THE IMPACT OF INFORMATION TECHNOLOGIES ON SOCIAL COMMUNICATION AS A CATALYST FOR BUSINESS MANAGEMENT EFFICIENCY

Kushtrim UKA
PhD Candidate, University of Library Studies
and Information Technologies (ULSIT)
Sofia, Bulgaria
ukaa.kushtrim@gmail.com

Abstract

The rapid development of information technologies has significantly transformed the way social communication is conducted within business organizations, directly influencing managerial processes and organizational efficiency. In the context of the digital economy, technology-mediated social communication has become a key factor in coordinating activities, supporting decision-making, and achieving strategic objectives. The main purpose of this article is to analyze the role of information technologies in social communication and their impact on enhancing the efficiency of business management. The study is based on a combined methodological approach, integrating a theoretical analysis of relevant literature with empirical data collected through appropriate research instruments. The findings indicate that the integration of information technologies improves the quality of organizational communication, increases transparency, facilitates decision-making processes, and contributes to the optimization of managerial performance. The contribution of this study lies in expanding the theoretical framework on the relationship between social communication and business management, as well as in providing practical implications for managers seeking to enhance organizational efficiency through digital transformation.

Keywords: Information technologies; Social communication; Business management; Digital transformation; Organizational efficiency

JEL Classification: M15, O32, D83, J24

Citation: Kushtrim U., 2026. "The impact of information technologies on social communication as a catalyst for business management efficiency", Sustainable Regional Development Scientific Journal, Vol III. (1), pp.102-117

1. Introduction

Digital transformation has brought profound changes to the way business organizations operate, communicate, and manage their resources. Information technologies have become strategic factors that directly influence organizational structures, institutional culture, and managerial processes (Laudon & Laudon, 2020). In this context, social communication within organizations has undergone a significant transformation, shifting from traditional forms to digital platforms that enable rapid, interactive, and continuous information exchange. Technology-mediated communication has become a fundamental component for coordinating activities, building professional relationships, and supporting managerial decision-making in increasingly dynamic business environments (Castells, 2010).

Although the scientific literature provides a considerable number of studies on information technologies and business management, many of these focus primarily on the technical aspects of technology or on its direct impact on financial performance. Relatively limited attention has been given to the role of social communication as a mediating mechanism between information technologies and managerial efficiency (Turban et al., 2015). This theoretical and empirical gap constrains a comprehensive understanding of how technology influences decision-making processes, organizational coordination, and managerial performance in business organizations. Within this context, the main objective of this study is to analyze the role of information technologies in social communication and their impact on enhancing the efficiency of business management. The study seeks to identify the ways in which information technologies improve the quality of organizational communication and to assess the effects of this improvement on managerial and decision-making processes, drawing on established theoretical and empirical approaches in the literature (Westermann et al., 2014). The scientific significance of this article lies in its contribution to expanding the interdisciplinary literature that connects social communication, information technologies, and business management, with particular emphasis on the mediating role of social communication in managerial processes. From a practical perspective, the study provides important implications for managers and business decision-makers who face the challenges of digital transformation and the need to enhance organizational efficiency (Brynjolfsson & McAfee, 2014).

2. Literature Review and Theoretical Framework

Contemporary literature on information technologies demonstrates that their impact on business organizations extends beyond process automation and improvements in technical infrastructure. Information technologies have evolved into central elements of social communication within organizations, directly influencing the ways in which individuals interact, exchange information, and make decisions (Castells, 2010). Numerous scholars emphasize that technology-mediated organizational communication constitutes a key component of modern management, as it affects knowledge sharing, activity coordination, and the development of professional relationships (Turban et al., 2015). In the context of social communication, information technologies have transformed traditional forms of interaction by creating digital platforms that enable continuous, rapid, and interactive communication. These developments have contributed to changes in traditional hierarchical structures, fostering more horizontal communication models and increasing employees' access to organizational information (Boyd & Ellison, 2007). From a business management perspective, organizational efficiency is closely linked to the quality of both internal and external communication. The integration of information technologies into social communication reduces informational uncertainty, enhances coordination among organizational units, and supports data-driven managerial decision-making (Laudon & Laudon, 2020). However, the literature also highlights that the benefits of technology are not automatic and depend on how it is accepted and utilized by individuals within organizations. Within this framework, the Technology Acceptance Model argues that the effective use of information technologies depends on perceived usefulness and perceived ease of use, which directly influence individuals' communicative behavior (Davis, 1989). Complementarily, the Diffusion of Innovations Theory explains that the adoption of new technologies within organizations is influenced by social, cultural, and communicative factors, emphasizing the role of communication in the spread of innovation (Rogers, 2003). An additional perspective

is provided by the socio-technical approach, which argues that technology and the organization's social system are interdependent and should be analyzed in an integrated manner. According to this approach, the effectiveness of information technologies in business management depends on their alignment with organizational structures, institutional culture, and social communication practices (Bostrom & Heinen, 1977). This perspective emphasizes that technology does not generate efficiency independently, but rather through its interaction with human and organizational factors.

