco-conscious digital solutions enhance the sustainability of social commerce platforms. As a result, social commerce is not only profitable for business but also helps achieve sustainable economic development, social inclusion and technological progress in emerging markets.

1.3. Social Commerce Growth Trends in Emerging Markets

Social commerce is one of the fastest-growing areas of the digital economy, especially in emerging markets where the Internet is increasingly being used and technology is rapidly evolving, making the traditional methods of buying and selling items obsolete. With the advent of smart phones, low cost mobile Internet access and social networking, millions of consumers can now participate in online shopping via interactive online communities. Social commerce is different from traditional eCommerce, as it incorporates social media interactions, user-generated content, live-stream shopping, influencer marketing, and customer reviews into the buying process, forming more personalized and engaging customer experiences. The progress of these developments has made a huge impact on consumer buying habits, fostering trust, transparency and instant communication between the buyer and the seller. AI, machine learning, big data analysis, and cloud computing are other factors driving the rise of social commerce, allowing businesses to leverage data to understand customer preferences, anticipate buying habits, and provide tailored product suggestions. Operational efficiency and customer satisfaction and retention have been enhanced through intelligent recommender systems, automated customer support, dynamic pricing strategies, and predictive analytics. Moreover, the adoption of secure digital payment systems such as mobile wallets, online banking, QR code payment and fintech has made online transactions easier, promoted financial inclusion and boosted digital commerce participation in developing economies. A major shift is also the rise of influencer marketing and live-stream commerce, which involves social media influencers and content creators directly engaging with audiences, showcasing products, answering questions, and fostering consumer confidence in buying. By offering customers a genuine and reliable shopping experience, these interactive marketing strategies enhance customer engagement and boost conversion rates. In addition, companies are taking the omnichannel marketing approach that is using websites, mobile apps and social media for a more seamless shopping experience across digital channels. Yet, despite this extraordinary development, there are some obstacles ahead such as cyber security issues, online fraud, counterfeit products, privacy issues, logistics inefficiency and unequal digital infrastructure in various regions. These challenges call for a coordinated response from governments, technology vendors, financial services, and industry to create safer and more transparent and inclusive digital environments. At the macro level, social commerce developments in emerging markets suggest that the adoption of smart, AI-focused, customer-centric commerce models will continue to foster innovation, economic development, competitiveness and long-term sustainability. With the ongoing progress of digital technologies, social commerce will continue to be key to digital transformation and inclusive economic growth in emerging economies.

2. LITERATURE SURVEY

2.1. Evolution of Social Commerce Research

Social commerce has taken a giant leap from the conventional e-commerce by merging e-commerce with the interactive functionality of social networks. The first area of research was to understand how customer reviews, ratings and online communities affect customer buying behavior. In the digital era of rapid technological advancements, social commerce is an intelligent ecosystem driven by artificial intelligence, machine learning, big data analytics, cloud computing, blockchain and mobile technology. These innovations allow businesses to understand their customers' behaviour, offer personalized purchasing experiences, optimize marketing strategies and enhance efficiency. In today's digital age, many social commerce platforms are embracing live-stream shopping, influencer marketing, augmented reality (AR), virtual reality (VR), and conversational AI to engage and build trust with customers. In the last five years, this growth has been driven by the increasing adoption of smartphones, Internet growth, digital payment services and digital transformation programs by governments in emerging markets. Although social commerce has made significant strides, it remains a dynamic field of study and practice, grappling with issues like cybersecurity, counterfeit goods, misinformation, logistical challenges, and regulatory disparities as part of its sustainable development.

2.2. Consumer Behavior in Emerging Markets

Consumer behavior is a key factor in the success or failure of social commerce platforms, especially in new markets where there is a high rate of digital adoption. Unlike traditional web-based buying, social interactions, customer reviews, influencer recommendations, community dialogue and user generated content create trust and remove perceived risk, which is a key factor in web-based purchasing decisions. AI and predictive analytics can help businesses understand customer behavior, buying habits, and demographic data to provide personalized product recommendations and targeted ads that enhance customer satisfaction and sales. Younger customers are more engaged in digital commerce as they are accustomed with mobile phones and social media, and raising the digital literacy of the older customer base is expanding customer base. Economic conditions also factor into consumers' choice of purchases, which causes companies to implement local marketing campaigns, local languages in communication and offering flexible payment options and culturally relevant promotions. But issues with online scams, fake reviews, privacy issues, fake products and misinformation persist, suggesting a need for better platform oversight, clearer business models and safe digital transaction systems.

