



Assessing the Impact of Social Media on SME Performance Using Structural Equation Modelling

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Authors' contributions

This work was carried out in collaboration between both authors. Author KK designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. Author PM managed the analyses of the study and managed the literature searches. Both authors read and approved the final manuscript.

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ABSTRACT

Social media technology plays a crucial role in boosting productivity and competitiveness within various industries. It has made a substantial impact on the growth and vitality of small and medium-sized enterprises (SMEs) in the global economy. Through the utilization of social media technologies, SMEs can efficiently reach markets and interact with stakeholders while keeping costs to a minimum. As a result, the purpose of this study is to investigate the factors that influence SMEs' adoption of social media and the subsequent impact on their performance. The research team conducted a comprehensive study on the difficulties encountered by Small and Medium Enterprises (SMEs), considering various aspects such as technology, organization, and the

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environment. To gather data for the investigation, a survey with predefined answer options was administered. By adopting a quantitative methodology, the researchers analyzed 395 responses using structural equation modelling from industries such as Pharmaceutical, Automobile parts components, Electronics, IT solution Provider, Logistics, Financials, Khadi, Ceramics and glass product in Jharkhand. The results suggest that social media is becoming increasingly important for SMEs. By focusing on studying the innovative use of social media, managers and decision-makers in SMEs can improve their performance. However, Business performance refers to how well an organization achieves its goals and objective, typically measured through Sales, Brand Awareness and Customer Relationship. Additionally, incorporating social media into their operations acts as a positive mediator between technology, organization, environment, and SME performance. This research also highlights the advantages of using social media for organizations and provides insights into the motivations behind investing in this digital platform. It will help SME owner/Manager to improve marketing practices via social media adoption.

Keywords: Social media marketing; small; medium sized enterprises (SMEs); technology construct; organization construct; environment construct; business performance.

1. INTRODUCTION

Small and Medium Enterprises (SMEs) are drawn to social media due to its affordability and the minimal technical expertise required. In accordance with these findings, [1] discovered that the utilization of social media by companies is rapidly expanding and has become a crucial component of corporate governance. This suggests that businesses are increasingly opting for social media as a means of engaging with a broader audience, surpassing private one-on-one interactions. Social networking sites offer economical solutions for a range of purposes, such as data analysis, automatic posting, content administration, conversion monitoring, and consumer segmentation. Businesses can utilize social media to advertise their goods, services, and brand identities.

According to the Micro, Small & Medium Enterprises Development Act of 2006, which was introduced in September 2006, companies that fall under the category of SMEs are those that have investments in machinery, equipment, and facilities ranging from INR 25 Lakhs to INR 10 Crores for the manufacturing industry. For SMEs in the service sector, the investments range from INR 10 lakhs to INR 5 crores. The significance of SMEs in India cannot be overstated, as they play a crucial role in the social and economic progress of the country. As stated by [2], SMEs have a significant impact on boosting exports, creating job opportunities, and promoting inclusive growth within the nation. Social media platforms are viewed as online marketplaces where businesses can engage with their customers. SMEs can expand their reach beyond

their local area and eliminate the need for a physical store by utilizing social media platforms. In India, SMEs make up 95% of all companies and contribute 40% of the value in the manufacturing sector [3]. SMEs possess unique characteristics and are known for their adaptability and innovative entrepreneurial mindset. The services and products offered by SMEs vary based on their size and level of technological advancement. As a result, they play a crucial role in the development of rural and underdeveloped regions, helping to reduce regional inequalities. This approach promotes a fair and equitable distribution of wealth and national income. According to a study carried out in 2016, SMEs accounted for 40% of total exports, 45% of manufacturing, and made an 8% contribution to India's gross domestic product (GDP). This information underscores the significant role that SMEs play in driving the country's economic progress. However, it is ironic that SMEs in India encounter difficulties due to their limited resources and lack of technological expertise. It is crucial to enhance the overall health and capabilities of SMEs in order to promote economic development. Interestingly, research conducted globally consistently highlights the advantages of social media in facilitating the growth of SMEs. Social media platforms provide a convenient avenue for consumers to directly engage with new products, services, and brands. Utilizing social media can provide significant benefits, as it offers a cost-efficient solution that has been proven to assist businesses in effortlessly connecting with their intended audience. Social media has gained recognition for its capacity to establish a connection between SMEs and potential customers. The approach employed by

businesses to sustain their operations through social media is commonly known as social media marketing (SMM). By leveraging SMM, businesses can successfully reach their target audience and establish a robust online presence.

