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Marwa Mohmoud Fahmy
Research Scholar, Department
of Commerce and
Management, Banasthali
Vidyapith, Jaipur, Rajasthan,
India

Dr. Ruchi Maheshwari Bangur
Assistant Professor,
Department of Commerce and
Management, Banasthali
Vidyapith, Jaipur, Rajasthan,
India

Dr. Harish Kumar KG Nair
Deputy Director,
Administration Registration
and Exam, Skyline University
College, Sharjah, UAE

Corresponding Author:
Marwa Mohmoud Fahmy
Research Scholar, Department
of Commerce and
Management, Banasthali
Vidyapith, Jaipur, Rajasthan,
India

Impact of social media and new video technology on knowledge sharing

**Marwa Mohmoud Fahmy, Dr. Ruchi Maheshwari Bangur and Dr.
Harish Kumar KG Nair**

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Abstract

This study utilizes Structural Equation Modeling (SEM) methodology to examine the relationships between social media platform use, adoption of new video technology, technical competency, user engagement, and knowledge sharing. The study examines four hypotheses (H1-H4) and draws conclusions through regression analysis. The results strongly support H1, suggesting a significant and positive impact of using social media platforms on sharing knowledge. Just like technical writing, the adoption of new video technology has a significant impact on knowledge sharing practices, confirming H2. In addition, the study reveals that the connection between usage of social media platforms and sharing of knowledge is impacted by the level of technological proficiency (H3). People who are more skilled with technology tend to have a stronger link between their use of social media and their sharing of knowledge. In addition, the role of user engagement on social media platforms is recognized as a mediator between platform usage and knowledge sharing, providing support for H4. While user engagement plays a crucial role, it is still important for facilitating the spread of knowledge. These findings highlight the significance of taking into account individual technological skills and promoting user engagement to improve knowledge sharing on social media platforms.

Keywords: Structural equation modeling (SEM), social media, new video technology, technical competency, user engagement, knowledge sharing

Introduction

For a very long time, knowledge has been considered to be one of the most important strategic resources that may provide a sustainable and long-term advantage in the market. The capacity of individuals and organizations to comprehend and behave in an efficient manner is referred to as knowledge. By having knowledge, one is better able to deal with the day-to-day tasks that are required of them, and it may also prepare one to deal with new circumstances and employ them when they are required. It is impossible for organizations that have the goal of thriving, competing, and operating in an environment that is constantly changing to leave the growth of knowledge inside the company alone to chance. One of the most important aspects of knowledge management is the sharing of information and acquired expertise among staff members. In point of fact, the firms are confronted with the issue of comprehending how to motivate individuals to offer their information ^[1].

Over the course of many decades, the most well-known social change forecasters in the world have prophesied the rise of a new economy in which the most important resource is not conventional sources of energy and machine power but rather the brainpower and knowledge of individuals. However, this future has already here, and the economy of information has found its way into the world. The period that we are now living in is defined by fast change and unpredictability, the growing significance of knowledge and knowledge management, and the popularity of new information technologies that have the potential to drastically revolutionize the manner in which organizations do their business.

The Internet has been the single most important technical advancement that has occurred over the course of the last twenty years. Through the use of the Internet, people are able to interact with one another, work together, and continually exchange information, documents, photos, videos, and other forms of media with anybody living anywhere in the globe. In addition, individuals are able to make use of the tools provided by social media in order to

broaden and enrich the scope of their networks, as well as to collect information. Furthermore, in today's world, a growing number of businesses are discovering methods to include social media into their operational procedures.

Organizations are increasingly using social media platforms for a variety of objectives, including consumer communication, internal collaboration among workers, and cooperation with suppliers and vendors. There has been a significant amount of study conducted on the effects of social media on marketing and corporate communication; yet, there is still a lack of understanding about the function that social media plays in improving organizational knowledge. An investigation of the impact that social media has on the level of organizational knowledge was carried out not too long ago in order to fill this knowledge gap. Companies have been concentrating their efforts on knowledge management projects for a considerable amount of time because they have recognized the strategic significance of knowledge as a significant resource for achieving a lasting competitive advantage. The Resource-Based Theory of the company serves as the foundation for these activities, which have the objective of gaining a competitive advantage by using resources that are precious, uncommon, and non-substitutable. Over the course of the last several decades, businesses have been progressively adopting knowledge management methods in order to enhance their performance. In order to aid these efforts, information technologies have often been used [2].

In addition, social media platforms facilitate the upkeep of a substantial number of electronic connections, which in turn helps users develop trust, shared values, and a profound knowledge of one another. In this way, these links act as channels via which new information and points of view may be transmitted [3]. Consequently, via the use of social media platforms, companies are able to improve their communication, cooperation, and innovative capabilities. In general, social media platforms are very effective at promoting connections between individuals and between individuals and documents, which provides a multitude of advantages to knowledge management endeavors [4]. In order for enterprises to successfully support their knowledge management initiatives, it is vital for them to embrace social media platforms and deliberately integrate them into their operations. On the other hand, businesses that have social media technologies in place are able to develop their knowledge management projects because they have the appropriate technology infrastructure. In light of the fact that the adoption and use of social media is a progressive process rather than a choice made all at once, the term "organizational social media assimilation" is used to define the degree to which companies deploy and make use of social media.

Social Media

Generally speaking, social media refers to the exploitation of the internet for the purpose of collaborative information sharing. This term embraces a wide range of tools and platforms, such as social networking services and news websites. It refers to any technology that is based on the internet and facilitates rapid communication and cooperation over data networks. It encompasses formats for text, graphics, audio, and video [5]. On the other hand, social media platforms make use of web-based technology in order to transition away from conventional broadcast media formats, which largely entail communication between one

person and many others, and toward a more interactive discourse that is defined by interactions between many people. Individuals will be able to shift from being passive content consumers to active content creators as a result of this revolution, which has the potential to democratize access to knowledge and information [6].

Magazines, online forums, weblogs, social blogs, microblogging platforms, wikis, social networks, podcasts, pictures, videos, rating systems, and social bookmarking are all examples of the many formats that fall under the umbrella of social media [7]. The following are the primary categories that can be used to classify these platforms: collaborative projects (like Wikipedia), blogs and microblogs (Like Twitter), content communities (like YouTube), social networking sites (like Facebook), virtual game worlds (Like World of Warcraft), and virtual social worlds (Like Second Life) [8]. This list is not exhaustive. Blogs, photo-sharing platforms, video-sharing platforms, wall posts, email, instant messaging, music-sharing services, crowd-sourcing platforms, and voice over Internet Protocol (VoIP) are all examples of technological tools that are used to facilitate activities related to social media networking. Through the usage of social network aggregation platforms, social media services often interface with one another, which streamlines the user experience across a variety of platforms. Facebook, Twitter, Bebo, and MySpace are some of the most well-known examples of social media networking platforms. An assortment of actions, including the exchange of material, the expression of identity, the participation in discussions, and the formation of connections, are carried out by people across these diverse platforms. This active interaction is embodied by the honeycomb structure, which outlines seven functional building components of social media services [9]. These building pieces include identification, conversations, sharing, presence, connections, reputation, and groups. In general, social media platforms function as dynamic venues in which users may communicate with one another, express themselves, and develop relationships within an environment that is mediated by digital technology.

New Video Technology

The term "new video technology" refers to the many breakthroughs and innovations that have been made in the production, delivery, and consumption of video information. Improvements in camera technology, editing software, streaming platforms, virtual reality (VR), augmented reality (AR), and immersive experiences are all included in this category. Producing movies that are visually appealing is made possible by high-quality production tools, and the use of sophisticated editing software improves the overall quality of video productions as well as the creative potential of such works. Accessing video material may be accomplished via a variety of channels, including online streaming platforms and video-on-demand services, which are examples of distribution channels. Immersive narrative experiences may be provided by technologies such as virtual reality and augmented reality, while developments in compression techniques have made it possible to access high-quality video material across a variety of devices and networks.

Knowledge Sharing

Sharing knowledge is a crucial part of building a strong organizational culture. It involves fostering social interactions that allow employees to exchange their knowledge, experiences, and skills within the department or

organization. It surpasses basic sharing of information and entails a dynamic process of mutual learning and collaboration. This process involves the exchange of task-related information, expertise, and feedback regarding products or procedures. Such exchanges of knowledge have been associated with a range of positive managerial outcomes, such as improved productivity, shorter task completion time, enhanced organizational learning, and increased innovativeness.