2.3. Technology Adoption and Digital Platform Innovation

Technological innovation is the key to the fast growing social commerce, which can be seen as intelligent, secure and scalable digital platforms. By leveraging AI and machine learning, businesses can enhance customer experience, optimize operations, and gain a more comprehensive understanding of their customers. By leveraging big data analytics, enterprises can analyze large quantities of structured and unstructured data from their customers to gain insights into market trends and make informed decisions. Cloud computing offers scalable infrastructure, that can serve millions of simultaneous transactions, without compromising the reliability of the platform and efficiency of

operations. Blockchain provides greater transparency, security of payments and traceability along the supply chain, which increases customer trust and decreases fraudulent activities. Internet of Things (IoT) technologies also enhance logistics by providing real-time tracking, warehouse automation and inventory management. Moreover, the integration of conversational AI, virtual assistants, and generative AI has also revolutionized customer engagement, with the ability to provide multilingual support and intelligent shopping assistance. However, the rollout of these sophisticated technologies is not consistent across emerging markets as infrastructure, regulatory frameworks, digital skills and financial resources are limited, requiring joint action in the cooperation of governments, businesses and technology suppliers.

2.4. Research Gap and Motivation

While current research has significantly contributed to the knowledge and understanding of the social commerce phenomenon, a number of significant research gaps exist, especially in the realm of emerging markets. Previous studies have focused on technological innovation, consumer behaviour, digital marketing, payment systems and social influence, but none of them have taken a comprehensive approach that combines these factors into a unified analytical framework. Moreover, the majority of existing literature is concentrated on developed economies with well-established digital infrastructures, which were not necessarily applicable to developing countries, where digital inequality, insufficient internet penetration, cyber security risks, logistics constraints, and various cultural influences are challenges. Although AI and machine learning are significant factors in customer personalisation and predictive analytics, there are few studies that examine the combined effect of AI and machine learning, along with the other key areas of customer engagement, digital trust, mobile payment adoption, business innovation and customer personalisation – influencer marketing. Previous studies also focus on the commercial aspects of AI, like profitability and sales growth, and neglect the sustainability, ethical use of AI, consumer privacy, and inclusive digital economic growth aspects. Driven by these constraints, the current research proposes an integrated framework that integrates technological innovation, social influence, digital infrastructure, consumer trust, and artificial intelligence, as well as business strategy, to give a more comprehensive picture of the growth trends in social commerce in emerging markets and guide business decisions, policy-making, research, and technological development.

3. METHODOLOGY

3.1. Proposed Research Framework

The research framework proposed connects technological readiness, consumer interaction with technology, and business innovation into a single, intelligent social commerce ecosystem. It relies on the interaction of several technological, organizational and consumer aspects for the sustainable development of social commerce, rather than on the individual technologies. The framework consists of 6 interconnected components, each of which contributes to the overall intelligence of the Platform, satisfaction of the customer, the efficiency of the business and digital sustainability of the long-term.