In this paper, our primary emphasis is centered on:

- Can social media marketing have an effect on the business performance of SMEs in Jharkhand?
- The impact of the Technology-Organization-Environmental Framework (TOE) on the adoption of social media and its impact on Performance of SMEs in Jharkhand.

The rest of this assignment has been organized in the subsequent format. In the second section, we will delve into the assessment of previous literature and the theoretical framework. In the third section, we will outline the methodology used to conduct the research. Progressing further, the fourth section will address the discussion surrounding the interpretation and analysis of the gathered data. Lastly, the fifth section will present the limitations faced during the research process and shed light on potential prospects for future investigations.

2. THEORETICAL FRAMEWORK, LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 SMEs and Adoption of Social Media

Social media can be defined in various ways, as it is interpreted and utilized differently by individuals [4]. Due to its subjective nature, there are numerous definitions of social media. One definition describes it as "a collection of internet-based applications that use the principles and technology of Web 2.0, allowing for the creation and sharing of User Generated Content." This definition is both concise and comprehensive. According to a study conducted by [5,6], social media plays a crucial role in enhancing different business operations. One way to achieve this is by strengthening connections with business partners, facilitating the exchange of information, and efficiently managing communication and

logistics within supply chains. Businesses can enhance their overall effectiveness and streamline operations by utilizing social media. Numerous research studies have examined how SMEs adopt social media and the impact it has on their performance in both developed and developing nations. However, it is important to note that most of these studies have focused on industrialized countries. This raises questions about the applicability of their findings in the context of developing nations. The concerns arise from the challenges faced by SMEs in both developed and developing countries, which are influenced by various factors such as organizational dynamics and environmental circumstances [7,8].

This research investigated the effects of incorporating SMEs by utilizing the TOE framework and certain components of the DOI theory. In addition to examining the impact on performance, the study also considered the environmental context of SMEs, which is not covered by the DOI theory. As a result, the authors concluded that the TOE framework is the most suitable model for this particular investigation. Fig. 1 visually depicts the three main factors that influence social media adoption: technological construct (TC), organizational construct (OC), and environmental construct (EC). These areas play a crucial role in determining the extent to which SMEs adopt social media. The decision-making process of SMEs when it comes to adopting new technologies can be influenced by various factors in different domains [9]. These domains cover technological aspects, organizational elements, and environmental components. The technological features include ideas stemming from the DOI theory, such as relative benefit, compatibility, complexity, observability, and testability. Organizational factors include the level of support provided to top management in their decision-making process regarding the adoption of social media. Environmental elements consist of competitive intensity, competitive pressure, and the impact of being a follower, all derived from the TOE framework. The study mentioned utilizes a framework consisting of ten constructs across three distinct domains, forming the foundation for the four hypotheses presented.