Knowledge sharing involves a range of behaviors centered on exchanging knowledge. This includes different people within the organization, the type of knowledge being shared, the organizational setting, the communication methods used, and the larger societal context. It's important to create an atmosphere that promotes open communication, collaboration, and collective learning, rather than just focusing on transferring information.

From a practical standpoint, knowledge sharing entails actively disseminating pertinent information among employees throughout various levels and departments within the organization. The sharing of knowledge helps to break down barriers, encourage collaboration across different areas, and cultivate a culture of openness and ongoing growth. In addition, knowledge sharing is a dynamic process where individuals participate in the reciprocal exchange of both personal insights and formalized knowledge. During these exchanges, individuals not only share their existing knowledge but also work together to generate new knowledge through collaborative problem-solving, experimentation, and innovation.

Knowledge sharing via social media

The author discovered that Facebook and blogging have been gaining more and more popularity as platforms that promote the administration and sharing of information online. Furthermore, it investigated whether or if blogs and Facebook provide a scaffolding and/or consolidation of student users' knowledge collection, sharing, and application when they are participating in internships, and in what ways this occurs. In order to research the behaviors and views of users about the usage of blogs and Facebook in online information management, a mixed-methods design was used. The findings of this investigation revealed that users, on the whole, have a favorable perception regarding the utilization of blogs and Facebook for online knowledge administration ^[10]. Facebook, in particular, seems to be a platform that is more conducive to users reflecting on their past knowledge, capturing new experiences, and providing feedback that is constructive to the cultivation of an atmosphere that encourages the exchange of information. It was discovered that Facebook encourages its users to demonstrate their social support for one another, which in turn strengthens their drive to take part in the processes of knowledge management ^[11].

Social Networks in Hospitals

A growing number of hospitals are using social networks for the aim of marketing their services. In order to improve their capacity to sell their services and engage with various stakeholders, more than 700 of the 5,000 hospitals in the United States have established a presence on social media and social networking sites. Author: Bennett, Ed. In order to have a better understanding of how their patients perceive their care experiences, cancer centers such as MD Anderson

are engaging in the development of health care communities ^[12]. Government organizations such as the Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC) are using social networks in order to involve the general public during product recalls and in the preparations for the H1N1 influenza pandemic (H1N1). A second research in which they studied the link between the level of adoption and use of social media in hospitals and the features of the hospitals themselves. The researchers carried out a cross-sectional analysis of the activity that was associated with the hospital on four different social media platforms: Facebook, Twitter, Yelp, and Foursquare. All hospitals in the United States that participated in the Centers for Medicare and Medicaid Services Hospital Consumer Assessment of Healthcare Providers and Systems survey as well as the American Hospital Association Annual Survey were considered for inclusion in the study. They assess the amount of adoption in relation to the features of the hospital, which include the geographic location, urban designation, bed number, ownership type, and teaching status.

Social Networks in Education

The tools of social media provide individuals with one-of-a-kind opportunity to fulfill the requirements of online and blended education in terms of cooperation and communication. "Learning 2.0" is a phrase that is used to characterize social media technologies that necessitate a demand-pull educational approach, with an emphasis on active interaction rather than passive delivery. With regard to the support of online and blended learning activities, researchers have found a variety of advantages that may be gained by using social software tools. Wikis, blogs, online forums, and online media sharing sites are some examples of the kinds of technologies that are now being investigated for the purposes of conducting professional learning and educational activities. The networking function of social software is recognized as a key benefit for online learning since it makes it easier for users to share and develop knowledge with one another ^[13].

Many different kinds of social media tools have shown that they have the potential to assist certain educational activities. Some of these tools, such as blogs and wikis, have been used widely in educational settings for more than a decade with great success. Writing a blog, for example, is considered to be a virtual arena that is favorable to learning via collaboration and cooperation. The usage of social software tools that are put together on an SNS platform is acknowledged as a technique of providing learning assistance. Social networking sites (SNS) provide chances for students to publish their work and provide comments on it. In addition, platforms such as Facebook and Ning have been investigated for their potential in the field of education ^[14]. The outcomes of these studies imply that these platforms provide a number of advantages, including the development of communities, the ability to personalize content, and the ease of access to resources.

New Video Technology on Knowledge Sharing

New video technology has emerged as an essential instrument for promoting the dissemination of information across a wide range of fields. As a result of the development of more advanced cameras, editing software, and visual effects, content producers now have the ability to generate engaging films that are capable of efficiently conveying

intricate ideas, instructions, and tales. These technological breakthroughs have ushered in a new age in which information can be transmitted via a multitude of platforms, such as YouTube, Vimeo, and TikTok. This affords content producers the opportunity to easily communicate with audiences all over the world. Furthermore, live streaming platforms such as Twitch and Facebook Live encourage real-time involvement and cooperation among viewers, which further enhances the transmission of information. The advent of virtual reality (VR) and augmented reality (AR) technologies has changed learning experiences by providing immersive environments for hands-on training and simulations. These technologies have emerged concurrently with the establishment of distribution channels.

The new video technology not only makes it easier to create and distribute material, but it also makes it possible for distant teams and learners to work together to create knowledge. Through the use of platforms like as Zoom and Microsoft Teams, users are able to work on projects and exchange ideas in a seamless manner. These platforms enable real-time communication and document collaboration, therefore removing geographical restrictions which previously existed. Additionally, video content has become more accessible to a wider range of viewers because to features like as closed captioning, subtitles, and transcripts. These features ensure that those who have hearing impairments or language hurdles are able to participate in the video content creation process. Additionally, data-driven insights and analytics make it possible to personalize learning experiences. These tools allow content producers and educators to improve material depending on viewer engagement and preferences, which in turn makes it feasible to personalize learning experiences. New video technology, in its most fundamental sense, acts as a catalyst for creativity in the sharing of knowledge. It provides producers and learners with a broad variety of tools and platforms that allow them to interact with information in the most dynamic manner possible. As technology continues to advance, the potential for video-based knowledge sharing to revolutionize education, industry, and society as a whole remains enormous. This potential holds the promise of democratizing access to information and empowering people to learn and interact in ways that have never been seen before.

Literature Review

^[5] Aimed to assess the impact of social media on the information sharing of students at colleges and universities as a teaching tool. To create a model that investigates the impact of social networking functions such as file sharing, student involvement, and individual incentives such reputation on information sharing, the research used social cognitive as well as connective theories. According to the study, social media use may enhance student performance and motivation by fostering knowledge sharing. According to the research, social networking is a helpful medium for knowledge exchange and may be used to boost student engagement ^[14]. Examined motivators (Enabling employees to share information), social media (the hygienic component), and knowledge sharing motive (KSM). The author does this by developing the theoretical model, putting out research hypotheses, and using the theory of two factors as a research framework. After that, the model is assessed and verified using structural equation modelling using SPSS

statistics and AMOS on a sample of 278 Chinese firm workers. Three information-sharing phases have been found to create two continuums: the lack of motivation stage, the intermediate state stage, and the motivated stage ^[15]. Investigated another specialized area in the information sharing environment, with an emphasis on the effect of social networking sites on academics' sharing of knowledge. In order to determine the likely factors that entice academics to utilize social media, a literature review was first done. Most often cited are the benefits to improved group building, idea generation, and communication. Furthermore, the need of conducting this inquiry will be emphasized in this piece. In summary, social media unquestionably enhances and revolutionizes the process of exchanging information, hence aiding scholars in their pursuit of knowledge ^[16]. Designed to define the research horizon and offer an overview of what, how, and how deeply has been explored. This research may not have provided comprehensive coverage of the issue under question. However, based on the selected technique, the authors believe that the research includes a considerable number of the studies accessible. The projected advantages for academia are primarily twofold. For starters, it may spur more study by highlighting areas where further research is needed. Second, it will compile results from several papers and present them in a thorough conceptual style, together with all supporting facts ^[10]. This study's main objective is to provide a comprehensive assessment and enhanced comprehension of the current status of research on the usage of social media platforms for knowledge sharing. In order to gather and analyse compile information on the accuracy and value of earlier research on this subject, the author of this study used a systematic review approach. The research used the Systematic Literature Review (SLR) methodology to collect and assess papers by using a predetermined review process that included both automated and human search tactics in attempt to address every pertinent research publication published within this time frame. Despite being a promising subject of research and being utilised for KS, the systematic review discovered that little is known about the field's current state or potential future developments ^[17]. Presented an analysis of interviews with 13 viewers of the YouTube videos created by 27 producers of popular science and knowledge communication. The authors explain the reasons behind the actions of producers and viewers, the methods they use to convey broad science as well as knowledge, as well as the challenges that community members encounter ^[18]. The acceptability of TikTok and YouTube among users as social media sites is evaluated using a hybrid methodology. The paradigm highlights content richness, innovativeness, happiness, and pleasure as the four main external elements. These traits are associated with perceived utility and ease of use, two TAM variables. The results show that content richness, flow theory, PEOU, PU, and personal innovativeness all have an effect on TikTok and YouTube. Both social networking platforms provide the most recent materials that are characterized as informative, fun, and relevant. Nonetheless, the comparison findings reveal that YouTube has had a greater impact on consumers' medical perceptions and knowledge than TikTok. It was designed only for the goal of socialization and self-expression ^[10]. This study's main objective is to