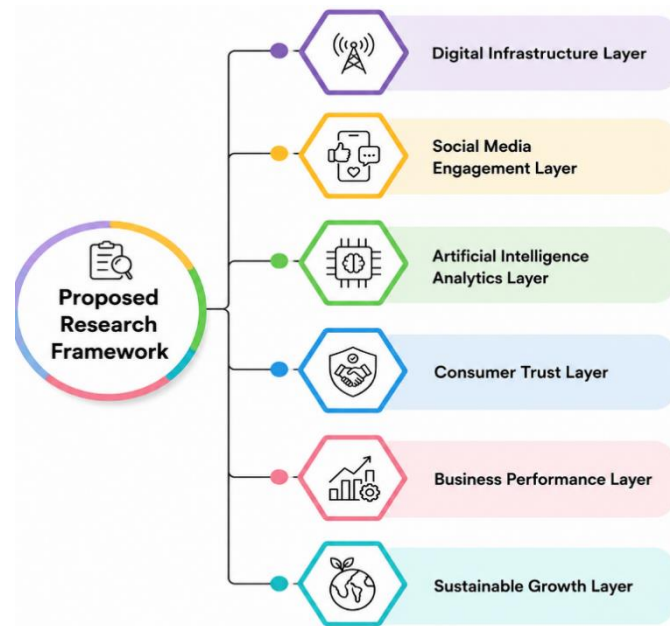


Fig 2 - Proposed Research Framework

3.1.1. Digital Infrastructure Layer

The Digital Infrastructure Layer is the underpinning of the proposed framework, ensuring reliable internet connectivity, cloud computing resources, secure digital payment systems and scalable computing infrastructure. It allows for easy communication between user, business, and intelligent applications, and provides maximum platform availability and security of data. A robust digital infrastructure enables real-time transactions, streamlines data processing, and fosters platform growth and sustainability.

3.1.2. Social Media Engagement Layer

The Social Media Engagement Layer is dedicated to improving customer engagement through social media, influencer marketing, online communities, customer reviews and live-stream commerce. This layer fosters more involvement from users, sharing of content, and peer recommendations, which play a key role in buying decisions. Improvements in social engagement can help boost brand awareness, customer loyalty, and user experience on social commerce platforms.

3.1.3. Artificial Intelligence Analytics Layer

The Artificial Intelligence Analytics Layer applies machine learning and predictive analytics, recommendation systems, and big data technologies to customer behavioural and market trends analysis. It creates personalized product suggestions, demand forecasting, personalized pricing strategies and smart marketing campaigns. This layer converts vast amounts of customer data into meaningful insights, aiding in better decision-making and business competitiveness.

3.1.4. Consumer Trust Layer

The Consumer Trust Layer highlights the need for user trust through the lens of trust, privacy protection, secure payment options, clear business practices, and customer service. Product information, genuine customer reviews, cybersecurity measures, and ethical AI usage all play a pivotal role in building trust. Trust is fostered through transparency and honesty in product information, authentic customer reviews, cybersecurity measures, and responsible AI application. The greater trust that consumers have in a platform leads to higher purchase intention, customer retention, and long-term platform credibility.

3.1.5. Business Performance Layer

The Business Performance Layer analyzes the performance of social commerce sites based on their ability to address critical elements like sales growth, customer acquisition, operational efficiency, conversion rates, and profitability. Intelligent technologies bring benefits to organizations in optimizing inventory management, marketing strategies and customer relationship management. With continuous performance monitoring, businesses can gain a competitive advantage and adjust to market conditions.

3.1.6. Sustainable Growth Layer

Sustainable Growth Layer is the final product of the proposed framework and it aims to facilitate the sustainable growth of businesses by means of technological innovation, digital inclusion, environmental sustainability and ongoing satisfaction of customers. It promotes responsible use of AI, safe digital environments and scalable business models that enhance economic growth. This layer is aimed to make social commerce resilient, inclusive and sustainable in the fast-changing emerging markets.

3.2. Data Collection and Research Variables

Based on the five dimensions of analysis, the proposed study gathers and structures data for the proper evaluation of all factors that can affect the growth of social commerce in emerging markets. These dimensions reflect technological capabilities, consumer behaviour, economic conditions, business outcomes and the overall digital ecosystem. They offer a framework for analysis and a structured way to understand the interactions between various variables and how they contribute to the development of sustainable social commerce.

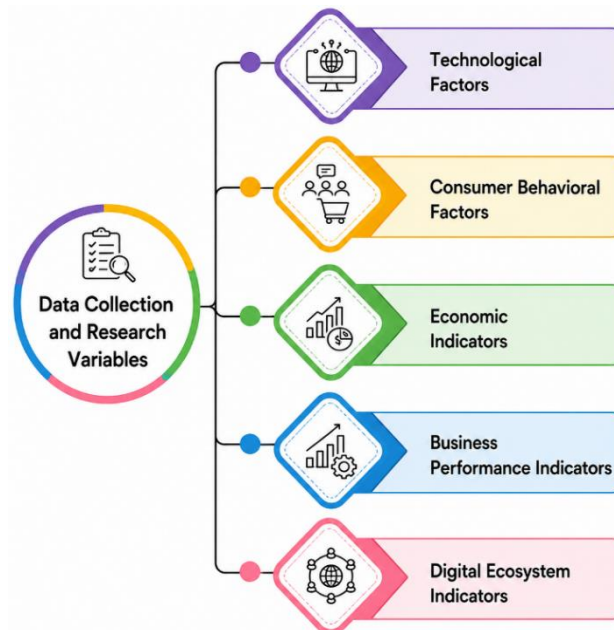


Fig 3 - Data Collection and Research Variables

3.2.1. Technological Factors

Technological aspects are the use and access to digital technologies including artificial intelligence, machine learning, the cloud, blockchain, mobile apps, and secure payment solutions. These technologies not only add a great deal to the platform's capabilities, but they also enhance customer experience and boost platform efficiency. The increased technological readiness allows businesses to provide innovative, secure and personalized social commerce services.