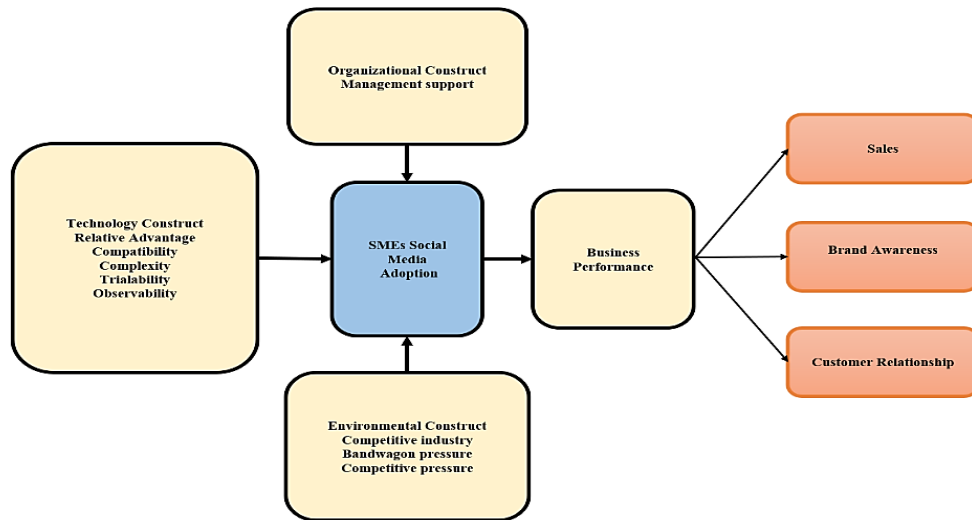


Fig. 1. Research framework

2.2 Technology Construct

Innovation can be defined by five key technological qualities. The first quality, referred to as relative advantage, relates to how potential adopters perceive an innovation to be superior to existing alternatives. The second quality, compatibility, assesses whether the innovation aligns with other technologies already in use within the organization. The third characteristic is complexity, which evaluates whether individuals view the innovation as difficult to utilize. The fourth quality, observability, determines if the outcomes of implementing an innovation are evident to external organizations and individuals who can observe the positive effects of the technology. Lastly, testability refers to the ease with which an innovation can be assessed before deciding to adopt it.

The decision to incorporate these elements into the research was based on the understanding that the use of social media is easily noticeable, shared through personal suggestions and informal communication, and can be terminated without incurring extra expenses. As a result, these factors are anticipated to have an impact. Therefore, the initial hypothesis suggests that:

H₁: Technological construct has a significant impact on adoption of social media by SMEs.

2.3 Organizational Construct

The internal characteristics of a company dictate its organizational structure. These characteristics

encompass elements like the company's size, level of formality and centralization, as well as factors related to personnel and management, such as employee networks and connections. In this particular research, the utilization of social media by owners/managers served as a measure of the overall organizational environment. SME owners hold a crucial role in highlighting the importance of social media within the broader SME strategy and recognizing the value of innovation as a holistic concept. Establishing a growth-oriented environment and allocating adequate resources for the integration of new technologies require crucial support from senior management. Previous research has consistently shown that the approval and endorsement from top-level executives are paramount in the successful implementation of new technologies within organizations [10]. Therefore, we can propose the second hypothesis based on this finding:

H₂: Organizational construct has a significant impact on adoption of social media by SMEs.

2.4 Environmental Construct

The environmental construct of an organization is shaped by the overall climate in which it operates. Previous research has investigated various factors such as industry structure, suppliers, and regulatory frameworks. Competitive intensity refers to the pressure that arises when there is a potential loss of competitive advantages. According to [11], adopting innovation can empower companies to

influence the structure of their industry. As a result, this can change the dynamics of competition within the industry and provide the organization with a competitive edge.

Competitive pressure refers to the level of competition present in a specific industry [10]. Various factors, such as globalization, advancements in technology, and the rapid dissemination of new technologies, can impact this [12]. In industries with a higher number of companies, organizations frequently prioritize innovation.

The phenomenon known as the bandwagon effect occurs when individuals or organizations adopt certain behaviors, such as embracing new technology, simply because they see others doing it, rather than because it aligns with their own strategic goals. When a significant number of organizations within an industry or sector begin to adopt a specific technology, there is a growing pressure for others to do the same [13,14]. This phenomenon highlights the impact of social conformity and the tendency to follow popular trends or behaviors. The bandwagon effect holds significant influence, especially in situations where the environment is uncertain. As a result, the third hypothesis of the study asserts that the bandwagon effect plays a significant role.

H₃: Environmental construct has a significant impact on adoption of social media by SMEs.