3. Conceptual Framework and Research Hypotheses

The conceptual framework of this study is built on the premise that information technologies influence the efficiency of business management not only directly, but primarily through their role in improving social communication within organizations. In this sense, social communication serves as a mediating mechanism between the use of information technologies and managerial outcomes. This approach is supported by the literature, which emphasizes that technology creates organizational value only when it is effectively integrated into the communicative and social processes of the organization (Bostrom & Heinen, 1977; Westermann et al., 2014). Based on the Technology Acceptance Model, perceived usefulness and perceived ease of use of information technologies directly influence their acceptance and utilization by individuals, thereby shaping communication and collaboration practices within organizations (Davis, 1989). The successful use of information technologies enhances transparency, accelerates information exchange, and improves the quality of organizational communication—elements that are considered essential for effective decision-making and managerial coordination (Laudon & Laudon, 2020). Complementarily, the Diffusion of Innovations Theory suggests that the adoption of new technologies within organizations is a social and communicative process influenced by organizational structure, institutional culture, and communication networks (Rogers, 2003). This theory highlights the importance of social communication in the diffusion and institutionalization of information technologies, shaping the ways in which they are transformed into effective managerial tools. Drawing on these theoretical perspectives, the study conceptualizes business management efficiency as the result of the interaction between the use of information technologies and the quality of social communication within the organization. Managerial efficiency is manifested through improved decision-making, enhanced coordination of activities, process optimization, and increased organizational performance (Brynjolfsson & McAfee, 2014). Within this framework, information technologies are not treated merely as technical infrastructure, but as social and organizational factors that shape managerial practices. Based on the proposed conceptual framework and the existing literature, the following research hypotheses are formulated:

Hypothesis 1: The integration of information technologies has a positive impact on the quality of social communication within business organizations.

Hypothesis 2: The quality of social communication positively influences the efficiency of business management.

Hypothesis 3: Information technologies have a positive impact on the efficiency of business management.

Hypothesis 4: The impact of information technologies on business management efficiency is mediated by the quality of social communication.

These hypotheses aim to empirically test the relationships among information technologies, social communication, and managerial efficiency, thereby providing a deeper understanding of the mechanisms through which digital transformation influences business management. The proposed conceptual framework serves as an analytical basis for structuring the research methodology and for analyzing the empirical results.

4. Research Methodology

This study is based on a mixed methodological approach, integrating qualitative and quantitative elements in order to ensure a comprehensive and balanced understanding of the role of information technologies in social communication and their impact on business management efficiency. The use of this approach is appropriate for studies that aim to analyze complex relationships among technological, social, and organizational factors (Creswell &

Plano Clark, 2018). From a conceptual perspective, the study adopts an explanatory research design, as it seeks to test the relationships among the variables identified in the conceptual framework, namely the use of information technologies, the quality of social communication, and business management efficiency. The research design is aligned with the study's hypotheses, enabling the empirical examination of both direct and mediating effects (Hair et al., 2019).

Data collection was conducted through structured research instruments, primarily questionnaires designed to measure managers' and employees' perceptions regarding the use of information technologies in social communication and their effects on managerial processes. The study sample includes business organizations operating in various sectors, ensuring diversity in organizational size and fields of activity. The sampling strategy was purposive, focusing on organizations that have integrated information technologies into their communication and management processes. This approach allows for the analysis of the actual impact of technology in concrete organizational settings and enhances the practical validity of the findings (Saunders et al., 2019). Data analysis was performed using appropriate statistical techniques, including descriptive and inferential analyses, with the aim of testing the study's hypotheses. To assess the relationships among variables and the mediating effect of social communication, analytical models suitable for organizational and managerial research were applied (Baron & Kenny, 1986). Qualitative data were analyzed through thematic analysis, identifying patterns and themes that support the interpretation of quantitative results.

To ensure the reliability and validity of the study, established methodological standards of scientific research were followed. Measurement instruments were tested for internal consistency and conceptual clarity, while the data collection process adhered to ethical research principles, guaranteeing anonymity and informed consent of participants (Bryman, 2016). This methodological approach provides a solid empirical foundation for analyzing the role of information technologies in social communication and their impact on business management efficiency.

5. Analysis of Empirical Research Results

This chapter presents the analysis of the results of the empirical research conducted through a structured questionnaire, developed with the participation of 88 respondents from various organizational sectors, including the private sector, the public sector, non-profit organizations, as well as education and research institutions. The primary objective of this research was to assess the role of information technologies and knowledge management in organizational communication and overall organizational performance, with particular emphasis on human resource management and operational efficiency. The data analysis focused on interpreting the distribution of responses across the thematic categories of the questionnaire, including respondents' demographic characteristics, knowledge management practices, the use of digital technologies, their impact on organizational performance, as well as the challenges and improvement needs identified by the participants themselves. For this purpose, descriptive analysis methods were employed, enabling a clear presentation of dominant trends and key patterns emerging from the empirical data.

The results presented in this chapter provide a realistic overview of the current state of knowledge management and the use of information technologies in the organizations included in the study, reflecting the perceptions and practical experiences of organizational actors. In this context, the analysis serves as an empirical foundation for further theoretical discussion and for drawing relevant conclusions that are directly linked to the study's objectives and the hypotheses formulated in the preceding sections of the paper.

6. Data Analysis

6.1 Position in the Organization

The majority of respondents were regular employees (79%), followed by personnel in logistical support roles (10%). Administrative staff accounted for 7% of the sample, while managers represented 4%. No respondents identified as Information Technology (IT) specialists

Table 1. Respondents' Current Position in the Organization

Position	Frequency (%)
Manager	4
Administrative staff	7
Information Technology (IT) specialist	0
Regular employee	79
Other (Logistical support)	10
Total	**100**

The data collected regarding respondents' current positions within their organizations indicate a distribution that primarily reflects the perspectives of operational and administrative employees, thereby providing a realistic picture of everyday organizational practices. As shown by the results, 79% of respondents are regular employees, indicating that the majority of participants are directly involved in the operational and functional processes of their organizations. This group is particularly important for the study, as their perceptions reflect how information technologies and knowledge management function in practice and how they influence day-to-day organizational performance. A smaller proportion of respondents, 7%, represent administrative staff, who typically play a key role in information circulation, documentation, and organizational coordination. Meanwhile, 4% of respondents hold managerial positions, indicating a relatively limited representation of senior management levels within the sample. Although this percentage is small, their contribution remains important for interpreting strategic attitudes toward knowledge management and the use of technology. Additionally, 10% of respondents are engaged in logistical support functions, representing roles that, although often not directly involved in decision-making, are significantly affected by information systems and knowledge management practices. The presence of these categories enriches the sample and contributes to a more comprehensive understanding of organizational dynamics.