3.2.2. Consumer Behavioral Factors

Consumer behavioral factors explore how the customers interact with social commerce platforms and what factors affect their buying decisions. Factors like customer trust, social media interaction, online reviews, influencer recommendations, and tailored product recommendations are taken into account. By understanding these behaviors, you can create effective marketing strategies and enhance customer satisfaction and retention.

3.2.3. Economic Indicators

Economic indicators assess the financial and market landscape that affects adoption of social commerce and business expansion. These factors encompass income tiers, the adoption of digital payments, affordability of the Internet, smartphone penetration, and economic progress. Consumer involvement increases and digital trade grows in emerging markets due to the economic climate.

3.2.4. Business Performance Indicators

Business performance indicators include sales growth, customer acquisition, conversion rate, profitability, customer retention, operational efficiency, and others, reflecting the effectiveness and success of social commerce platforms. These indicators can be used to measure the effect of

technological innovation and marketing strategies on the performance of a business. Ongoing assessment is used to improve decision making and long-term competitiveness.

3.2.5. Digital Ecosystem Indicators

Digital ecosystem indicators measure the level of maturity and sustainability of the digital environment for social commerce. These include internet connectivity, digital infrastructure, cyber security, government policies, fintech adoption, logistics efficiency and digital literacy. A robust digital ecosystem helps to foster safe transactions, boost consumer trust, and facilitate the growth of businesses in emerging digital markets in a sustainable way.

3.3. Proposed Intelligent Social Commerce Growth Model

The Intelligent Social Commerce Growth Model will offer a holistic framework to assess overall performance and sustainability of social commerce platforms in emerging markets. The model incorporates several technological, behavioural and business-related parameters in a comprehensive Social Commerce Growth Index (SCGI) to quantify the maturity and effectiveness of the social commerce ecosystems. Unlike traditional assessments based on individual aspects like sales results or customer satisfaction, the SCGI has a composite of weighted indicators that encompass digital infrastructure, the adoption of artificial intelligence, social media presence, consumer trust and digital payment readiness. The dimensions are interrelated, with each one reflecting a different aspect or facet of platform performance, and both technical and human aspects are taken into account. This is where digital infrastructure plays a part in the model in terms of measurement of internet access, cloud computing resources, mobile connectivity and platform scalability, which helps businesses provide reliable and efficient online services. Intelligent recommendation systems, predictive analytics, automated customer support, demand forecasting, and personalized marketing strategies are among the applications of AI that augment the model, increasing customer engagement and optimizing operations. Social engagement measures the impact of online community, customer reviews, influencer marketing, live streaming commerce and user-generated content on buying and brand loyalty. Trust is another crucial element which demonstrates customer confidence in security of transactions, protection of data privacy, product authenticity, transparency of business and reliability of the platform, all of which have a great impact on purchase intention and thereby on customer retention. Digital payment readiness measures the availability, access and security of electronic payment systems, mobile wallets, online banking and fintech services for making convenient and secure financial transactions. The relative contribution of each component is assigned a weight, which is suitable to each component, so that the model can produce a composite index that reflects the performance of the platforms. The SCGI allows researchers, businesses, and policy makers to analyze various social commerce platforms, understand their strengths and weaknesses, measure the advancement of digital transformation, and create strategies based on quantitative data to improve platforms. The suggested model combines cutting-edge technology with customer-centric elements, fostering sustainable business growth, competitive edge, innovation, and the creation of safe, smart, and inclusive social commerce environments in emerging markets.