2.5 Adoption of Social Media and Its Impact on Business Performance

Incorporating social media platforms can enhance the efficiency and efficacy of business operations [15]. Several researchers have discovered that integrating social media into organizational strategies yields advantages, while others have established a clear correlation between adopting social media and attaining improved sales performance. By utilizing social media, businesses can optimize their operations and enhance their sales outcomes. A study conducted by [16] discovered that utilizing social media has a beneficial effect on customer relationships. The utilization of social media platforms resulted in increased brand awareness. Specifically, Facebook had a positive impact on the sales effectiveness of SMEs. The objective of this research is to enhance our understanding of the relationship between the adoption of social

media and business performance. Consequently, the fourth hypothesis aims to examine this correlation.

H₄: Social Media Adoption positively impact the Business Performance.

3. RESEARCH METHODOLOGY

3.1 Sampling and Data Collection

The research sample was randomly selected from the SMEs listed by the Government of India's Ministry of Micro, Small & Medium Enterprises from various districts of Jharkhand, including Jamshedpur, Ranchi, Dhanbad, Bokaro, Ramgarh, Khunti, and Hazaribagh. Given that the majority of businesses in Jharkhand are SMEs, it is unsurprising that we assembled a diverse sample with a substantial number of responses. The primary respondents targeted were owners, managers, and CEOs, as they were deemed to have the most in-depth knowledge of their company's operations and performance. A closed ended survey instrument was utilized to gather data between January and June 2024, with a total of 513 questionnaires distributed via Google Forms. From these, 395 valid responses were received. The research methodology applied in this investigation included the use of structural equation modeling (SEM) to assess the proposed model.

3.2 Measurements

The primary goal of this study was to investigate the extent to which the company embraces social media as an external influence, while also taking into account the internal factor of the company's business performance. The information gathered for this research, which offers valuable insights into the underlying factors, has been structured and displayed in Table 1. The assessment of these concepts was carried out by employing various factors on a Likert scale comprising of five levels. Respondents were presented with options for their responses, ranging from 1 (completely disagree) to 5 (completely agree). The questions regarding the acceptance of social media were derived from established scales that had been previously utilized in studies on technology adoption. These scales were subsequently customized to fit the particular context of adopting social media platforms.

Table 1. Measurement Scale

Part	Name	Source of measurement items	Items
A1.	A1 Respondents characteristics.	[17]	4
B.2.	B2 Social media adoption.	[18]	5
C.3.	C2 Technological construct.		24
	C3.1 Relative advantage.	[19]	6
	C3.12 Compatibility.	[20]	6
	C3.3 Complexity.	[21]	5
	C3.4 Trialability.	[22]	3.
	C3.5 Observability.	[23]	4.
C3.	C3.6 Organizational construct.		3.
	c.3.7 Top management support.	[24]	3.
C3.1	C.3.8 Environmental construct.		9.
	C.3.9 Competitive industry.	[25]	3.
	C.3.10 Bandwagon pressure.	[26]	3.
	C.3.11 Competitive pressure.	[27]	3.
D.1	D.4.1 Business performance.	Self-developed	6.
	D.4.2 Total items.		51.

4. RESULTS

4.1 Descriptive Information

According to the data presented in Table 2, total of 395 individuals participated in the survey. It was observed that 328 respondents (76%) were male, while 95 respondents (24.0%) were female. The majority of the participants, 200 individuals (51%), fell into the age range of 30 to 40 years. Furthermore, 222 respondents (56%) held a undergraduate's degree. The findings suggest that decision-makers in the study were young and had a higher level of education.

When considering job roles, it was found that the majority of respondents were owner, accounting for 115 individuals (29%), followed by executives with 106 individuals (27%). In terms of company size, 159 respondents (40%) belonged to small businesses, characterized by having more than 50 employees. The surveyed sample- included companies from various sectors, such as pharmaceuticals, Automobile part components, Electronic Products, IT solution provider, Logistics and many more. Notably, the majority of companies, 96 in total (24%), operated in the IT solution provider. Majority of the respondents were from Jamshedpur 201 in total (51%). Facebook is the most preferred choice among SMEs to boost their business performance 122 in total (31%). And they are using from last 1 to 2 years, 165 respondents were using. 305 in total respondents (77%) has allocated up to 20% of budget on social media marketing.