provide a comprehensive assessment and enhanced comprehension of the current status of research on the usage of social media platforms for knowledge sharing. In order to gather and analyse compile information on the accuracy and value of earlier research on this subject, the author of this study used a systematic review approach. The research used the Systematic Literature Review (SLR) methodology to collect and assess papers by using a predetermined review process that included both automated and human search tactics in attempt to address every pertinent research publication published within this time frame. Despite being a promising subject of research and being utilised for KS, the systematic review discovered that little is known about the field's current state or potential future developments ^[18]. The acceptability of TikTok and YouTube among users as social media sites is evaluated using a hybrid methodology. The paradigm highlights content richness, innovativeness, happiness, and pleasure as the four main external elements. These traits are associated with perceived utility and ease of use, two TAM variables. The results show that content richness, flow theory, PEOU, PU, and personal innovativeness all have an effect on TikTok and YouTube. Both social networking platforms provide the most recent materials that are characterized as informative, fun, and relevant. Nonetheless, the comparison findings reveal that YouTube has had a greater impact on consumers' medical perceptions and knowledge than TikTok. It was designed only for the goal of socialization and self-expression ^[19]. identify and provide an overview of the potential causes and contributing variables that either support or undermine knowledge sharing and management in businesses. 64 papers from the years 2010–2015 were the subject of a meta-review. Studies on the causes and obstacles to knowledge management and sharing are included, both quantitative and qualitative. The majority of the studies in this meta-review had cooperation bias as a common drawback since the participants tended to overestimate their involvement in knowledge management (KM) and knowledge sharing (KS) ^[20]. Investigated the influence of country culture on knowledge exchange using video conferencing. Existing techniques for determining national cultural effect rely only on broad acceptance of information technology and do not take into account specific mediums. Before proposing their conceptual model, these authors examined previous research and looked at ideas of technology and cultural adoption. Conflicting results were found in studies on this cultural element. In order to acquire more precise results than those achieved at higher ranks, such organizational or national, it is essential to measure national cultural worth at the individual level. A proposed method to lessen the impact of national culture on knowledge-sharing initiatives is video conferencing ^[21]. Examined the connection between the usage of social media by the team (SMU), individual work performance, and two types of knowledge sharing (KS): in-role and extra-role. Furthermore, two distinct types of KS were shown to have mediation effects, and the main and moderating implications of team performance standards on individual job performance were also examined. This study develops a cross-level model based on the concept of communication visibility, and employs a three-wave survey to verify it with 600 respondents from 120 teams. The hypotheses are tested

using a hierarchical linear model. Additionally, the findings demonstrate that although team performance standards adversely buffer the relationship between an individual's extra-role knowledge and their ability to perform at work; they mostly have a positive effect on job performance ^[22]. Investigated the potential for social networking platforms to encourage knowledge-sharing among university faculty. The study uses grounded theory in an interpretivist qualitative research methodology. 52 non-directives, semi-structured interviews were carried out with university personnel from both public and private sectors. The research focuses on how social media networking tools may be utilized successfully and effectively to promote knowledge-sharing procedures in the business. Following is a list of the five emerging subjects. Social media networking tools may facilitate skill development, the growth of a culture of information sharing, enhanced communication, and increased participation in research projects among staff members ^[23]. Investigated the origins of the researchers' self-efficacy as well as the impact those origins had on how they used social media to share knowledge. It carries on a longer research project. The authors distributed an online questionnaire to 144 investigators at the University of Strathclyde, and then employed descriptive statistics to examine the responses. The participants' usage of social media was motivated by verbal persuasion, emotional stimulation, vicarious experience, and personal mastery. With a few outliers, these components of self-efficacy enabled them to utilize it mainly successfully ^[24]. Investigated whether employee knowledge capture and sharing throughout the professional development cycle may be facilitated by adding narrative and video sharing features to a corporate social media site. It also gathers user input on the knowledge capture and sharing methodology that has been established. It also offers a knowledge framework that gives knowledge direction and substance and is directly guided by the knowledge consumer ^[25]. Examined the link between social media characteristics and the exchange of information, as well as the role that ambient awareness plays as a mediating factor. At a well-known Chinese business organization, 156 genuine samples were collected from an experiment intended to advance knowledge work. In this research, the theoretical model was examined using AMOS. The relationship between ambient awareness, information sharing, and social media features is clear. The meta-knowledge of others' connections, or network translucence, has no effect on sharing knowledge ^[15]. Investigated a different subset of the information sharing environment, with a particular emphasis on social media's impact on the sharing of academic knowledge. In the beginning, a literature review study was conducted to identify possible motivators for academics to use social media. The most often mentioned factors are the capacity to foster group formation, idea development, and communication. Additionally, this article will emphasise the need of carrying out this investigation. To sum up, there is no doubting that social media enhances and improves the procedure of exchanging information, helping academics in their scholarly endeavours ^[26]. Investigated if user characteristics have an impact on these content-related strategies on social media, also referred to as social media sharing of knowledge behaviours. The author explored the relationship between

the sharing of knowledge behaviours and user characteristics like the level of involvement on social media, a solid platform preference, as well as several functional intents to use social media by utilizing concepts from Affordance Theory and Self-Motivation Theory. The major results indicate that users' diverse functional intents, or needs, were related to their knowledge generation and targeting behaviours. This suggests that users who utilized social media to meet a variety of requirements generated and disseminated information more often than those who used it to meet fewer needs [27]. Sought to examine how social media networks contribute to the growth of employee bridge social capital and professional knowledge sharing. An empirical study approach was used to obtain data from workers in Indian industrial plants. The study's main results demonstrated that using social media improves employee performance at work by facilitating the sharing of knowledge. However, one important result from the data was that employees' bridging social capital may not be developed via social networking sites.

Research Gap

The Existing study investigates how social media and new video technologies influence knowledge exchange in the education, business, and tourist sectors. However, considerable gaps exist. For example, there is a paucity of understanding of the various motivations and behaviors that drive information sharing across many cultural and organizational settings, particularly in underrepresented sectors. Longitudinal studies are required to understand how social media's impact on knowledge sharing varies over time in response to changing technology and social dynamics. Furthermore, there is a scarcity of study on the interaction of interpersonal and organizational factors-such as leadership styles, corporate culture, and technological infrastructure-that influence knowledge sharing behaviors. Finally, although many research concentrate on the facilitators of knowledge sharing via social media, there is little investigation of barriers such as privacy, trust, and information overload. Addressing these gaps would offer a more complete picture of the complexity involved in utilizing social media for knowledge exchange in a variety of circumstances.

Problem Statement

The research examines how social media and new video technologies affect knowledge sharing in the digital age, taking into account the changing environment of information delivery. It examines how these technologies impact the sharing of knowledge accessibility, quality, and dynamism as conventional educational paradigms move online. The study also addresses gaps in diversity learners' access, engagement, and learning outcomes. Sociological and cultural effects of digital networking will be addressed. The project will examine disinformation, digital divisions, and face-to-face learning using an interdisciplinary approach including education, sociology, and technology studies. The initiative intends to illuminate these difficulties to help educators, policymakers, and technologists maximize the advantages and minimize the drawbacks of incorporating social media and video technology into knowledge exchange.

Aim and Objectives

Aim of the Study: The objective of this study is to conduct a thorough examination of how social media and new video technologies impact knowledge exchange in the digital age.

Objectives of this study: To investigate the impact of social media platform usage on knowledge sharing among users.

1. To assess the impact of new video technology adoption on knowledge sharing effectiveness.
2. To explore how the relationship between social media platform usage and knowledge sharing is influenced by the level of technological proficiency.
3. To examine the mediating role of user engagement on social media platforms in the relationship between social media platform usage and knowledge sharing.
4. To identify strategies for enhancing knowledge sharing through social media platforms and new video technologies based on the findings of this study.

Hypothesis

H₁: There will be significant impact of Social media platform usage on knowledge sharing.

H₂: There is significant impact of new video technology adoption knowledge sharing.