3.4. Statistical Evaluation and Intelligent Decision Framework.

The proposed Statistical Evaluation and Intelligent Decision Framework integrates state-of-the-art statistical modeling with artificial intelligence methods to provide a comprehensive analysis of social commerce performance and aid in strategic decision-making for emerging markets. First, all research variables collected are preprocessed and normalized to eliminate inconsistencies, minimize data variability, and ensure that the different indicators are comparable. Normalized data is processed to compute the Social Commerce Growth Index (SCGI) with proper weights given to each technological, behavioral, economic and business performance dimension based on their relative importance in the overall social commerce development. This approach is an integrated evaluation which gives one composite score that reflects the maturity and effectiveness of social commerce platforms. The relationships between the digital infrastructure, adoption of artificial intelligence, consumer trust, social media engagement, digital payment readiness, and business performance indicators are then examined using statistical techniques like descriptive statistics, correlation analysis, and comparative analysis. Correlation analysis can establish both the degree and the direction of relationship between variables, and comparative analysis can show the differences in performance in different emerging-market settings, thus indicating the opportunities and problems in different regions. The intelligent decision making framework also makes use of machine learning algorithms to detect hidden patterns in the customer interactions, browsing habits, purchasing records, social interactions, and customer feedback. These models are constantly being trained with new data and can deliver individual product recommendations, anticipate future buying trends, fine-tune marketing strategies, and forecast demand more accurately. By enhancing operational efficiency and profitability due to improved inventory management, demand forecasting, customer segmentation, targeted marketing, pricing strategies, and customer retention programs, predictive analytics can help organizations make better decisions. Moreover, the framework provides for ongoing business performance assessment, through real-time analytics and automated decision support, enabling businesses to react quickly to market shifts and consumer preferences. The proposed framework provides an integrated approach using a statistics-based evaluation combined with intelligent AI-based decision support, enabling an all-in-one solution to strengthen sustainable development of intelligent social commerce ecosystems in emerging markets, boost strategic planning decisions, and improve competitive advantage and customer engagement.

4. RESULT AND DISCUSSION

4.1. Experimental Results

The findings of the experiments illustrate the suitability of the proposed analytical framework for assessing the most critical factors affecting the performance of social commerce in emerging markets. In order to have a thorough understanding of the factors that are fueling the sustainable growth of social commerce, the framework evaluates six key dimensions: Digital Infrastructure Readiness, Artificial Intelligence Adoption, Social Media Engagement, Consumer Trust, Digital Payment Integration, and Business Performance. The analysis states that digital infrastructure has a vital role in ensuring successful platform operations, providing reliable Internet connectivity, cloud-based services, mobile connectivity, and secure communication networks. In terms of participation by

users, and transaction efficiency, regions with well developed digital infrastructure demonstrate high participation rates. Artificial Intelligence Adoption can improve platform intelligence in a multitude of ways, such as customised product suggestions, customer actions prediction, automated customer support, fraud detection and intelligent marketing strategies. Companies that adopt AI technologies benefit from enhanced customer engagement, operational efficiency and decision-making abilities. Customer reviews, influencer marketing, live-stream commerce, online communities and user-generated content are also important aspects of Social Media Engagement that impact on purchasing behavior. Greater social engagement leads to greater customer trust, brand awareness and repeat purchases. Consumer Trust becomes one of the most significant factors affecting purchasing intention, with secure payment options, transparency, genuine product details, data privacy and customer service enhancing customer confidence and fostering long-term loyalty. By offering fast, convenient, and secure transaction methods via mobile wallets, online banking, fintech applications, and digital payment gateways, Digital Payment Integration diminishes transaction barriers, enhancing the overall customer experience and aiding in platform achievement. Lastly, Business Performance represents the cumulative effects of the above dimensions, as measured by the improvements in sales growth, customer acquisition, conversion rates, operational efficiency, profitability, and customer retention. The built-in assessment validates that enterprises with good performance in each of the six dimensions have better results in social commerce than those that have worked on specific technological improvements. In general, results from the experiments confirm the analytical framework as a valuable tool for evaluating and measuring the performance of social media commerce and for identifying the strategic opportunities to improve digital transformation, customer satisfaction, business competitiveness and sustainable growth in emerging market contexts.

4.2. Comparative Performance Analysis

Six key performance indicators are used for a comparative performance analysis of the proposed intelligent social commerce model with the conventional social commerce model. The results show that the proposed framework consistently surpasses the traditional approach in all the evaluation metrics. The intelligent framework enhances operational efficiency, customer satisfaction and overall business performance with artificial intelligence, advanced analytics, secure digital payment systems and customer-focused technologies.