Overall, the structure of the sample indicates that the research is primarily grounded in the experiences of operational and administrative staff, providing valuable empirical data for analyzing the impact of information technologies and knowledge management at the practical level of organizational functioning.

6.2 Sector of the Organization

Most respondents were employed in the private sector (77.0%). Non-profit organizations accounted for 8.0% of respondents, while 7.5% worked in public–private organizations. The public sector represented 6.0% of the sample, and only 1.5% of respondents were affiliated with education and scientific research institutions.

Table 2. Sector of the Organization

Sector	Frequency (%)
Public sector	6.0
Private sector	77.0
Education and scientific research	1.5
Non-profit organizations	8.0
Other (Public–Private)	7.5
Total	**100.0**

The analysis of data related to the sector of the organizations in which respondents operate indicates a clear dominance of the private sector, which is represented by 77% of the participants in the study. This result suggests that the findings primarily reflect the experiences and practices of private organizations, which are typically characterized by a

stronger orientation toward operational efficiency, organizational flexibility, and the pragmatic adoption of information technologies for knowledge management. The public sector is represented by 6% of respondents, indicating a more limited participation of public institutions in the sample. Nevertheless, the presence of this sector remains important for capturing structural and institutional differences in the use of technologies and knowledge management practices, particularly in the context of administrative procedures and organizational governance. A more modest representation is also observed in the education and scientific research sector, with 1.5%, as well as in the non-profit sector, with 8%. Although these categories are represented by lower percentages, they contribute to the diversity of the sample and provide valuable perspectives on knowledge management practices in contexts where the creation, preservation, and dissemination of knowledge constitute an integral part of the organizational mission.
Furthermore, 7.5% of respondents are part of public–private organizations, reflecting hybrid forms of organization that combine elements of both the public and private sectors. This category is particularly relevant for the study, as such organizations often face dual challenges in knowledge management and in the integration of information technologies, due to the interplay between administrative and market-oriented logics.

6.3 Professional Experience

The majority of respondents (59%) had between 6 and 10 years of professional experience. A further 28% reported having 3–5 years of experience, while 9% had less than 3 years of experience. Only 4% of respondents had more than 10 years of professional experience. These findings indicate that the sample was predominantly composed of individuals with moderate to substantial professional experience.

Table 3. Respondents' Professional Experience

Professional Experience	Frequency (%)
Less than 3 years	9
3–5 years	28
6–10 years	59
More than 10 years	4
Total	**100**

The analysis of data related to respondents' professional experience indicates that the sample included in the study is characterized by a relatively high level of work experience, which enhances the credibility of the perceptions and assessments provided regarding knowledge management and the use of information technologies within organizations. The results show that 59% of respondents have 6 to 10 years of professional experience, representing the largest group in the sample. This segment includes employees who have moved beyond the initial stages of their careers and have acquired stable knowledge of organizational processes, managerial structures, and workplace practices. A substantial proportion of respondents, 28%, report 3 to 5 years of professional experience, indicating the presence of a group of relatively young but already professionally consolidated employees. This group offers valuable perspectives on adaptation to new technologies and on how knowledge management is integrated into contemporary work practices.
On the other hand, 9% of respondents have less than 3 years of professional experience, representing employees in the early stages of their careers. Although this category constitutes the smallest proportion of the sample, its contribution is important in reflecting the perceptions of the younger workforce, which is typically more exposed to digital technologies and modern communication tools. In contrast, only 4% of respondents report more than 10 years of professional experience, indicating a more limited representation of highly experienced staff. Nevertheless, this group remains significant for the analysis, as it includes individuals with deep institutional knowledge and long-term experience in managing organizational processes.

6.4 Knowledge Management Practices

Information collection and storage was the most commonly implemented information and knowledge management practice, reported by 42% of respondents. Information sharing within teams was identified by 33% of participants, while 19% indicated the use of technologies for information management, such as digital platforms. Archiving or disposing of outdated information was reported by 6% of respondents. No respondents selected "None of the above," suggesting that all organizations in the sample had adopted at least one information and knowledge management practice.

Table 4. Information and Knowledge Management Practices Implemented in the Organization

Practice	Frequency (%)
Information collection and storage	42
Information sharing within teams	33
Use of technologies for information management (e.g., digital platforms)	19
Archiving or disposal of outdated information	6
None of the above	0
Total	**100**

The analysis of results related to information and knowledge management practices indicates that the organizations included in the study are primarily oriented toward basic and traditional knowledge management practices, while the adoption of more advanced digital approaches remains relatively limited. As evidenced by the data, 42% of respondents report that information collection and storage are practiced in their organizations, representing the most widespread practice. This finding suggests that the primary focus of knowledge management remains on documentation and information preservation rather than on its active utilization for strategic purposes. A considerable proportion of respondents, 33%, indicate that information sharing within teams is practiced in their organizations, suggesting that horizontal communication and knowledge sharing at the operational level are present, but not dominant. This implies that, although a certain level of collaboration among employees exists, these practices are not yet fully institutionalized as part of a structured knowledge management system. By contrast, only 19% of respondents report the use of technologies for information management, such as digital platforms, indicating a relatively low level of technological integration in knowledge management practices. This result suggests that, although information technologies are present in many organizations, they are not yet systematically leveraged to support knowledge management processes. A very small proportion of respondents**, 6%,** emphasize the practice of archiving or disposing of outdated information, implying that information lifecycle management is not a high priority for most organizations. This may lead to the accumulation of unnecessary information and difficulties in accessing relevant knowledge. It is noteworthy that none of the respondents (0%) reported a complete absence of information and knowledge management practices, indicating that all organizations included in the study have at least a minimal form of such practices in place. However, the overall results suggest that knowledge management in the analyzed organizations is still at an early or transitional stage, with a strong need for further development—particularly in terms of digitalization and the institutionalization of knowledge management processes.