H₃: The relationship between social media platform usage and knowledge sharing is moderated by technological proficiency level

H₄: User engagement on social media platforms does mediate the relationship between social media platform usage and knowledge sharing.

Methodology

The purpose of this research is to conduct an in-depth evaluation of the influence of new video technologies as well as social media channels on knowledge sharing in the present era of digital technology. For the purpose of achieving this objective, an effective research method has been established in order to effectively collect, evaluate, and analyse data.

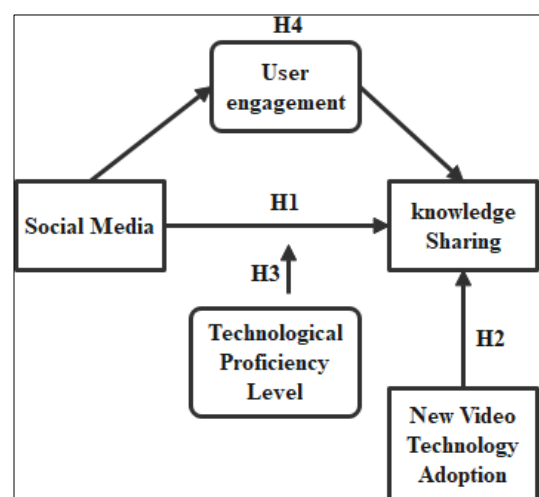


Fig 1: Conceptual Framework

Research Design

The proposed research method of this study employs a quantitative approach to assess the influence of new video technologies and social media platforms on knowledge sharing. Participants will be randomly selected from a large

population of regular social media users on various platforms as well as video content consumers, assuring a representative sample. Data will be gathered using a thorough questionnaire intended to capture many elements of knowledge-sharing behaviours and experiences in the digital world. The collected data will then be statistically analyzed, using Pearson's correlational analysis to investigate relationships between variables, T-tests to compare knowledge-sharing outcomes between groups, and regression analysis to identify predictive factors influencing knowledge-sharing effectiveness.

Sampling Technique: The research will use a random sample approach to assure representativeness. 310 male volunteers aged 18 to 45 in the public and private transport sectors will be chosen at random to participate in the questionnaire-based data collecting procedure.

Random Sampling

Random sampling, a strategy for selecting samples from a group of individuals, guarantees that every potential participant has an equal chance of being picked. A representative sample of the complete population may often be obtained by randomly selecting a sample from a group. Random sampling is among the most straightforward techniques for obtaining data from a large population.

When the population is only picked once, the random sampling formula is as follows.

$$P = 1 - \left(\frac{N-1}{N} \right) \left(\frac{N-2}{N} \right) \dots \left(\frac{N-n}{N-(n-1)} \right)$$

Data Collection

Gathering pertinent data is a critical component of every research endeavours. Primary data collection and secondary data collection are the two methods of information gathering that are most often employed. Using a questionnaire, the main data will be obtained. Aside from these places, books, essays, research papers, yearly reports, and periodicals and journals may also include secondary data.

Tools for Data collection

Surveys/questionnaires: To gather information from respondents, structured questions are used in surveys, which are tools for collecting data. Their usage in research is common, since they provide valuable perspectives on attitudes, beliefs, and experiences. Researchers may

quantify data, look for trends, and understand the different perspectives of participants on a given topic by using surveys, which are an adaptable instrument.

Inclusion and Exclusion Criteria

- **Inclusion Criteria:** who had consented to participate in the study and provided personal information.
- **Exclusion Criteria:** Those who were under the age of 18 at the time of data collection and who were unwilling to participate in the study were declined.

Tools and Techniques of this study

Data Analysis: As part of our data analysis process, we looked at the information we had collected in a planned way to find useful insights. We used different statistical methods to look at the connections between key factors. SEM analysis helped us figure out how Social Media Influence by Women and, and Social Media Influence by Women, Women's Presence on Social Media and perceived value are connected, and mediating analysis showed how Perceived Credibility these links. We made a summary of the data and tried our study theories by using both descriptive and inferential statistics. This in-depth study gave important insights into the complicated relationships between Social Media Engagement Frequency, Perceived Credibility.

Analysis of Structural Equation Modelling (SEM)

A potent statistical technique is structural equation modelling, or SEM tool that we use in our study to examine complicated interactions between several variables at the same time. It enables the investigation of both direct and indirect effects, offering a thorough knowledge of the interaction of many components within a theoretical framework. SEM combines several statistical approaches, such as regression analysis and factor analysis, to evaluate the degree to which the suggested model and the data were well-fitting. This analytical technique allows us to verify and modify our research hypotheses, revealing detailed patterns and relationships that lead to a better understanding of the phenomena under study. SEM analysis is critical in our study because it reveals the complex dynamics between management of Technology Adoption and Customer Satisfaction, Service quality and perceived value, providing significant insights into their linkages and possible ramifications for companies and organizations.

Results and Discussion

Table 1: Demographic Information

Gender		
	Frequency	Percent
Male	192	60.0
Female	128	40.0
Total	320	100.0
Mean	1.400	
Age		
	Frequency	Percent
18-24 years	107	33.4
25-34 years	83	25.9
35-44 years	81	25.3
45 and above	49	15.3
Total	320	100.0
Mean	2.225	
Education		

	Frequency	Percent
High school	68	21.3
Bachelor's degree	106	33.1
Master's degree	81	25.3
Doctoral degree	65	20.3
Total	320	100.0
Mean	2.446	
Occupation		
	Frequency	Percent
Student	82	25.6
Unemployed	102	31.9
Self-employed	136	42.5
Total	320	100.0
Mean	2.168	

The sample consisted of 320 participants, with 60% identifying as male and 40% as female. The age distribution of the participants was as follows: the largest group consisted of individuals between 18 and 24 years old, accounting for 33.4% of the total. This was followed by the 25-34 years age range, which made up 25.9% of the participants. The 35-44 years age group accounted for 25.3% of the participants, while those aged 45 and above made up 15.3%. In terms of education, the respondents had a wide variety of educational backgrounds. 21.3% had completed high school, 33.1% had a bachelor's degree, 25.3% had a master's degree, and 20.3% had a doctoral degree. The sample consisted of 25.6% students, 31.9% unemployed individuals, and 42.5% self-employed individuals in terms of occupation. The average values for age, education, and occupation were 2.225, 2.446, and 2.168, respectively, which represent the typical age group, educational attainment, and occupational status of the participants. In general, the sample displayed a wide range of individuals in terms of gender, age, education, and occupation, which gives a thorough representation of the population being studied.

Structural Equation Model (SEM)

Structural Equation Modelling (SEM) is a robust statistical technique that allows for a comprehensive analysis of complex relationships between variables, whether they are

observable or latent. The strength of this approach lies in its ability to examine intricate causal relationships, incorporate hidden variables, test multiple hypotheses at once, account for measurement errors, assess model fit, and combine elements of both factor analysis and regression. SEM is a crucial tool used in a wide range of disciplines, including psychology, sociology, economics, and more. It helps validate theoretical models, assess the effects of interventions or policies, and simplify intricate datasets. This comprehensive approach enables a more in-depth and precise analysis of data and testing of hypotheses.

Measurement Model and Validity

Measurement models and validity are essential components of research, as they establish a structured framework to ensure the accuracy and significance of collected data. Measurement models help to clarify the relationships between observed variables and the constructs they represent, making it easier to evaluate complex concepts. Accuracy is crucial in ensuring that measurement instruments effectively capture the intended constructs, thus avoiding any potential for incorrect or misleading conclusions. Measurement models and validity play crucial roles in research, serving as the foundation for dependable and trustworthy findings. The reliability of this information is essential for making well-informed decisions and advancing knowledge in various fields.