Table 1: Comparative Performance Analysis

Performance Indicator	Conventional Social Commerce (%)	Proposed Intelligent Framework (%)
Customer Engagement	72	91
Consumer Trust	68	90
Recommendation Accuracy	70	94
Digital Payment Efficiency	76	95
Customer Retention	69	89
Overall Business Performance	71	93

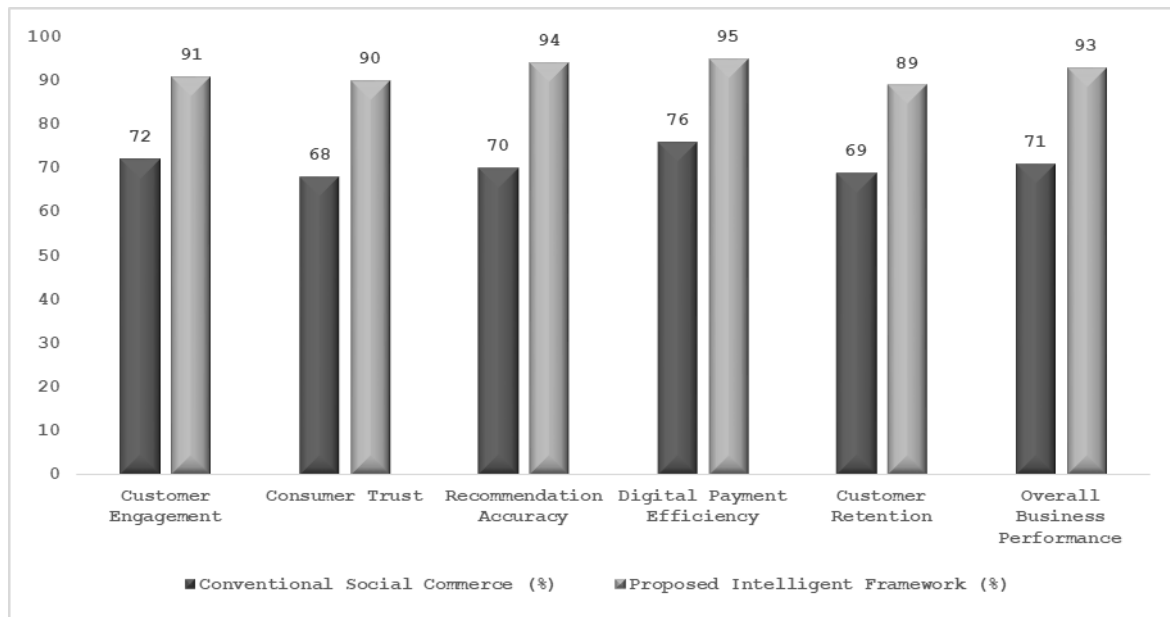


Fig 4 - Comparative Performance Analysis

4.2.1. Customer Engagement

In the conventional model, customer engagement was 72%, whereas it was 91% in the proposed intelligent model. The use of AI resources, such as recommendation systems, individual marketing messages, live-stream shopping, and interactive social media functions, promotes more active user engagement. Increased engagement leads to customer satisfaction, brand loyalty, and repeat purchases.

4.2.2. Consumer Trust

The proposed framework increased consumer trust by more than 20%, from 68% to 90%. Confident customers know they can secure payment systems, know exactly how the business operates, understand their privacy is protected, and can verify their customer reviews and know the business is secure and protected from cybercrime. A higher level of trust helps to foster repeat sales and maintain customer relationships.

4.2.3. Recommendation Accuracy

The highest improvement was seen in the recommendation accuracy, from 70% to 94%. Machine learning algorithms use customer information such as their preferences, browsing history, purchasing behavior, and demographics to provide highly personalized product recommendations. Inaccurate recommendations have the opposite effects on customers, which means fewer conversions, more wasted product promotion and a poor customer experience.

4.2.4. Digital Payment Efficiency

With the Smart framework, the efficiency of digital payments went up from 76% to 95% compared to the traditional system. The seamless integration of secure digital payment methods, mobile wallets, fintech services, and real-time transaction processing helps to facilitate more rapid and

secure financial transactions. Better payment efficiency decreases the number of failed transactions and improves the shopping experience.

