Enhancing Employee Performance through IT Service Management: The Mediating Role of Knowledge Sharing and Innovation Capability

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Abstract

Purpose: This study investigates the impact of IT Service Management (ITSM) practices on employee performance, with a particular focus on the mediating roles of knowledge sharing and innovation capability. The research aims to provide a comprehensive understanding of how ITSM practices influence employee performance and how these effects are mediated by organizational knowledge sharing and innovation.

Method: A quantitative research design was employed, utilizing a survey-based approach to collect data from 600 IT professionals across various organizations. The study used structural equation modeling with SmartPLS 4.0 to analyze the relationships between ITSM practices, knowledge sharing, innovation capability, and employee performance. The sample included 450 valid responses, providing a robust dataset for analysis.

Findings: The study found that ITSM practices positively impact employee performance, with knowledge sharing and innovation capability serving as significant mediators in this relationship. Effective knowledge sharing enhances the benefits of ITSM practices by facilitating access to critical information, while strong innovation capability helps in adapting and refining ITSM practices to improve performance outcomes.

Originality/Significance: This research fills a gap in the literature by exploring the mediating roles of knowledge sharing and innovation capability in the ITSM-performance relationship. The findings offer valuable insights for organizations seeking to optimize ITSM practices and enhance employee performance, contributing to both theoretical understanding and practical applications in IT management.

Keywords:IT Service Management (ITSM), Employee Performance, Knowledge Sharing, Innovation Capability, Incident Management, Employee Training and Development

Introduction

Today's networked and computerized world requires better IT resource management and service delivery. IT Service Management. Optimise

performance and accomplish corporate goals with IT services (McIntosh et al., 2024). IT Service Management is comprised of Incident Management, Knowledge Management, Workload Management, and Employee Training and Development. Our methods improve operations, achieve corporate goals, and enhance IT services. Good IT Service Management (ITSM) is crucial for operational excellence and organisational success as company operations become more dependent on IT (Shrestha et al., 2020). ITSM impacts organizational and personnel performance beyond operations. Effective ITSM practices decrease service disruptions, increase problem resolution, and boost staff productivity (Al-Hawari & Barham, 2021). Effective Incident Management solutions fix IT issues quickly, allowing personnel focus on their primary tasks. Comprehensive Employee Training and Development programs linked into IT Service Management (ITSM) frameworks give employees the skills and knowledge they need to do their jobs well. Knowledge Management Systems help employees make better decisions and work more effectively by delivering critical information(Żywiołek et al., 2022). Workload management systems reduce employee stress, boost productivity, and assign duties(Haddad et al., 2022). ITSM components are essential to developing a successful and high-performing workplace.

Although ITSM is becoming more important, the relationship between employee performance and ITSM strategies is being examined. The literature demonstrates that ITSM practices affect operational efficiency, although employee performance needs additional study (Permatasari et al., 2023). Current study emphasizes creativity and information sharing as mediators. IT service management performance depends on knowledge exchange. It allows staff solve IT issues and improve performance using shared knowledge and best practises (Kahfi&Legowo, 2024). Innovation is generally regarded as a cornerstone to improving ITSM principles. It promotes staff innovation (Woo et al., 2020). Improving ITSM strategies and organizational outcomes requires understanding how these mediating components affect employee performance and ITSM practices. Organizational performance theories and ITSM reveal these relationships. The Resource-Based View (RBV) states that an organization's resources and capabilities, including ITSM practices, define its competitiveness and success (MacLean &Titah, 2023). Knowledge sharing and innovation improve ITSM. Innovation helps ITSM processes adapt to changing demands, while information exchange promotes organisational knowledge and experience (Fajrillah et al., 2022). Researchers can optimize ITSM practises and analyze how they effect employee performance using these theoretical methods.