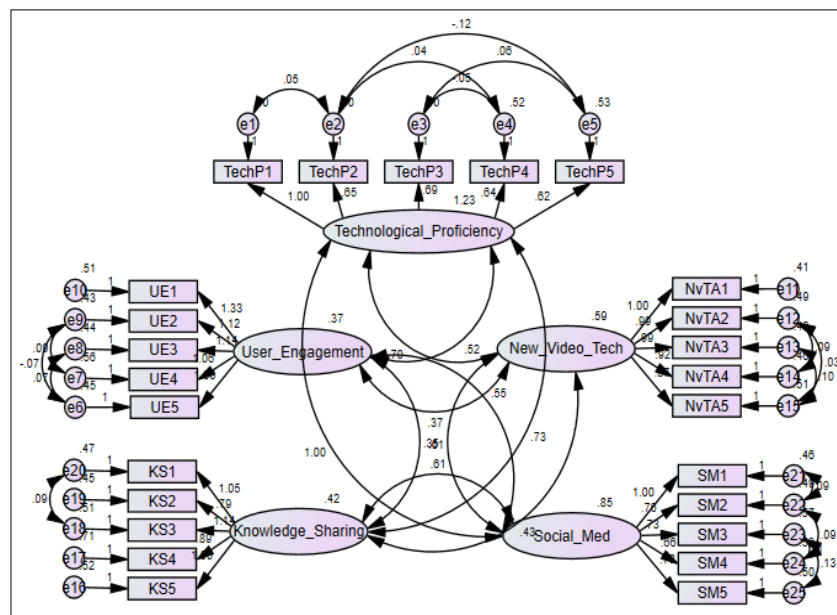


Fig 2

Table 2: Regression Weights: (Group number 1 - Default model)

PATH			Unstandardized Estimate	S.E.	Standardized Estimate	C.R.	P
TechP1	<---	Technological Proficiency	1.000		.869		
TechP2	<---	Technological Proficiency	.649	.034	.796	18.982	***
TechP3	<---	Technological Proficiency	.693	.042	.770	16.650	***
TechP4	<---	Technological Proficiency	.637	.044	.701	14.380	***
TechP5	<---	Technological Proficiency	.620	.044	.687	13.968	***
UE5	<---	User Engagement	1.000		.672		
UE4	<---	User Engagement	1.064	.104	.652	10.232	***
UE3	<---	User Engagement	1.135	.093	.720	12.201	***
UE2	<---	User Engagement	1.122	.108	.718	10.407	***
UE1	<---	User Engagement	1.325	.115	.747	11.550	***
NvTA1	<---	New Video Technology	1.000		.769		
NvTA2	<---	New Video Technology	.993	.078	.738	12.684	***
NvTA3	<---	New Video Technology	.995	.078	.738	12.824	***
NvTA4	<---	New Video Technology	.924	.074	.725	12.523	***
NvTA5	<---	New Video Technology	.868	.075	.684	11.622	***
KS5	<---	Knowledge Sharing	1.000		.670		
KS4	<---	Knowledge Sharing	.892	.093	.567	9.585	***
KS3	<---	Knowledge Sharing	1.139	.095	.721	11.937	***
KS2	<---	Knowledge Sharing	.789	.077	.606	10.190	***
KS1	<---	Knowledge Sharing	1.046	.089	.704	11.688	***
SM1	<---	Social Media	1.000		.806		
SM2	<---	Social Media	.759	.048	.707	15.763	***
SM3	<---	Social Media	.733	.056	.666	13.139	***
SM4	<---	Social Media	.658	.052	.641	12.527	***
SM5	<---	Social Media	.777	.054	.711	14.298	***

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.961
Bartlett's Test of Sphericity	Approx. Chi-Square	4852.182
	DF	300
	Sig.	.000

Using KMO and Bartlett's tests to evaluate the appropriateness for factor analysis. The KMO value obtained was 0.960, indicating a high level of sampling adequacy. Additionally, the Bartlett's test yielded a highly significant result (P = 0.00), providing further support for the factor analysis.

Table 4: Post CFA, Cronbach alpha, factor loadings

Factors and items	Cronbach alpha values	Post CFA factor loadings	Ave.	CR
Technological proficiency level	0.871		0.7646	0.487099
TechP1		.869		
TechP2		.796		
TechP3		.770		
TechP4		.701		
TechP5		.687		
User engagement	0.833		0.7018	0.44447467
UE5		.672		
UE4		.652		
UE3		.720		
UE2		.718		
UE1		.747		
New Video Technology Adoption	0.863		0.7308	0.46454998
NvTA1		.769		
NvTA2		.738		
NvTA3		.738		
NvTA4		.725		
NvTA5		.684		
Knowledge Sharing	0.794		0.6536	0.40967067
KS5		.670		
KS4		.567		
KS3		.721		
KS2		.606		
KS1		.704		
Social Media	0.854		0.7062	0.44756325
SM1		.806		
SM2		.707		
SM3		.666		
SM4		.641		
SM5		.711		

Discriminant validity

Discriminant validity is not a test that can be directly conducted in SPSS or other statistical software. Instead, it is a concept that is used to validate measurement instruments and evaluate the connections between variables. Ensuring discriminant validity is essential in order to establish that various constructs or variables in a study are genuinely separate and not assessing the same underlying concept. Researchers employ a range of techniques, such as

confirmatory factor analysis (CFA) or correlation analysis, to establish that the measures designed to evaluate distinct constructs are truly distinct and not strongly correlated. Ensuring discriminant validity is crucial for measurement instruments to accurately represent distinct concepts. This prevents any overlap or redundancy in constructs and enables more reliable and precise data analysis and interpretation.

Table 5: Discriminant Validity Test

	Social Media	New Video Technology	Technological Proficiency	Knowledge Sharing	User Engagement
Social Media	0.8744				
New Video Technology	.696**	0.8377			
Technological Proficiency	.807**	.700**	0.8548		
Knowledge Sharing	.801**	.689**	.842**	0.8084	
User Engagement	.816**	.660**	.679**	.726**	0.8403

The discriminant validity test assesses the uniqueness of the constructs in a study on the adoption of digital payment, convenience and utility perception, smartphone ownership, trust in the digital payment system, and level of digital literacy. The correlation matrix reveals significant correlations among these constructs, with coefficients. On the other hand, the diagonal values (highlighted) indicate the square root of the average variance extracted (AVE) for

each construct, which are significantly higher than the correlations between constructs. Based on the data, it appears that there is enough evidence to support the idea that the constructs in the study are distinct from one another. This is because the correlations between each construct and its respective measures are higher than the correlations between the constructs and other measures.

Table 6: Model Fit Summary

Variable	Value
Chi-square value(χ^2)	523.581
Degrees of freedom (df)	294
CMIN/DF	2.103
P value	0.000
GFI	0.935
RFI	0.924
NFI	0.925
IFI	0.942
CFI	0.942
RMR	0.045
RMSEA	0.060

The quality of fit was acceptable representation of the sample data ($\chi^2 = 523.581$), NFI (Normed Fit Index) =0.925; IFI (Incremental fit index) = 0.942, GFI (Goodness of Fit) = 0.935, RFI (Relative Fit Index) = 0.924 and CFI (Comparative Fit Index) =0.951 which is much larger than the 0.90. Similarly, RMR (Root Mean Square Residuals) =0.045 and RMSEA (Root mean square error of approximation) = 0.060 values are lower the 0.080 critical

value. Results indicated a good fit for the model presented including RMSEA of 0.060, RMR of 0.045, GFI of 0.935, and CFI of 0.942.

Hypothesis

H₁: There will be significant impact of Social media platform usage on knowledge sharing.

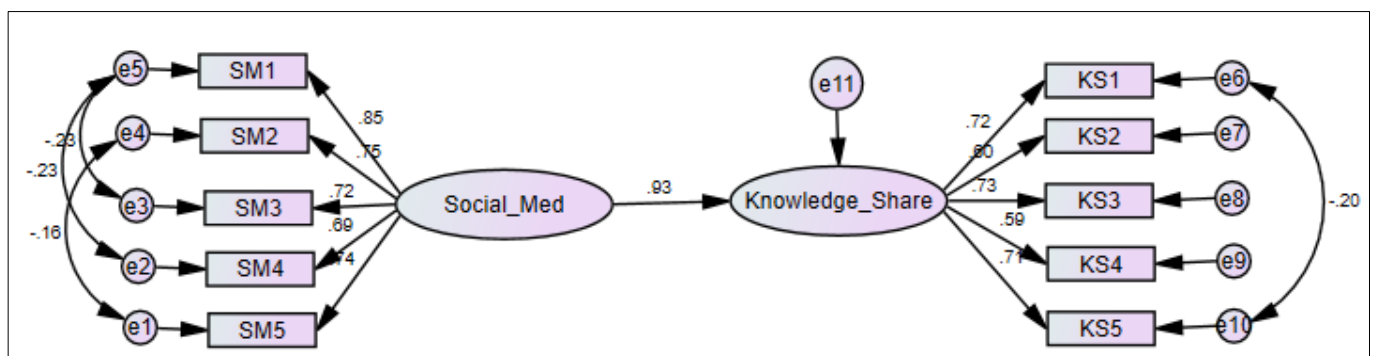


Fig 3

Table 7: Regression Weights: (Group number 1 - Default model)