4.2.5. Customer Retention

Customer retention went from 69% to 89%, proving the success of personalised customer experiences and intelligent relationships management. The smart use of AI in creating engagement strategies, loyalty schemes, providing timely customer support, and delivering personalized product suggestions helps to keep customers active on the platform. The more you retain, the more you will grow and the longer you will keep your customers alive.

4.2.6. Overall Business Performance

The business performance was significantly improved using the proposed intelligent framework from 71% to 93% overall. With the combination of advanced technologies, better customer engagement, trust, accurate recommendations, and efficient digital payment systems, you'll see increased sales, better operational efficiency, more profitability, and increased competitive advantage. The findings confirm the effectiveness of the proposed framework to boost sustainable growth of social commerce in emerging markets.

4.3. Discussion

The experimental assessment validates that social commerce expansion in emerging markets is built on the combination of successful incorporation of intelligent technologies, strong digital infrastructure, consumer confidence and strategic business innovation. These dimensions are not exclusive to one another, but rather are interdependent in their ability to foster a highly connected digital ecosystem that boosts customers engagement, shapes purchasing decisions and contributes to the competitiveness of organizations. The results show how the digital infrastructure is the essence of social commerce by providing a reliable Internet connection, cloud computing tools, mobile access, and secure communication channels that facilitate seamless online transactions. Artificial intelligence also plays a crucial role in improving the functionality of platforms, as they feature personalized recommendation algorithms, predictive analytics, AI-powered customer support, demand forecasting, and intelligent marketing strategies, helping businesses understand customer preferences and provide customized shopping experiences. Social media engagement also has a key part to play in boosting customer engagement via user-generated content, customer reviews, influencers, live-stream commerce, online communities and drive higher purchase intent and brand awareness. The study pinpoints payment security, clear business operations, privacy safeguards, genuine product details, and customer service reliability as key factors that foster consumer trust and, ultimately, boost platform success. The use of digital payment technologies further enhances the efficiency of the transaction by providing secure, convenient and rapid payment methods, which eliminate purchase impediments and boost customer satisfaction. The comparative analysis shows that the companies adopting the proposed intelligent framework significantly outperform traditional social commerce websites in metrics such as customer engagement, recommendation accuracy, customer retention, and overall business performance. These enhancements underscore the need to leverage technological

advancement and focus on customer-centric business solutions, instead of solely focusing on digital infrastructure and marketing efforts. Moreover, the findings highlight the need for ongoing AI, cybersecurity, digital education, fintech services, and scalable cloud investments to drive sustainable social commerce growth. Close cooperation amongst governments, technology service providers, financial institutions and business organizations will also be vital to improving digital ecosystems and bridging technological gaps in emerging markets. Overall, the proposed intelligent framework is a comprehensive and effective approach to the improvement of operational efficiency, consumer trust, data-driven decision making, innovation, and long-term sustainability and competitiveness of social commerce platforms in the emerging market environments.

5. CONCLUSION

Social commerce is one of the most exciting developments of the digital economy, bringing together the potential of e-commerce, social network, artificial intelligence, cloud, mobile and intelligent business analytics into one commercial system. This study holistically explored the development of social commerce in emerging markets, studying technological, behavioral, economic and organizational factors that, altogether, determine business performance and sustainability. The results reveal that the sustainable growth of the social commerce sector is not just about technological advancements, but also about effective integration of digital infrastructure, consumer trust, social media interaction, intelligent analytics, secure digital payment systems and innovative business models. The proposed framework emphasises how these dimensions are interrelated and how they all are essential to create intelligent, customer-centric and resilient digital commerce ecosystems that will enable ongoing innovation and economic growth. The literature survey showed that the penetration of smartphones, the spread of internet and financial inclusion via digital payment systems and the popularity of social networking platforms have boosted the development of social commerce in emerging economies at a very rapid pace. In addition, AI and machine learning have revolutionized digital commerce with their ability to make personalised recommendations, anticipate customer needs, automate customer service, make smart predictions, and craft dynamic marketing campaigns. Cloud computing, blockchain, big data analytics, and the Internet of Things (IoT) have added to the platform's scalability, operational efficiency, transaction security, supply chain management, and real-time business intelligence. These technological advancements have helped companies gain insight into customer preferences to maximize the use of resources, provide customer service, and personalize the shopping experience to increase customer satisfaction and loyalty. The suggested methodology brought in a holistic analytical framework with six dimensions namely digital infrastructure readiness, social media engagement, capability on artificial intelligence, consumer trust, digital payment integration and business performance. These were included in a single Social Commerce Growth Index (SCGI) which offers a structured and scalable method to assess overall platform performance. Data normalization, weighted aggregation, correlation analysis, and comparative analysis were applied to statistical evaluation techniques, along with AI-assisted decision support, to provide insightful analyses on the relationships between technological, behavioral and economic factors. The integrated approach helps researchers, business organizations and policy makers to determine strengths, weakness, benchmarking market performances and evidence-based policies that can be adopted for