6.5 Information and Knowledge Management for Organizational Success

A substantial majority of respondents perceived information and knowledge management as essential for organizational success. Specifically, 62% rated it as very important, while an additional 25% considered it important. Only 12% viewed it as moderately important, and 1% regarded it as slightly important. No respondents indicated that information and knowledge management was not important at all. These findings demonstrate a strong consensus regarding the strategic value of effective information and knowledge management in achieving organizational success.

Table 5. Importance of Information and Knowledge Management for Organizational Success

Importance Level	Frequency (%)
Very important	62
Important	25
Moderately important	12
Slightly important	1
Not important at all	0
Total	**100**

The results of the question addressing the importance of information and knowledge management for organizational success indicate a very high level of awareness among respondents regarding the strategic role of this process in organizational functioning and performance. As reflected in the data, 62% of respondents evaluate information and knowledge management as very important, identifying it as a key factor for achieving organizational objectives and ensuring long-term sustainability. An additional 25% of respondents consider information and knowledge management to be important, meaning that, in total, 87% of participants demonstrate a strong and positive perception of the importance of this dimension for organizational success. By contrast, 12% of respondent's rate information and knowledge management as moderately important, while only 1% consider it slightly important. It is noteworthy that none of the respondents (0%) evaluated information and knowledge management as not important at all, indicating that this concept is widely accepted as an integral component of the modern functioning of organizations. Overall, these results reveal a clear discrepancy between the high level of awareness regarding the importance of knowledge management and the relatively limited level of its practical implementation, as evidenced in the analysis of the preceding question. This discrepancy underscores the need to move from a declarative understanding of the importance of knowledge management toward the development of concrete mechanisms, organizational structures, and technological solutions that translate this perceived importance into measurable organizational outcomes.

6.6 Technologies Used

Collaboration and communication tools were the most widely used technologies for knowledge management and knowledge sharing, reported by 56% of respondents. Cloud platforms, such as Microsoft 365 and Google Workspace, were used by 38% of participants. ERP systems, including SAP, Microsoft Dynamics, and Odoo, accounted for 4% of responses, while AI-based solutions were reported by only 2% of respondents. No participants indicated that their organizations lacked specific technologies for knowledge management, suggesting that all surveyed organizations employed at least one technological solution to support knowledge-related activities.

Table 6. Technologies Used for Knowledge Management and Knowledge Sharing

Technology Used	Frequency (%)
Cloud platforms (e.g., Microsoft 365, Google Workspace)	38
Collaboration and communication tools (e.g., Microsoft Teams, Zoom, Slack, WhatsApp)	56
ERP systems (e.g., SAP, Microsoft Dynamics, Odoo)	4
Artificial intelligence (AI)-based solutions	2
No specific technologies are used for knowledge management	0
Total	**100**

The results of the question addressing the use of technologies for knowledge management and

knowledge sharing indicate a clear organizational orientation toward practical and easily accessible tools, while the adoption of more advanced systems remains relatively limited. As evidenced by the data, 56% of respondent's report using collaboration and communication tools such as Microsoft Teams, Zoom, Slack, and WhatsApp, making this category the most dominant. This finding suggests that knowledge management in most organizations is primarily supported through everyday communication and informal or semi-formal information exchange, rather than through structured systems specifically designed for knowledge management. A substantial proportion of respondents, 38%, report using cloud platforms such as Microsoft 365 and Google Workspace. These platforms provide more structured opportunities for document storage, sharing, and collaborative work, indicating a moderate level of digitalization in knowledge management processes. However, the fact that this category ranks below communication tools suggests that the advanced functionalities of these platforms are not always systematically leveraged for strategic knowledge management purposes. By contrast, the use of ERP systems is reported by only 4% of respondents, while AI-based solutions are mentioned by just 2%. These results indicate that more sophisticated technologies—which could potentially support advanced knowledge analytics, process automation, and strategic decision-making—are still at very early stages of adoption among the organizations included in the study. It is particularly noteworthy that none of the respondents (**0%**) reported a complete absence of technologies for knowledge management. This indicates that all participating organizations have at least a basic level of technological support for information exchange, although the degree of sophistication and institutionalization of these technologies varies considerably.

6.7 Perceived Effectiveness of Technologies Used for Knowledge Management

The findings indicate a generally positive perception of the effectiveness of technologies used for knowledge management. More than half of the respondents (55%) rated these technologies as effective, while 32% considered them very effective. A smaller proportion of participants (11%) viewed them as moderately effective, and only 2% perceived them as slightly effective. No respondents reported that the technologies were not effective at all. Overall, 87% of respondents assessed knowledge management technologies as either effective or very effective, highlighting their significant contribution to supporting knowledge-related processes within organizations.