PATH		Un-Standardized Estimate	S.E.	Standardized Estimate	C.R.	P	
Knowledge Sharing	<---	Social Media	.870	.074	.927	11.705	***
SM5	<---	Social Media	1.000		.736		
SM4	<---	Social Media	.883	.076	.691	11.626	***
SM3	<---	Social Media	.988	.081	.721	12.142	***
SM2	<---	Social Media	1.005	.082	.754	12.235	***
SM1	<---	Social Media	1.309	.092	.850	14.276	***
KS1	<---	Knowledge Sharing	1.000		.722		
KS2	<---	Knowledge Sharing	.731	.074	.601	9.937	***
KS3	<---	Knowledge Sharing	1.077	.090	.731	12.023	***
KS4	<---	Knowledge Sharing	.873	.089	.595	9.828	***
KS5	<---	Knowledge Sharing	.995	.092	.715	10.829	***

The regression analysis in Table 7 examines the correlation between social media platform usage and knowledge sharing. The findings suggest a compelling correlation between the use of social media platforms and the sharing of knowledge. More precisely, the un-standardized estimates for the regression weights indicate a positive relationship between social media platform usage and knowledge sharing. The correlation between social media usage and knowledge sharing is strongly supported by the standardized estimates. These estimates, which range from 0.595 to 0.927 across different paths, indicate a high level of correlation. In

addition, it is worth noting that the critical ratios (C.R.) for each path are quite high, ranging from 9.828 to 14.276. This suggests that the relationships are strong and significant. Based on the analysis, it is evident that there is a strong and significant correlation between the use of social media platforms and the sharing of knowledge in the specific context that was studied. This highlights the significance of social media in promoting the spread and exchange of knowledge in different contexts, which has implications for both individuals and organizations aiming to improve their knowledge sharing practices.

Table 8: Model Fit Summary

Variable	Value
Chi-square value(χ^2)	85.049
Degrees of freedom (df)	30
CMIN/DF	2.835
P value	0.000
GFI	0.949
RFI	0.913
NFI	0.942
IFI	0.962
CFI	0.961
RMR	0.036
RMSEA	0.077

The fit indices provided in the table demonstrate the model's ability to accurately represent the sample data. The chi-square value of 85.049 with 30 degrees of freedom indicates a favorable fit, as the ratio of chi-square to degrees of freedom is 2.835, which is below the recommended threshold of 3. The p-value of 0.000 suggests that the model fits the data with a high level of significance. In addition, the goodness of fit index (GFI) of 0.949, relative fit index (RFI) of 0.913, normed fit index (NFI) of 0.942, and incremental fit index (IFI) of 0.962 all surpass the threshold of 0.90, suggesting a robust fit. In addition, the CFI value of

0.961 indicates a strong agreement between the observed covariance matrix and the model-implied covariance matrix. The RMR value of 0.036 and RMSEA value of 0.077 are both below the critical threshold of 0.080, which further supports the conclusion that the presented model fits well. In summary, the results strongly support the notion that the model effectively captures the connections between the variables in the sample data.

H2: There is significant impact of New video technology adoption on knowledge sharing.

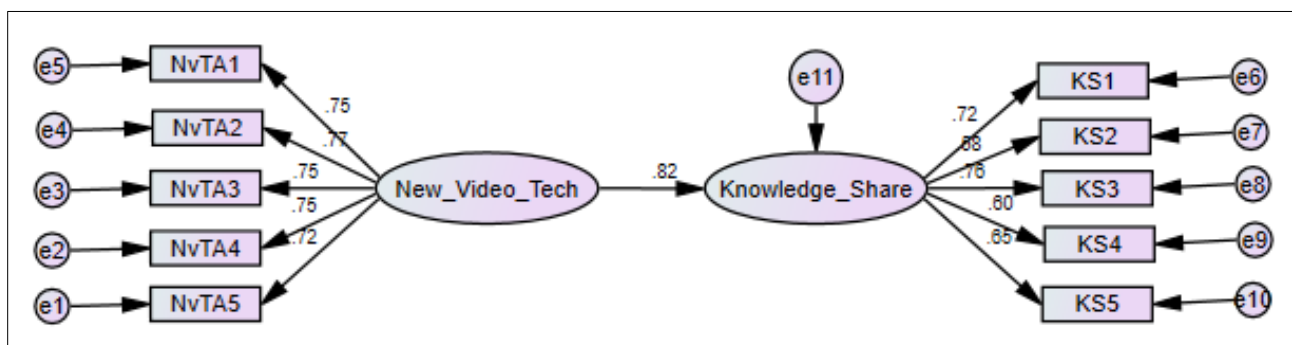


Fig 4

Table 9: Regression Weights

PATH		Un-Standardized Estimate	S.E.	Standardized Estimate	C.R.	P
Knowledge Sharing	<---	New Video Tech	.816	.080	.818	10.158 ***
NvTA5	<---	New Video Tech	1.000		.716	
NvTA4	<---	New Video Tech	1.057	.086	.755	12.316 ***
NvTA3	<---	New Video Tech	1.115	.091	.752	12.281 ***
NvTA2	<---	New Video Tech	1.134	.091	.766	12.491 ***
NvTA1	<---	New Video Tech	1.068	.088	.747	12.194 ***
KS1	<---	Knowledge Sharing	1.000		.725	
KS2	<---	Knowledge Sharing	.704	.075	.582	9.334 ***
KS3	<---	Knowledge Sharing	1.112	.093	.758	11.960 ***
KS4	<---	Knowledge Sharing	.875	.091	.599	9.599 ***
KS5	<---	Knowledge Sharing	.904	.087	.652	10.420 ***

The regression analysis presented in Table 9 explores the correlation between the adoption of new video technology and knowledge sharing. It aims to test the hypothesis that the adoption of new video technology has a substantial influence on knowledge sharing. The results demonstrate compelling evidence in favor of this hypothesis, as the un-standardized estimates for the regression weights indicate a positive correlation between the adoption of new video technology and knowledge sharing. The standardized estimates provide additional support for this discovery, with values varying from 0.582 to 0.818 across various paths. This suggests a significant correlation between the

implementation of new video technology and the sharing of knowledge. In addition, the critical ratios (C.R.) for each path are quite high, ranging from 9.334 to 12.491. This suggests that the relationships are strong and significant. Based on the data, it is evident that incorporating new video technology has a substantial and positive effect on knowledge sharing in the specific context under investigation. This highlights the significance of utilizing video technology to facilitate and improve knowledge sharing practices in different settings. It has implications for individuals and organizations aiming to optimize knowledge dissemination and exchange processes.

Table 10: Model Fit Summary

Variable	Value
Chi-square value(χ^2)	78.125
Degrees of freedom (df)	34
CMIN/DF	2.298
P value	0.000
GFI	0.950
RFI	0.923
NFI	0.942
IFI	0.962
CFI	0.966
RMR	0.039
RMSEA	0.065

The fit indices in the table indicate that the model accurately represents the sample data. The chi-square value of 78.125 with 34 degrees of freedom results in a ratio of chi-square to degrees of freedom (CMIN/DF) of 2.298. This ratio is below the recommended threshold of 3, suggesting a favorable fit. The p-value of 0.000 suggests that the model fits the data with a high level of significance. In addition, the goodness of fit index (GFI) of 0.950, relative fit index (RFI) of 0.923, normed fit index (NFI) of 0.942, and incremental fit index (IFI) of 0.962 all surpass the benchmark of 0.90, suggesting a robust fit. In addition, the CFI value of 0.966 indicates a strong agreement between the

observed covariance matrix and the model-implied covariance matrix. The RMR value of 0.039 and RMSEA value of 0.065 are both below the critical threshold of 0.080, which further supports the conclusion that the presented model fits well. In summary, the results strongly support the notion that the model effectively captures the connections between the variables in the sample data.