4.2 Inferential Information

4.2.1 Data purification

The majority of the metrics utilized in this study were acquired or modified from existing scales. However, certain aspects of measurement required enhancement and verification to ensure uniformity across various factors prior to analyzing the data [28]. To refine and purify the scale items, established methodologies and techniques from previous studies were employed, as outlined by [29]. These procedures encompassed exploratory factor analysis (EFA) and confirmatory factor analysis. The comprehensive results of the EFA for all constructs can be found in Table 3. The researchers conducted examinations to assess the validity agreement, consistency of the components, and internal coherence. In Table 3, you can find the coefficients, sizes, reliabilities, and p-values that were used to determine the reliabilities of individual components. The results showed that all indicator sizes were statistically significant, providing evidence for their use. To evaluate the coherence among different indicators, Cronbach's standard was employed. The composite reliability achieved a value above the suggested threshold of 0.70 [30]. Furthermore, the average variance extracted surpassed 0.50, indicating strong support for convergent validity. In addition, the findings presented in Table 4 demonstrate that all constructs have met the Fornell-Larcker criterion for discriminant validity [31].

Table 2. Demographic and organizational characteristics of the sample

Construct	Characteristics	Frequency	Percent
Gender	Male.	300	76
	Female.	95	24
	Transgender	0	0
Age	20-30	104	26
	30-40	200	51
	40-50	69	17
	Over 50	22	6
Education	Secondary	14	4
	Diploma	38	10
	Undergraduate	222	56
	Postgraduate	100	25
	Others	22	6
Position	Owner	115	29
	Executive	106	27
	Manager	92	23
	Senior manager	30	8
	Director	52	13
Employees	Below 10	88	22
	11to 50	148	38
	More than 50	159	40
Industry sector	Pharmaceutical	38	10
	Automobile parts components	76	19
	Electronics	36	9
	IT solution Provider	96	24
	Logistics	32	8
	Financials	22	6
	Khadi	42	11
	Ceramics and glass products	30	8
	Others	24	6
Firm location	Jamshedpur	203	51
	Ranchi	79	20
	Dhanbad	41	10
	Bokaro	30	8
	Ramgarh	22	6
	Khunti	11	3
	Hazaribagh	8	2
Utilization of social media	Minimum	88	22
	Basic	154	39
	Moderate	115	29
	Extensive/Ample	38	10
Social media platforms used.	LinkedIn.	38	10
	Facebook.	122	31
	X.	42	11
	Instagram	62	16
	YouTube	22	6
	Google+	16	4
	WhatsApp	98	25
	Others	8	2
Number of years since initial adoption.	0-1 years	63	16
	1-2 years.	165	42
	3-4 years.	88	22

Construct	Characteristics	Frequency	Percent
Use as a marketing tool.	More than 5 years.	79	20
	Very little.	17	4
	Little.	74	19
	Quite a lot.	69	17
Use of Social Media per day (in Hours)	Extensive.	236	60
	0-5 hours.	181	46
	6-10 hours.	132	33
	11-15 hours.	33	8
Budget allocation	Above 16 hours.	49	13
	0-20%	305	77
	21-30%	41	10
	31-40%	36	9
	More than 40%	14	4

Table 3. Loadings, weights, reliabilities and p-values0.