Empirical research has examined how ITSM practices affect operational efficiency and service quality. Multiple studies demonstrate ITSM principles improve worker productivity and service delivery. ITSM methods and organizational performance were evaluated by Permatasari et al. (2023). Poor ITSM systems like incident and knowledge management lower worker productivity. Their study indicated that fixing IT issues and getting important data enhances productivity and lowers interruptions. ITSM employee training and development is well-studied. Wright et al. (2022) said IT professionals need significant problem-solving training. Their analysis found that ITSM companies that focused training and professional development had higher productivity and employee satisfaction. ITSM workload management increases productivity and minimizes stress (Hogan et al., 2022). Knowledge management systems affect ITSM, say Drljevic et al. (2020). These technologies promote efficiency and knowledge access. Swarnakar et al. (2021) say Knowledge Management Systems assist IT professionals handle problems by offering rapid access to relevant knowledge and best practices. This improves performance and decision-making. Knowledge management increases worker performance, highlighting ITSM value of corporate knowledge. Research shows innovative skill improves ITSM. Innovative organizations may better adjust their ITSM strategies to shifting needs, according to Rizun et al. (2021). Their findings suggest that encouraging staff to be creative and implement innovative ideas enhances ITSM operations.

This study examines how IT Service Management (ITSM) practises affect employee performance, focusing on knowledge sharing and innovation capabilitiy. This study examines how ITSM techniques including Incident Management, Employee Training and Development, Knowledge Management Systems, and Workload Management affect employee performance and how knowledge sharing and innovation capabilities affect these outcomes. The study examines these links to determine how ITSM practices improve employee performance and how knowledge exchange and innovation optimize them. ITSM practices and employee performance are explained theoretically and practically in this article. The article bridges literature gaps by analyzing how knowledge exchange and innovation affect ITSM framework interactions. This research explains their relationships. It's hypothetical. This study enhances ITSM and organizational performance theories by explaining how ITSM approaches effect employee performance. This paper helps firms improve employee performance using Effective IT Service Management (ITSM) techniques. The paper emphasises information exchange and innovation to profit from ITSM practises. Based on this study, firms may build techniques to promote innovation and information sharing, enhancing IT service management and staff performance. Managers and IT professionals may enhance ITSM approaches to boost business performance and employee happiness, according to the report.

Literature Review

IT Service Management (ITSM) methods are important for company productivity. Incident Management, for example, guarantees seamless operations and staff performance. Effective incident management reduces IT service failures, improving work satisfaction and productivity. Employee morale and performance improve with quick problem solving, providing a pleasant workplace. For managing complex IT systems in today's modern environment, Employee Training and Development within ITSM frameworks is essential. Frequent, concentrated training boosts employee confidence and performance, boosting individual and organizational success. Knowledge Management Systems (KMS) in ITSM improve employee performance by solving problems quicker and better. ITSM frameworks with comprehensive KMS boost productivity and creativity by teaching staff to leverage common knowledge. ITSM task management improves worker performance, promoting a balanced work environment and long-term productivity. Effective responsibility management reduces staff fatigue, decreasing output and increasing turnover. This highlights the importance of ITSM in maximizing human resource efficiency and achieving employee performance while managing technology.

IT Service Management Practices and Employee Performance

As organizations use technology to simplify operations and achieve strategic goals, employee performance and ITSM methodologies are important to analyze. ITSM methods guarantee that IT services meet business needs, making IT systems reliable, effective, and supportive of company goals(Maes, 2022). Incident management, employee training and development, knowledge management systems, and workload management affect employee performance. Each of these components contributes to an environment that encourages individual excellence, which impacts organizational success(MacLean & Titah, 2023). The latest research on ITSM practices and employee performance is presented here. It explains this intricate relationship using several research and theoretical frameworks.Incident Management in ITSM aims to quickly restore service operations to reduce the company's exposure to disruptions. Incident management directly affects the productivity of IT-dependent staff. Permatasari et al., (2023)suggest that a well-structured Incident Management plan can reduce delay and boost staff productivity. Efficient event management eliminates disturbances, letting staff focus on their work. This constant flow of work enhances employee productivity and corporate productivity. Technical issues can stress and anger employees, thus addressing them quickly can improve the workplace(Fast-Berglund et al., 2020).. Thus, incident management requires solving technological issues and creating settings that boost efficiency and satisfaction.