H3: The relationship between social media platform usage and knowledge sharing is moderated by technological proficiency level

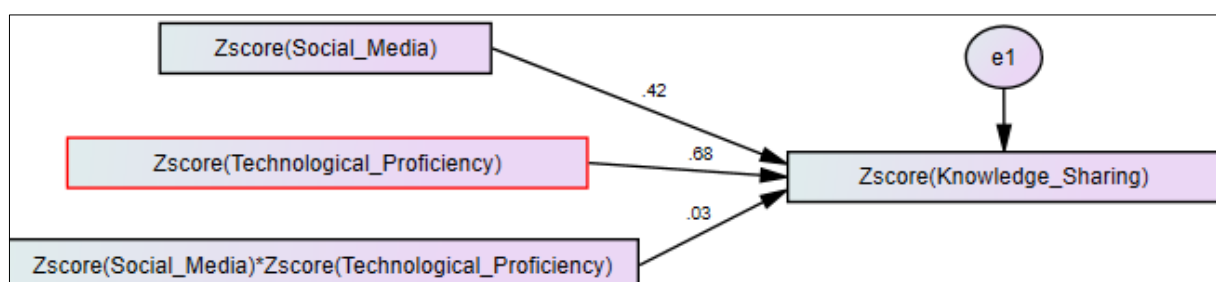


Fig 5

Table 11: Regression Weights

PATH		Un-Standardized Estimate	S.E.	Standardized Estimate	C.R.	P
ZKnowledge Sharing	<--- ZSocial Media	.345	.028	.415	12.166	***
ZKnowledge Sharing	<--- ZTechnological Proficiency	.567	.028	.683	19.998	***
ZKnowledge Sharing	<--- Zscore(Social Media)*Zscore(Technological Proficiency)	.319	.021	.132	.927	.004

The regression analysis presented in Table 3 examines the relationship between social media platform usage and knowledge sharing, taking into account the role of technological proficiency level as a moderator. The findings indicate a notable influence of utilizing social media platforms and the level of technological proficiency on the sharing of knowledge. The estimate for the regression weight of social media platform usage on knowledge sharing is 0.345, with a standardized estimate of 0.415, suggesting a positive association between the two variables. Similarly, the estimate for the regression weight of technological proficiency level on knowledge sharing is 0.567, with a standardized estimate of 0.683, indicating a stronger positive association between technological proficiency level and knowledge sharing. Furthermore, the interaction term between social media platform use and technical competence level (Zscore (Social Media) *Zscore (Technical Proficiency level)) is significant. The estimate for this interaction term is 0.319, which has been standardized to 0.132. It is evident that the connection

between the utilization of social media platforms and the sharing of knowledge is influenced by one's level of technological proficiency. Nevertheless, the moderation's impact, as shown by the standardized estimate, is relatively minor in comparison to the primary effects of social media platform usage and technological proficiency level. Based on the results, it can be concluded that the study indicates an association between social media platform usage, technological proficiency level, and knowledge sharing. Additionally, the findings suggest that the relationship between social media platform usage and knowledge sharing is influenced by technological proficiency level. It can be inferred that the influence of using social media platforms for sharing knowledge may differ based on individuals' technological skills. These results highlight the significance of taking into account individual variations in technological proficiency when developing interventions or strategies to encourage knowledge sharing on social media platforms.

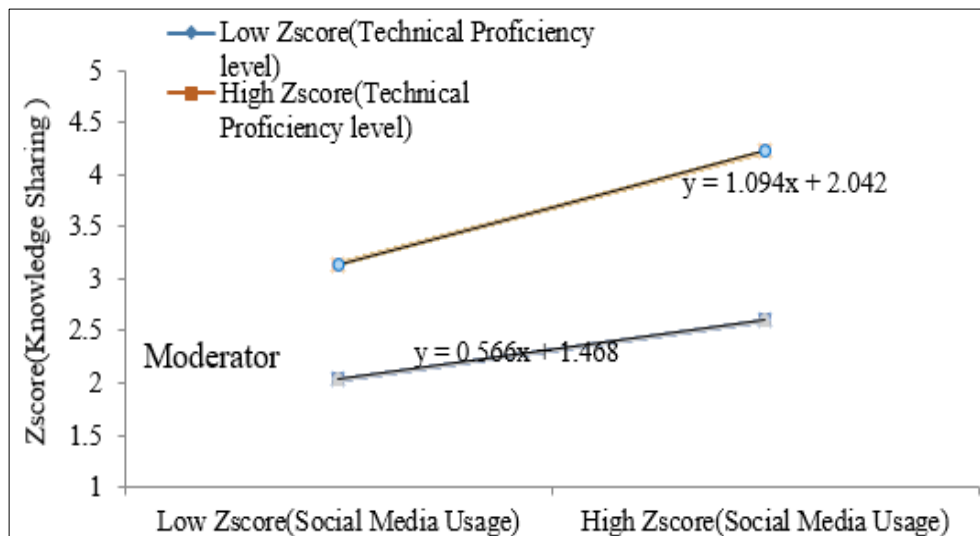


Fig 6

Table 12: Model Fit summary

Variable	Value
Chi-square value(χ^2)	588.482
Degrees of freedom (DF)	197.151
CMIN/DF	2.984
P value	0.00
GFI	0.950
RFI	0.932
NFI	0.966
IFI	0.968
CFI	0.966
RMR	0.055
RMSEA	0.045

The fit indices provided offer insights into the model's ability to accurately represent the sample data. The chi-square value of 588.482 with an estimated degrees of

freedom of approximately 197.151 results in a ratio of chi-square to degrees of freedom of approximately 2.984. This ratio is considered acceptable since it falls below the recommended threshold of 3. The p-value of 0.00 indicates that the model fits the data with a high level of significance. In addition, the goodness of fit index (GFI) of 0.950, relative fit index (RFI) of 0.932, normed fit index (NFI) of 0.966, and incremental fit index (IFI) of 0.968 all surpass the threshold of 0.90, suggesting a robust fit. In addition, the CFI value of 0.966 indicates a strong agreement between the observed covariance matrix and the model-implied covariance matrix. The RMR value of 0.055 and RMSEA value of 0.045 are both below the critical threshold of 0.080, indicating a strong fit for the presented model. In summary, the results strongly support the notion that the model

effectively captures the connections between the variables in the sample data.

H4: User engagement on social media platforms does mediate the relationship between social media platform usage and knowledge sharing.

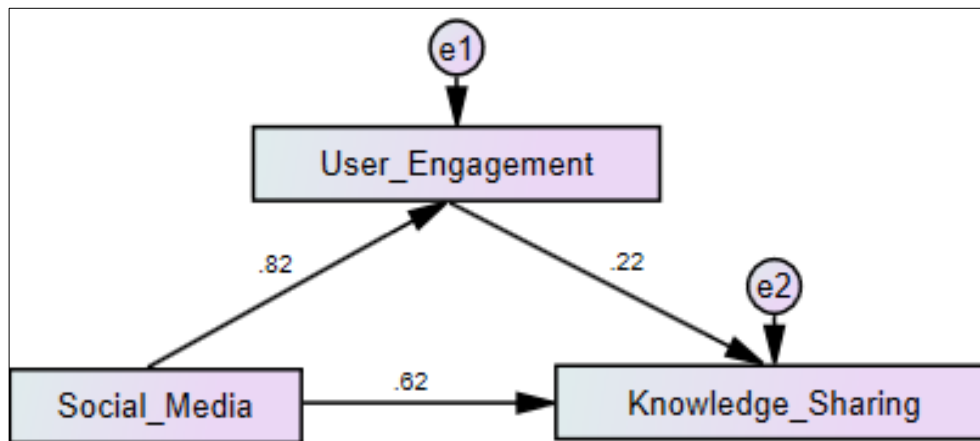


Fig 7

Table 13: Regression Weights

PATH		Un-Standardized Estimate	S.E.	C.R.	Standardized Estimate	P
User Engagement	<--- Social Media platform usage	.760	.031	24.833	.816	***
Knowledge Sharing	<--- Social Media platform usage	.550	.051	10.819	.624	***
Knowledge Sharing	<--- User Engagement	.205	.055	3.748	.216	***

The regression analysis presented in Table 13 explores the connection between social media platform usage, user engagement, and knowledge sharing, with a specific emphasis on examining the mediating role of user engagement. Based on the findings, it is evident that the utilization of social media platforms and the level of user engagement play a crucial role in influencing knowledge sharing. The unstandardized estimate for the path from social media platform usage to user engagement is 0.760, with a critical ratio (C.R.) of 24.833, suggesting a robust positive correlation. In a similar vein, the relationship between using social media platforms and sharing knowledge is supported by a substantial unstandardized estimate of 0.550 and a C.R. of 10.819. In addition, there is a noteworthy unstandardized estimate of 0.205 and a C.R. of 3.748 when considering the path from user engagement to knowledge sharing.

Table 14: Standardized Indirect Effects

	Social Media	User Engagement
User Engagement	.000	.000
Knowledge Sharing	.177	.000

Table 14 offers valuable insights into the indirect effects, showcasing standardized values that shed light on the mediation process. The calculated standardized indirect effect from social media platform usage to knowledge sharing via user engagement is 0.177. This suggests that user engagement plays a partial mediating role in the relationship between social media platform usage and knowledge sharing. Nevertheless, the standardized indirect effect from user engagement to knowledge sharing through social media platform usage is 0.012, indicating that this pathway does play a role in the mediation process.