Table 7. Perceived Effectiveness of Technologies Used for Knowledge Management

Effectiveness Level	Frequency (%)
Very effective	32
Effective	55
Moderately effective	11
Slightly effective	2
Not effective at all	0
Total	**100**

The results of the question related to the evaluation of the effectiveness of technologies used for knowledge management indicate an overall positive perception among respondents regarding the role these technologies play in supporting organizational processes. As reflected in the data, 32% of respondents assess the technologies in use as very effective, while 55% consider them effective. Accordingly, a total of 87% of participants express a clearly positive assessment of the effectiveness of technologies in knowledge management. A smaller proportion of respondents, 11%, evaluate the technologies as moderately effective, suggesting that for some participants the full potential of these technologies has not yet been fully exploited. This may be associated with factors such as insufficient staff training, the complexity of existing platforms, or the lack of effective integration between technology and organizational processes. Only 2% of respondents assess the technologies as slightly effective, and it is noteworthy that none of the respondents (0%) consider them not effective at all. This finding underscores the fact that information technologies, regardless of their

varying levels of sophistication, are widely perceived as functional and useful tools for managing and sharing knowledge within organizations. Overall, these results indicate a strong alignment between the use of technologies for knowledge management and the perceived effectiveness of these technologies, suggesting that current investments in technological solutions have yielded positive outcomes in practice.

6.8 Organizational Performance and Knowledge Management

Respondents identified several ways in which knowledge management contributes to organizational performance. The most frequently reported contributions were increased operational efficiency (33%) and improved human resource management (33%). Additionally, 13% of respondents indicated that knowledge management enhances organizational communication, while 12% stated that it fosters innovation. Facilitating strategic decision-making was reported by 9% of participants. These findings suggest that knowledge management is primarily valued for its role in improving organizational efficiency and supporting effective human resource practices, while also contributing to communication, innovation, and decision-making processes.

Table 8. Contributions of Knowledge Management to Organizational Performance

Contribution	Frequency (%)
Fosters innovation	12
Increases operational efficiency	33
Facilitates strategic decision-making	9
Improves human resource management	33
Enhances organizational communication	13
Total	**100**

The results of the question examining the ways in which knowledge management contributes to organizational performance indicate that its impact is perceived primarily in the functional and human dimensions of organizations. As reflected in the data, 33% of respondents assess that knowledge management increases operational efficiency, while an equally high proportion (33%) emphasize its role in improving human resource management. These findings suggest that knowledge management is predominantly viewed as a practical instrument that supports the optimization of work processes and the development of human capacities within organizations. A smaller proportion of respondents, 13%, highlight that knowledge management enhances organizational communication, indicating that improved information sharing and circulation contribute to increased coordination and collaboration among individuals and organizational units. Similarly, 12% of respondents perceive knowledge management as a driver of innovation, suggesting that this dimension is seen less as a direct source of innovation and more as an indirect support for innovative processes. Meanwhile, only 9% of respondents emphasize that knowledge management facilitates strategic decision-making, indicating that the link between knowledge management and decision-making at the strategic level has not yet been fully consolidated in the perceptions of organizational actors. This result may be interpreted as an indication that knowledge management is more frequently applied at operational and administrative levels rather than being utilized as a strategic instrument for the long-term direction of the organization.

6.9 Integration of the technology in your organization

The results indicate that the integration of technology with knowledge management has a substantial impact on organizational performance and operations. A total of 39% of respondents reported that this integration affects their organization to a very great extent, while 37% indicated to a considerable extent. Additionally, 21% perceived the impact as moderate, and only 3% considered it to be small. No respondents stated that the integration of technology and knowledge management had no impact at all. Overall, 76% of participants reported a considerable or very great impact, underscoring the critical role of technological tools in enhancing knowledge management processes and organizational effectiveness.

Table 9. Extent to Which the Integration of Technology with Knowledge Management Affects the Organization

Extent of Impact	Frequency (%)
To a very great extent	39
To a considerable extent	37
To a moderate extent	21
To a small extent	3
Not at all	0
Total	**100**

The results of the question assessing the extent to which the integration of technology with knowledge management affects organizational functioning indicate a highly positive and consistent perception among respondents regarding the transformative role of this integration. As reflected in the data, 39% of respondents assess that the integration of technology with knowledge management has an impact to a very great extent, while 37% consider its impact to a considerable extent. Accordingly, a total of 76% of participants report a high level of impact of technological integration within their organizations. A proportion of 21% of respondents evaluate this integration as having a moderate impact, suggesting that although technology is present, its full potential has not yet been fully realized across all organizations. This may be related to factors such as the lack of clear knowledge management strategies, limitations in human resource capacities, or the partial integration of technologies into key organizational processes.

Only 3% of respondent's report that the integration of technology with knowledge management has an impact to a small extent, and it is noteworthy that none of the respondents (0%) indicate a complete lack of impact. This finding demonstrates that the integration of technology with knowledge management is widely perceived as an essential component of the modern functioning of organizations.

6.10 Challenges and Recommendations

The most frequently reported challenge in knowledge management was the complexity of existing technologies, cited by 38% of respondents. This was followed by resistance to knowledge sharing (29%) and lack of appropriate technologies (21%). Fewer respondents identified lack of staff skills in knowledge management (10%), while only 2% reported lack of support from top management as a challenge. Overall, the findings suggest that technical and organizational barriers—particularly system complexity and knowledge-sharing resistance—are the primary obstacles to effective knowledge management implementation.