sustainable digital transformation. The experimental comparison proved the effectiveness of the proposed intelligent framework with the conventional social commerce systems by achieving good performance in all important evaluation indicators. Customer engagement increased, consumers trusted the service more, the accuracy of recommendations improved, digital payment efficiency improved, customers were retained and business performance improved. The findings highlight how artificial intelligence, secure digital payment methods, trust-building business practices, and social media interaction are interconnected to foster a more effective and competitive social commerce ecosystem. By embracing integrated intelligent technologies, organizations can better leverage to enhance customer experiences, streamline operational processes, boost profits, and quickly adapt to evolving market requirements. The results also highlight that customer trust and digital payment security continue to be some of the most pivotal factors influencing purchasing decisions and customer relationships in emerging markets. In the practical aspects, this research gives important insights into how business leaders, digital entrepreneurs, tech vendors, and policy makers can boost intelligent commerce ecosystems. Social commerce platforms can be optimized for efficiency and sustainability through investments in advanced applications of AI, cloud infrastructure, cybersecurity, blockchain-based transaction security, logistics modernization, and financial technology services, as well as digital literacy initiatives. Governments and regulators should continue to encourage digital policies and payment infrastructure, consumer protection policies and public-private partnerships that foster innovation and transparency and trust. The solutions to new challenges arising in the field of digital inequality, cybersecurity threats, privacy concerns and ethical AI implementation will require cooperation between academic researchers and tech firms, financial entities and government bodies. The experimental evaluation confirmed the effectiveness of the proposed intelligent framework by showing that it has better performances on key evaluation indicators in comparison to conventional social commerce systems. Results highlighted better customer engagement, consumer trust, recommendation accuracy, digital payment efficiency, customer retention and business performance. The findings are further confirmation that AI-enabled personalization, safe digital payment methods, transparency in business operations and social media interaction will combine to make social commerce more effective and competitive. Companies that embrace integrated intelligent technologies have a more competitive advantage in enhancing customer experience, optimizing business processes, boosting profitability, and meeting evolving market needs. The results also indicate that trust in the company and security of digital payments are still key determinants in purchasing and maintaining customer relationships in emerging markets.

Practical implications for business leaders, digital entrepreneurs, technology providers and policy-makers seeking to enhance intelligent commerce ecosystems. These investments in cutting-edge technology, including AI applications, cloud systems, cybersecurity, blockchain-based transaction security, logistics modernisation, financial technology services, and digital literacy initiatives, have the potential to shape the efficiency and sustainability of social commerce platforms. Governments and regulators need to remain fostering digital policies, safe payment systems, consumer protection laws and public-private cooperation to stimulate innovation and promote transparency and trust. To tackle new issues arising from digital inequality, cybersecurity threats, privacy concerns, and ethical use of

AI, this collaboration will be crucial between academic researchers, tech firms, financial institutions, and policymakers. Finally, the Social Commerce Growth Framework proposed in this paper offers a complete, scalable and intelligent framework for assessing the development of social commerce in emerging markets. This study brings together technological innovation, consumer behavior, digital infrastructure, artificial intelligence, business performance, and strategic decision-making as a whole into a unified analytical framework, thus adding value to both academia and industry. The framework helps to guide data-informed decision making, to foster sustainable digital transformation, to strengthen the competitiveness of organizations, and to stimulate inclusive economic development. The proposed framework provides a good foundation for future research and business innovations, as well as policy development, in order to ensure and build secure, intelligent, resilient, and customer-centric social commerce systems that can support sustainable growth in the fast-changing digital economy of the world.

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