In summary, the findings partly corroborate the hypothesis that user interaction on social media platforms mediates the association between knowledge sharing and social media

platform utilization. This highlights the significance of taking user engagement into account as a means by which social media platforms enable the sharing of knowledge. Organizations and individuals looking to improve knowledge sharing through social media can utilize strategies that encourage active participation among users to optimize the spread and exchange of knowledge.

Table 15: Model Fit Summary

Variable	Value
Chi-square value(χ^2)	302.080
Degrees of freedom (DF)	186
CMIN/DF	1.624
P value	0.048
GFI	0.942
RFI	0.924
NFI	0.944
IFI	0.978
CFI	0.977
RMR	0.035
RMSEA	0.038

Conclusion

Based on the regression analysis for hypotheses H1–H4, numerous conclusions may be derived about the correlations between social media platform use, new video technology adoption, technical competency, user engagement, and knowledge sharing. Firstly, the results provide strong evidence in favor of H1, suggesting a substantial and positive influence of social media platform usage on knowledge sharing. This indicates that utilizing social media platforms can efficiently facilitate the sharing and exchange of information in different situations. In line with the research, the results confirm the hypothesis, showing a significant impact of adopting new video technology on the sharing of knowledge. Utilizing new video technology has proven to be a successful approach in improving knowledge sharing practices. In addition, the results offer support for

H3, suggesting that the connection between usage of social media platforms and knowledge sharing is influenced by the level of technological proficiency. Individuals who possess a greater level of technological proficiency show a more pronounced connection between their use of social media and their willingness to share knowledge. This highlights the significance of taking into account individual variations in technological skills when developing interventions that aim to encourage knowledge sharing through social media platforms. Finally, the analyses provide support for H4 by uncovering that user engagement on social media platforms acts as a mediator between social media platform usage and knowledge sharing. Although user engagement acts as a mediator in this relationship, it remains a crucial factor in promoting the dissemination of knowledge on social media platforms. Promoting active engagement and fostering interaction among users can prove to be a valuable approach in improving knowledge sharing on social media platforms. In summary, the regression analyses offer a thorough understanding of the intricate relationship between social media platform usage, technological factors, user engagement, and knowledge sharing. The findings of this study have important implications for individuals and organizations interested in utilizing technology, especially social media platforms and new video technologies, to enhance knowledge sharing practices.

Reference

- Dwivedi YK, Rana NP, Tajvidi M, Lal B, Sahu GP, Gupta A. Exploring the Role of Social Media in e-Government. *Int. J Hum Comput. Interact.* 2017;13(3):97-106. DOI:10.1145/3047273.3047374.
- Bharati P, Zhang W, Chaudhury A. Better knowledge with social media? Exploring the roles of social capital and organizational knowledge management. *J Knowl Manag.* 2015;19(3):456-475. DOI:10.1108/JKM-11-2014-0467.
- Nazim M, Mukherjee B. Factors Critical to the Success of Knowledge Management. *Knowl Manag. Libr.* 2016:263–286. DOI:10.1016/b978-0-08-100564-4.00011-9.
- The Power of Knowledge Sharing.
- Sivakumar A, Jayasingh S, Shaik S. Social Media Influence on Students' Knowledge Sharing and Learning: An Empirical Study. *Educ. Sci.*, 2023, 13(7). DOI:10.3390/educsci13070745.
- Razmerita L, Kirchner K, Nielsen P. What factors influence knowledge sharing in organizations? A social dilemma perspective of social media communication. *J Knowl Manag.* 2016;20(6):1225-1246.
- Gaál Z, Szabó L, Obermayer-Kovács N, Csepregi A. Exploring the role of social media in knowledge sharing. *Electron J Knowl. Manag.* 2015;13(3):185-197.
- Lam HKS, Yeung ACL, Cheng TCE. The impact of firms' social media initiatives on operational efficiency and innovativeness. *J Oper. Manag.* 2016;47:28-43.
- Li Y, Wang X, Lin X, Hajli M. Seeking and sharing health information on social media: A net valence model and cross-cultural comparison. *Technol Forecast Soc Change.* 2018;126:28–40.
- Ahmed YA, Ahmad MN, Ahmad N, Zakaria NH. Social media for knowledge-sharing: A systematic literature review. *Telemat Informatics.* 2019;37:72-112. DOI:10.1016/j.tele.2018.01.015.
- Shadiev R, Yu J, Sintawati W. Exploring the Impact of Learning Activities Supported by 360-Degree Video Technology on Language Learning, Intercultural Communicative Competence Development, and Knowledge Sharing. *Front Psychol.* 2021;12:11-18. DOI:10.3389/fpsyg.2021.766924.
- Petan AS, Petan L, Vaslu R. Interactive Video in Knowledge Management: Implications for Organizational Leadership. *Procedia Soc. Behav. Sci.* 2014;124(2001):478-485. DOI:10.1016/j.sbspro.2014.02.510.
- Ansari JAN, Khan NA. Exploring the role of social media in collaborative learning the new domain of learning. *Smart Learn Environ.* 2020, 7(1). DOI:10.1186/s40561-020-00118-7.
- Zhang X, Jinpeng X, Khan F. The Influence of Social Media on Employee's Knowledge Sharing Motivation: A Two-Factor Theory Perspective. *SAGE Open.* 2020;10(3):2158244020942495. DOI:10.1177/2158244020942495.
- Ghazali S, Sulaiman NIS, Zabidi NZ, Omar MF, Alias RA. The impact of knowledge sharing through social media among academia. *AIP Conf. Proc.*; c2016. DOI:10.1063/1.4966060.
- Mladenovic D, Krajina A, Kucharska W. Social media and knowledge sharing - What do we know so far? In: *Proc. 5th Eur. Conf. Soc. Media, ECSM 2018.*; c2018. p. 163-170.
- Xia H, Ng HX, Chen Z, Hollan J. Millions and Billions of Views: Understanding Popular Science and Knowledge Communication on Video-Sharing Platforms. *L@S 2022 – Proc. 9th ACM Conf. Learn @ Scale.* 2022, 163-174. DOI:10.1145/3491140.3528279.
- Al-Marroof R, *et al.* The acceptance of social media video for knowledge acquisition, sharing and application: A comparative study among YouTube users and TikTok users' for medical purposes. *Int. J Data Netw. Sci.* 2021;5(3):197–214. DOI:10.5267/j.ijdns.2021.6.013.
- Asrar-ul-Haq M, Anwar S. A systematic review of knowledge management and knowledge sharing: Trends, issues, and challenges. *Cogent Bus Manag.*, 2016, 3(1). DOI:10.1080/23311975.2015.1127744.
- Alkhalidi AN, Yusof ZM, Aziz MJA. Measuring National Culture Impact (NCI) At an Individual Level: A Conceptual Model for Capturing The NCI on Knowledge Sharing Via Video-Conferencing. *J Knowl. Manag. Pract.*, 2011, 12(4).
- Cui X, Huo B, Lei Y, Zhou Q. The influence of team social media usage on individual knowledge sharing and job performance from a cross-level perspective. *Int. J Oper. Prod. Manag.* 2020;40(5):553-573. DOI:10.1108/IJOPM-04-2019-0311.
- Naeem M. Uncovering the role of social media and cross-platform applications as tools for knowledge sharing. *VINE J Inf. Knowl. Manag. Syst.* 2019;49(3):257-276. DOI:10.1108/VJIKMS-01-2019-0001.
- Alshahrani H, Pennington DR. How to use it more?' Self-efficacy and its sources in the use of social media for knowledge sharing. *J Doc.* 2020;76(1):231-257. DOI:10.1108/JD-02-2019-0026.
- X. Yang, B. Fei, Z. Bian, Wang B. A knowledge capturing and sharing framework for improving the

- testing processes in global product development using storytelling and video sharing. *Science* (80-.); c2010. p. 31-37.
25. Y. Zhao, X. Zhang, J. Wang, K. Zhang, P. Ordóñez de Pablos. How do features of social media influence knowledge sharing? An ambient awareness perspective. *J Knowl. Manag.* 2020;24(2):439-462. DOI: 10.1108/JKM-10-2019-0543.
26. D. Shwartz-Asher, S. Chun, Adam NR, Snider KL. Knowledge sharing behaviors in social media. *Technol. Soc.* 2020;63:101426. DOI: 10.1016/j.techsoc.2020.101426.
27. Vyas PG, Itam UJ. The role of social media in employee knowledge sharing. In: *Handbook of Research on Artificial Intelligence Knowledge Management in Asia's Digital Economy*; c2022. p. 138-160. DOI: 10.4018/978-1-6684-5849-5.ch009.