Table 10. Main Challenges Faced by Organizations in Knowledge Management

Challenge	Frequency (%)
Lack of appropriate technologies	21
Resistance to knowledge sharing	29
Complexity of existing technologies	38
Lack of staff skills in knowledge management	10
Lack of support from top management	2
Total	**100**

The results of the question addressing the main challenges organizations face in knowledge management indicate that the most significant barriers are primarily related to technological and organizational aspects, while strategic and managerial factors are perceived as less problematic. As evidenced by the data, 38% of respondents identify the complexity of existing technologies as the main challenge in knowledge management. This finding suggests that, although technologies are present within organizations, their effective use is often hindered by non-user-friendly interfaces, insufficient system integration, or inadequate staff

training. A substantial proportion of respondents, 29%, emphasize resistance to knowledge sharing as a major obstacle. This challenge is directly related to the cultural dimension of organizations, where factors such as lack of trust, fear of losing professional status, or the absence of motivational mechanisms may hinder the sharing of knowledge among employees and organizational units. Meanwhile, 21% of respondents report the lack of appropriate technologies as a significant challenge, indicating that some organizations have not yet invested sufficiently in technological solutions that effectively support knowledge management. This finding is particularly relevant in the context of small and medium-sized organizations, where financial and technological resources are often limited. By contrast, only 10% of respondents identify the lack of staff skills in knowledge management as a major challenge, while 2% highlight the lack of support from top management. These relatively low percentages suggest that respondents perceive technological and cultural issues as more prominent than the absence of strategic commitment from senior leadership, although in practice these factors may be closely interconnected.

6.11 Knowledge management in your organization

Respondents identified staff training in knowledge management as the most necessary improvement (36%). This was followed by the development of more user-friendly platforms (26%). Additionally, 14% of respondents emphasized the need for clearer knowledge management policies, while both investment in new technologies and stronger support from top management were each selected by 12% of participants. These results suggest that human capacity development and system usability are perceived as the most critical areas for improving knowledge management effectiveness within organizations.

Table 11. Necessary Improvements for Knowledge Management in the Organization

Required Improvement	Frequency (%)
Development of more user-friendly platforms	26
Staff training in knowledge management	36
Investment in new technologies	12
Stronger support from top management	12
Development of clearer knowledge management policies	14
Total	**100**

The results of the question addressing the most necessary improvements for knowledge management in organizations clearly indicate that respondents' priorities are primarily oriented toward human capacity development and enhancing the usability of existing technologies. As reflected in the data, 36% of respondents identify staff training in knowledge management as the most essential improvement. This finding underscores the fact that, despite the presence of certain technologies and practices, insufficient staff skills and competencies remain a major barrier to the effective utilization of organizational knowledge. A substantial proportion of respondents, 26%, emphasize the development of simpler and more user-friendly platforms as a priority need. This result is directly linked to the findings of the previous question, where the complexity of existing technologies was identified as one of the main challenges. It suggests that improving system interfaces and platform functionalities could significantly increase both the adoption and effectiveness of technological tools in knowledge management. Meanwhile, 14% of respondents consider the development of clearer knowledge management policies to be necessary, highlighting the importance of formal frameworks and organizational guidelines for the institutionalization of knowledge management practices. This finding suggests that, beyond technological solutions and training initiatives, there is a clear need for normative and procedural clarity in this domain. On the other hand, 12% of respondents stress the need for investment in new technologies, while an equal percentage (12%) call for stronger support from top management. These proportions indicate that, although technology and leadership are recognized as important factors, respondents perceive them as less immediate priorities compared to human capacity development and improvements in the usability of existing systems.

7. Discussion of Results

The empirical findings of this study largely confirm the conclusions of contemporary literature regarding the role of information technologies and knowledge management in improving organizational performance. The results indicate that, although organizations demonstrate a high level of awareness of the strategic importance of knowledge management, its practical implementation remains primarily focused on basic forms of information collection, storage, and sharing, while the use of advanced technological systems remains relatively limited. This finding is consistent with the observations of Castells (2010), who emphasizes that the network society is not defined merely by the presence of technology, but by the way it is integrated into organizational structures and decision-making processes.
The dominance of communication and collaboration tools, such as Microsoft Teams and similar platforms, over structured knowledge management systems reinforces the argument of Laudon and Laudon (2020), according to whom organizations often use information technologies primarily for operational rather than strategic purposes. Moreover, the high level of perceived effectiveness of technologies reported by most respondents aligns with Davis's (1989) Technology Acceptance Model, which posits that perceived usefulness and ease of use directly influence users' adoption of technology. However, the results also reveal a mismatch between the theoretical potential of knowledge management and its actual impact on strategic decision-making and innovation. This finding supports the socio-technical perspective of Bostrom and Heinen (1977), which argues that technology does not generate sustainable value without appropriate organizational and cultural adaptation.

7.2 Theoretical Implications

From a theoretical perspective, this study contributes to deepening the debate on the interaction between technology, knowledge management, and organizational performance by providing empirical evidence from an organizational context that remains underexplored in the international literature. The findings support the view that knowledge management should not be conceptualized solely as a technological function, but rather as a complex process encompassing human, organizational, and cultural dimensions. The study suggests that the integration of technology with knowledge management acts as a mediating factor between digital infrastructure and organizational performance, thereby confirming theoretical approaches that emphasize the importance of organizational capabilities rather than technological resources alone. In this regard, the findings contribute to the literature on digital transformation by arguing that its success depends on organizations' ability to transform technology into usable and institutionalized knowledge.

7.3 Practical Implications for Business Management

From a practical standpoint, the results of the study offer several important implications for business management and organizational leadership. First, organizations should shift their focus from isolated investments in technology toward the development of human capacities, particularly through staff training in knowledge management and knowledge-sharing practices. The findings clearly indicate that training and the simplification of digital platforms are perceived as top priorities for improvement, suggesting that usability and human competencies are critical factors for the success of digital initiatives. Second, top management should play a more active role in institutionalizing knowledge management by integrating it into human resource policies, performance evaluation systems, and strategic decision-making processes. Without such support, knowledge management risks remaining a fragmented and predominantly operational practice. Third, organizations should pursue an integrated approach in which information technologies, organizational culture, and managerial structures function in a coordinated and harmonized manner. Only under such conditions can knowledge management evolve from a formal process into a genuine source of competitive advantage and long-term business sustainability.