Variable	Loadings	Weights	p-Values
IV 1Technological construct.			
IV.1 Composite reliability = 0.868.			
IV AVE = 0.578.			
IV1.2Relative advantage.	.0713	.0247	<0.001.
IV1.3 Compatibility.	.0478	.0162	<0.001.
IV1.4Complexity.	.0781	.0274	<0.001.
IV 1.5Trialability.	.0899	.0311	<0.001.
IV 1.6Observability.	.0859	.0298	<0.001.
IV 2Organizational construct.			
IV 2Composite reliability = 1.000.			
IV 2AVE = 1.000.			
IV2.1Top management support.	.1000	.1000	<0.001.
IV 3Environmental construct.			
IV 3 Composite reliability = 0.798.			
IV 3AVE = 0.568.			
IV3.1Competitive industry.	.0797	.0465	<0.001.
IV 3.2Bandwagon pressure.	.0614	.0364	<0.001.
IV 3.3Customer pressure.	.0835	.0487	<0.001.
M1Social media adoption	1.000	1.000	<0.001
M1Composite reliability = 1.000.			
M1AVE = 1.000.			
DV1Business performance.			
DV1Composite reliability = 0.921.			
DV1AVE = 0.794.			
DV1.1Sales.	.0847	.0355	<0.001.
DV1.2Customer Relationship.	.0924	.0387	<0.001.
DV 1.3Brand Awareness.	.0897	.0379	<0.001.

4.2.2 Structural model

A linear regression analysis was employed to capture the interplay between endogenous constructs, utilizing a structural framework [30]. These frameworks possess the capability to identify patterns of relationships among the constructs. The model's PLS score included path coefficients (β), path significance (p-value), and the extent to which variance was explained (R²). According to these standards, the findings

indicated that solely the elements connected to the company and the surrounding context had a noteworthy influence on the utilization of social media by SMEs, accounting for 12 percent of the variation. Both the organizational and environmental aspects were deemed statistically significant at a significance level of $p < 0.01$. The findings from the hypothesis test are presented in Table 5, where the t-values for each path load were utilized as indicators to validate the hypotheses. The acceptance criteria were met

when the t-value equaled or surpassed 1.644, which corresponds to a significance level of 0.05 [30].

4.3 Regression Analysis

To establish and pinpoint the particular factors within different categories that influence how SMEs use social media, we employed a multiple regression analysis. The study conducted on the structural equation model (SEM) revealed the significance of the technology factor. This discovery was further validated by subsequent analysis, which indicated that the specific factors

within the technological category had a significant influence on the adoption of social media. Competitive pressure became a notable element within the environmental construct. Furthermore, support from management, a component of the organizational structure, also played a significant role in the utilization of social media. As expected, there was a positive and substantial correlation between the adoption of social media and business performance, affirming the results of the SEM analysis. The factors of significance identified through the analysis of multiple regression are outlined in Table 6.

Table 4. Discriminant validities

Variables.	Technological construct.	Organisational construct.	Environmental construct	Social Media.	Business Performance.
Technological construct.	0.863				
Organisational Construct.	0.683	0.913			
Environmental construct.	0.711	0.723	0.844		
Social Media.	0.673	0.787	0.545	0.892	
Business Performance.	0.655	0.781	0.499	0.784	0.863

Table 5. Path coefficient and Hypothesis Testing...

Variable	Hypothesis	Path coefficient	t-Stats	Result
IV 1-Technological. construct.	H ₁ : Technological construct has a significant impact on adoption of social media by SMEs.	0.43	6.81	. Supported.
IV 2-Organizational. construct.	H ₂ : Organizational construct has a significant impact on adoption of social media by SMEs.	0.235	3.952	. Supported.
IV 3-Environmental. construct.	H ₃ : Environmental construct has a significant impact on adoption of social media by SMEs.	.0.294	3.414	. Supported.
DV 1-Business Performance	H ₄ : Social Media Adoption positively impact the Business Performance.	0.71	3.891	. Supported.

Table 6. Regression analysis

Model	Unstandardized coefficients		Standardized coefficients	T	Sig.
	B.	SE.	β.		
IV 3(Constant).	1.382	0.341		4.095	0.000
IV 3Management support.	0.126	0.048	0.209	2.509	0.015
IV 3.2Competitive intensity.	0.514	0.061	0.376	2.83	0.042
IV3.2Bandwagon pressure.	0.107	0.048	0.205	2.388	0.02
IV3.3Competitive pressure.	0.054	0.088	0.064	4.636	0.029

5. DISCUSSION

The researchers have carried out an investigation that examines how the utilization of social media affects the effectiveness of SMEs in Jharkhand. This study stands out among the limited number of researches conducted on this subject. It is difficult to comprehend the impact of social media on organizations due to its unpredictable nature. The decision-making process of SMEs in adopting social media is influenced by technological considerations. The available literature does not offer definitive evidence on whether internal or external factors have a greater influence on the adoption of technology by SMEs. However, when examining particular technological aspects, the research revealed a notable connection between the adoption of social media and the concept of relative advantage. This discovery aligns with the findings of [16], who similarly observed a robust positive relationship between relative advantage and the intention to adopt social media among SMEs.