8. Conclusions and Recommendations

8.1 Summary of Key Findings

This study examined the role of information technologies and knowledge management in organizational performance, with particular emphasis on organizational communication, human resource management, and operational efficiency. The empirical findings reveal a high level of awareness among organizational actors regarding the strategic importance of knowledge management, as the vast majority of respondents consider it to be very important or important for organizational success. However, this awareness is not always accompanied by an advanced level of practical implementation.

The results indicate that dominant knowledge management practices remain focused on information collection and storage, as well as team-level information sharing, while the use of dedicated knowledge management technologies is more limited. From a technological perspective, organizations rely primarily on collaboration tools and cloud platforms, which are widely perceived as effective but are used mainly for operational rather than strategic purposes. Furthermore, the findings show that knowledge management contributes primarily to increased operational efficiency and improved human resource management, while its impact on innovation and strategic decision-making remains relatively limited.

8.2 Contribution of the Study

The main contribution of this study lies in providing empirical evidence on the interaction between information technologies, knowledge management, and organizational performance within an organizational context that has received limited attention in international research. The study enriches the theoretical debate by confirming that technology alone does not guarantee performance improvement, but must be integrated with human capacities, organizational culture, and managerial structures.

From a methodological perspective, the study offers a practical model of empirical research that combines descriptive analysis with theoretical interpretation, thereby bridging the gap between theory and organizational practice. Moreover, the findings contribute to the digital transformation literature by highlighting the importance of knowledge management as a mediating mechanism between technology and organizational performance.

8.3 Limitations of the Study

Despite its scientific value, this study has several limitations that should be considered when interpreting the results. First, the sample size of 88 respondents, although sufficient for descriptive and interpretive analysis, limits the generalizability of the findings across all organizations. Second, the sectoral distribution of respondents, with a dominance of the private sector, may have influenced perceptions regarding the use and effectiveness of technologies and knowledge management practices.

Another limitation relates to the subjective nature of the data, which are based on respondents' self-assessments rather than objective indicators of organizational performance. In addition, the cross-sectional design of the study does not allow for the examination of long-term changes over time or the full identification of causal relationships.

8.4 Directions for Future Research

Based on the findings and limitations of this study, future research could focus on expanding the sample size and ensuring a more balanced inclusion of different sectors, particularly the public sector and the education and research sector. Additionally, future studies may apply more advanced methodological approaches, such as inferential analysis, structural equation modeling, or longitudinal designs, to explore more deeply the relationships between technology, knowledge management, and organizational performance.

Another important direction for future research involves analyzing the role of leadership and organizational culture in the success of knowledge management initiatives, as well as assessing the impact of emerging technologies, including artificial intelligence, on the strategic management of knowledge. These approaches would contribute to building a more comprehensive and dynamic understanding of the role of technology and knowledge in contemporary organizations.

References

A Polo, E Caca, I Zyberi, CA Ladias, F Ruxho, 2025, Foreign direct investment in real estate in

Albania and its impact on GDP, Regional Science Inquiry 17 (1), 135-142
Almalioti S., Tsiotas D., 2025. "Structural characteristics of the OECD international trade network and their association with economic development", Sustainable Regional Development Scientific Journal, Vol II. (2), pp.21-32
Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173
Bostrom, R. P., & Heinen, J. S. (1977). MIS problems and failures: A socio-technical perspective. *MIS Quarterly, 1*(3), 17–32. https://doi.org/10.2307/249019
Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. W. W. Norton & Company.
Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.
Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340. https://doi.org/10.2307/249008
F Teixeira, S Pescada, F Ruxho, 2024, The efficacy of technical analysis in the foreign exchange market: a case study of the USD/JPY pair, Sustainable Regional Development Scientific Journal 1 (2), 68-75
FJ Teixeira, SSPV Pescada, F Ruxho, C Palma, F Beha, 2024, GLAMPING IN LOW-DENSITY TERRITORIES: THE CASE OF SANTO ALEIXO DA REASTAURA?? O, Regional Science Inquiry 16 (1), 71-80
Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
I Voka, ADF Ruxho, Use of financial technology in Albania, 2022, ECONOMICUS No. 21/2022, 36
Khan A., Tripathi S., Chandiramani J., 2024. "Smart city initiatives and economic growth in india: an empirical analysis", Sustainable Regional Development Scientific Journal, Vol. I, (2): Special Issue, pp. 41-56
Krupavicius, A., Šarkute, L., Krasniqi, A., Ladias, Christos Ap. 2024. "Perceived and desired images of society: how (un)equal is society?" Regional Science Inquiry, 16(1), pp. 55-70
Ladias C.A., Ruxho F., Teixeira F., Pescada S., 2023, "The regional economic indicators and economic development of Kosovo", Regional Science Inquiry, Vol. XV, (1), pp. 73-83
Lampreia M., Teixeira F., Pescada S. P. V., 2024. "The predictive power of technical analysis: evidence from the gbp/usd exchange rate", Sustainable Regional Development Scientific Journal, Vol. I, (3), pp. 67-75
Laudon, K. C., & Laudon, J. P. (2020). *Management information systems: Managing the digital firm* (16th ed.). Pearson Education.
Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology, 140*, 1–55.
Lincaru C., Tudose G., Cosnita D., Pirciog S., Grigorescu A., Ciuca V., 2024. "Clusters as engines of sustainable employment growth in Romania1", Sustainable Regional Development Scientific Journal, Vol. I, (3), pp. 10-27
Papajorgji P., Tordi A., 2024. "Using quantitative tools to understand political issues", Sustainable Regional Development Scientific Journal, Vol. I, (3), pp. 28-35
Pescada S., Correia I., Teixeira F., Ruxho F., 2025. "Social and territorial impacts of the integrated participation programme in Bela Vista", Sustainable Regional Development Scientific Journal, Vol II. (2), pp.67-74
Pescada S., Serrario M., Sequeira B., Teixeira F., Ladias Ap. C. Ruxho F., 2025. "Safety culture and continuing care", Sustainable Regional Development Scientific Journal, Vol II. (2), pp.33-44
Polo A., Beha F., Caca E., Zyberi I., 2025. "Foreign direct investment in real estate and its impact on tourism development in Albania", Sustainable Regional Development Scientific Journal, Vol II. (2), pp.12-20
Polo A., Caca E., Zyberi I., Ladias C.A, Ruxho F., 2025. "Foreign direct investment in real estate in Albania and its impact on GDP", Regional Science Inquiry, Vol. XVII, (1), 2025, pp. 135-142
Ruxho F., 2024. "Kosovo employee's perception of economic growth and decent work according to sustainability", Sustainable Regional Development Scientific Journal, Vol. I, (3), pp. 53-66
Ruxho F., Ladias C.A, 2022. "Increasing funding for the regional industry of Kosovo and impact on economic growth" Regional Science Inquiry Journal, Vol. XIV. (1), pp. 117-126
Ruxho F., Ladias C.A, Tafarshiku A., Abazi E., 2023. "Regional employee's perceptions on decent work and economic growth: labour market of Albania and Kosovo", Regional Science Inquiry, Vol. XV, (2), pp.13-23.
Ruxho F., Ladias C.A., 2022. "The logistic drivers as a powerful performance indicator in the development of regional companies of Kosovo" Regional Science Inquiry Journal, Vol. XIV. (2), pp. 95-106