There could be a potential explanation for the notable correlation discovered in this investigation, possibly due to the fact that the participants belonged to a younger age group (as shown in Table 3), suggesting that they were likely more acquainted with social media. This familiarity might have enhanced their proficiency in utilizing it efficiently. The connection between compatibility and the adoption of social media was found to be substantial. This discovery aligns with previous studies that have also established a significant positive association between compatibility and the intention to embrace technology.

Nevertheless, there exists a noticeable correlation between intricacy and the inclination to embrace social media, which coincides with the discoveries made by [32] in their study. The above-mentioned research revealed a clear and positive association between perceived intricacy and the eagerness to adopt RFID technology in retail establishments in Taiwan. This relationship may be attributed to the respondents' limited familiarity with particular social media platforms and tools.

The utilization of social media appears to be impacted by two key factors: testability and observability. Previous research has identified significant connections between testability and the propensity to embrace e-commerce [33], as

well as between observability and the desire to adopt cloud technologies [34]. These findings highlight the influence of these factors on the adoption of different technological platforms. The results of this study indicate that the degree of testability and observability can greatly impact the willingness to adopt new technologies. In the context of this research, there may be a potential link between testability and the utilization of social media. This is due to the ease with which social media can be integrated with minimal effort, thus reducing associated risks. It is important to note that the use of social media is widespread among SMEs in Jharkhand, thereby increasing its visibility among other SMEs. This underscores the influence of observability. Prior research has emphasized the significance of active engagement from upper management in effectively incorporating technology into a company. This finding aligns with previous studies conducted on SMEs by [10]. The results of their research reinforce the notion that the integration of social media technology in SMEs is influenced by the directives provided by top-level executives, while employees are dedicated to utilizing it for operational and marketing purposes.

The findings of this revelation align with previous studies conducted on small and medium-sized businesses (SMEs) by [10]. The results of this investigation emphasize the point that the incorporation of social media technology in SMEs is impacted by the directives provided by top-level management, while staff members are dedicated to utilizing it for operational and promotional purposes.

The findings of this research also uncovered that the primary factor that affects the acceptance of social media among small and medium-sized enterprises (SMEs) is the surrounding situation. Numerous businesses embrace novel technologies merely because their competitors are doing the same. When it becomes challenging to determine if a new technology can enhance operational effectiveness, following the same path as others can help avoid significant setbacks in performance.

The primary goal of this research was to assess how the integration of social media by SMEs affects their overall business performance. However, the findings indicated a significant impact, indicating that companies have derived benefits from their investments in this domain. Nonetheless, [35] propose that the use of social

media is an ongoing process, and its outcomes should be promptly evaluated. They recommend that businesses, irrespective of their size, should transparently communicate the advantages they gain from their social media investments, as well as the strategies they employ to measure these benefits. Until this becomes a common practice, companies will need to satisfy their curiosity by conducting experiments with the technology.

5.1 Theoretical Contributions

This study offers valuable insights into the field of social media and enterprise information management in SMEs. It presents findings from a rapidly growing economy in the Jharkhand region. There is a lack of research on this topic, especially regarding the challenges and results of implementing social media platforms, specifically within a business setting. This study aims to fill this gap in the current body of literature by highlighting the importance of this particular domain. The objective of this study is to enhance the existing theory by expanding on the TOE model and incorporating elements from the DOI theory in order to examine the growing utilization of social media in organizations. This study used social media as a mediator to investigate its relationship with organizational, technological, environmental, and SME performance.

This paper makes several contributions to the existing literature in the adoption of SM and SMEs in developing countries. The findings relate to developing countries, especially Jharkhand, where little literature is available.

Through empirical evidence from a social media perspective, this research offers a significant contribution by validating a conceptual framework with strong explanatory capabilities. As a result, it deepens our comprehension of the increasing trend of social media usage within organizational contexts.

5.2 Practical Implications

The findings of this research hold significant implications for SMEs who are contemplating the adoption of social media technology. One key takeaway is that social networking services are the most commonly utilized applications in the realm of social media. The choice to use these applications aligns closely with the preferences of individuals in both local and regional communities, as they are the preferred means of

interacting with social media platforms. The results of this investigation reveal that the SMEs in question employed these software programs to interact with external entities.

As this study reveals, the positive relationship between SM adoption and SME performance and managers can encourage SMEs to adopt SM, because findings suggest that the adoption of social media will help SMEs to increase their performance, reduce marketing costs, reach out to more potential customers, and find more potential partners for future growth through SM. TOE factors help firms to adopt SM easily because these factors provide a favorable environment to adopt SM easily and quickly without any resistance.

SME owners/managers in developing countries are seeking to improve marketing practices via SM adoption, which provide multiple tools to improve firm performance, as proved in this study. However, owners/managers may not optimally maximize their SM presence if their goal does not encompass exploiting SM for marketing purposes. The most common media types used by firms are Facebook, WhatsApp and Instagram [36,37] were considered cost-effective. The speed, ease of use, interactive nature, and ability to reach large customers make SM essential for SMEs in Jharkhand.

This finding aligns with a previous analysis carried out by [13,38], which examined the utilization of social media by SMEs in Europe. As a result, SMEs aiming to incorporate social media into their business plans should exercise caution when selecting applications that are widely adopted within their respective industries or target markets. It is of utmost importance to comprehend that currently, these applications ought to primarily be used for external communication objectives, as customers are not yet completely ready for transactional social media platforms [39,40].

Harnessing the power of social media to improve business performance undoubtedly yields numerous advantages, backed by compelling evidence [41].

6. CONCLUSION

The purpose of this research is to analyze the effects of SMEs adopting social media technology on their business performance in Jharkhand. The findings suggest that integrating social media into their operations has a

significant impact on the overall performance of these organizations. This can be attributed to the fact that many companies have implemented social media platforms without properly aligning them with their corporate strategies and goals. Consequently, numerous companies lack a comprehensive understanding of the potential advantages that social media can offer. Our intention is for this study to serve as a valuable foundation for future investigations into the utilization of social media.

7. LIMITATIONS AND FUTURE RESEARCH

The study faced a significant constraint when it came to the sample's size and diversity. Most of the companies analyzed in the research belonged to industries like automotive parts, electronics, IT solutions, logistics, and others. It would be intriguing to investigate the situations within businesses that have a stronger presence on social media platforms, such as entertainment venues, restaurants, fashion boutiques, and travel agencies. Additionally, there may be differences between SMEs that prioritize the production of goods compared to those that prioritize the provision of services. However, due to the limited number of samples used in the research, this particular aspect was not thoroughly investigated. Furthermore, the study did not explore any potential relationships between the adoption of social media and corporate strategy. It would be intriguing to explore whether businesses that actively implemented social media platforms had a greater influence on their overall performance.

Moreover, the study evaluated its hypotheses by engaging subject matter experts (SMEs) from a specific country and collecting data through a cross-sectional analysis. As a result, the outcomes achieved provide a fleeting insight into the topic. However, it is crucial to recognize that the consequences of adopting social media may vary. To gain a more thorough comprehension, it is advisable for future studies to include a longitudinal investigation. This would allow for an examination of the long-term effects, especially as knowledge in this area advances. Forthcoming work could also investigate product based and service-based SMEs separately, as well as large firms in developing countries and also examine the adoption of social media in Covid 19 time frame and the examine the performance of SMEs.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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