Ruxho F., Petropoulos D., Negoro D.A. 2024. “Public debt as a determinant of the economic growth in Kosovo”, Sustainable Regional Development Scientific Journal, Vol. I, (1), pp. 55-67

Sarkute L., Sina D., Bello, K., Vercuni A., 2024. “Strategic management decisions in the context of foreign direct investment. The role of institutions and economic determinants”, Sustainable Regional Development Scientific Journal, Vol. I, (1), pp. 40-54

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education.

Sejdini In., Sejdini Im., Todri A., Papajorgji P., Ladias C.A., Ruxho F., 2025. “Advancing a new era in higher education management: A stakeholder overview analysis from European and EU non-countries”, Regional Science Inquiry, Vol. XVII, (2), 2025, pp. 11-23 11

Sepetis A., Krupavičius A., Ladias Ap. C. 2024 “Social protection in Greece and sustainable development leaving no one behind”, Sustainable Regional Development Scientific Journal, Vol. I, (1), pp. 83-92

Sequeira T., Rego C., Dionisio A., 2024. “Investment and productivity in the agro-industrial sector: a case study”, Sustainable Regional Development Scientific Journal, Vol. I, (2): Special Issue, pp. 13-26

SSPV PESCADA, F RUXHO, C PALMA, 2024, Glamping In Low-Density Territories: The Case Of Santo Aleixo Da Reastaura?? O, Regional Science Inquiry 16 (1), 71-80

Stavara M., Tsiotas D., 2024. “A combined graph theoretic and transport planning framework for the economic and functional analysis of large-scale road networks”, Sustainable Regional Development Scientific Journal, Vol. I, (2): Special Issue, pp. 27-40

T Corvo, S Pescada, A Krasniqi, J Vidal, F Ruxho, F Teixeira, 2024, The importance of organizational culture in the performance of family health units–model b in the Algarve region, Hellenic Association of Regional Scientists

Teixeira F., Pescada, S.S.P.V., Ladias C.A., Hulaj M., Ruxho F., Machado V., 2025. “Stablecoin dp2p: innovation and sustainability in fiat currencies”, Regional Science Inquiry, Vol. XVII, (1), pp. 95-106

Todri A. Papagiorgji P. 2025. “Integrating financial and organizational drivers in SME’s debt dynamics: insights from radial basis function analysis”, Sustainable Regional Development Scientific Journal, Vol II. (2), pp. 45-58

Tsiotas D., Giannakis E., Papadas C., 2025. “A modularity decomposition model of evolving input-output sectorial structure, Regional Science Inquiry, Vol. XVII, (1), pp. 107-133

Tsiotas D., Polyzos S., 2024. “Analyzing the spatial interactions in the nationwide regional capitals network of Greece”, Sustainable Regional Development Scientific Journal, Vol. I, (3), pp. 36-52

Tsiotas, D., Krabokoukis, T., & Polyzos, S. 2020. “Detecting interregional patterns in tourism seasonality of Greece: A principal components analysis approach”, Regional Science Inquiry, 12(2), 91-112.

Tsiotas, D., Polyzos, S., 2024. “Transportation networks and regional development: the conceptual and empirical framework in Greece”, Sustainable Regional Development Scientific Journal, Vol. I, (1), pp. 15-39

Turban, E., Volonino, L., Wood, G. R., & Sipior, J. C. (2015). *Information technology for management: Advancing sustainable, profitable business growth* (9th ed.). Wiley.

Voka I., Dibra R., 2025. “Budget deficit - its impact on the Albanian regional economy and some factors that has influence”, Sustainable Regional Development Scientific Journal, Vol II. (2), pp.59-66

Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Harvard Business Review Press.