Employee training and development within ITSM frameworks employee performance. Staff must continuously learn about IT system and process advances in today's fast-changing technological environment. Regular training sessions targeted to ITSM processes can help personnel enhance their technical abilities and knowledge(Woo et al., 2020). Improved work performance is linked to this. Training gives workers the tools they need to succeed. These programs emphasize burden balance, knowledge management, and incident management. Lim et al., (2020)found that companies with substantial training and development programs have higher employee engagement, a reliable success indicator. Actively engaged people are more likely to lead, solve challenges creatively, and contribute to team dynamics. Staff training boosts productivity, accuracy, and speed, according to da Silva et al. (2022). This relationship suggests that skilled IT workers need professional growth. ITSM practices must integrate KMS to improve employee performance. By gathering, storing, and sharing information, KMS assist firms promote continuous learning and innovation and improve decision-making. According to Żywiołek et al. (2022), organizational effectiveness relies on knowledge generation and usage in technology-intensive settings. Strong knowledge management systems assist employees solve problems and accomplish their duties by giving information quickly, claim Hong et al. (2022). Using a KMS to rapidly find essential information helps employees address problems, decreasing interruption and boosting service quality. Good knowledge management systems boost worker productivity and creativity, according to Chichkanov (2021). Because KMS encourages novel ideas and approaches and regular problem-solving, performance may increase. KMS encourages department and team collaboration, allowing the organization to harness its expertise and abilities, which is vital in complex IT systems.The study shows that IT Service Management methodologies boost employee performance. Knowledge management systems, workload management, incident management, and employee training and development are essential for fostering peak performance. These methods eliminate interruptions, develop abilities, share knowledge, and change office roles. A comprehensive IT service management strategy that improves the organization's technological infrastructure and human aspect is crucial for success and optimal performance.

H1: IT Service Management Practices have a significant and positive impact on Employee Performance

Knowledge sharing as a Mediator

Knowledge sharing has become essential to employee performance and IT Service Management (ITSM) practices, bridging the gap between human elements that drive corporate success and technical systems. Employee training, incident management, and workload management optimise IT operations and meet company goals (Wubante et al., 2022). If the company fosters information sharing, these strategies can boost employee performance. Knowledge sharing catalyzes ITSM benefits into quantifiable employee performance improvements. Information, when managed and disseminated effectively, may improve performance, according to Xia et al., (2022). Knowledge sharing increases problem-solving, innovation, and work efficiency by giving employees access to the organization's knowledge and expertise. This literature analysis examines how information sharing mediates employee performance and ITSM practices. It uses several theoretical and empirical perspectives.Knowledge sharing mediates the link between ITSM practices and employee performance by improving decision-making and problem-solving. Incident management is an ITSM method for minimizing interruptions and assuring IT service availability (Bukari et al., 2023). However, when employees voluntarily share knowledge about preventing and resolving such events, these systems work better. (Alami et al., 2023)suggest that knowledge sharing helps employees get relevant information at the correct moment, which is vital for making effective decisions during extreme situations. Giving staff knowledge about prior issues, troubleshooting methods, and best practices will help them address potential problems. Sharing this experience reduces problem-solving time and enhances service quality by helping workers adopt proven solutions(Kwihangana, 2020). Recording and sharing

episode knowledge encourages a culture of continuous improvement. This leads to modest performance improvements.

Employee training and development requires effective knowledge sharing to integrate training skills into daily work. ITSM training programs teach professionals how to handle complicated IT systems and procedures. These initiatives work best when people are motivated to share their knowledge with coworkers(Wang et al., 2023). This obstacle must be overcome to boost employee performance from training. Sharing information helps colleagues and improves employees' knowledge. This collaborative learning environment helps individuals use their abilities to complete complex tasks, improving team performance. Sharing information ensures that training benefits the entire organization, improving performance(Beck et al., 2023). Information sharing is very important in ITSM due to fast-paced technology that requires constant learning and adaptability.

IT Service Management requires knowledge sharing to manage workload. Distributing jobs fairly among staff members improves productivity and reduces weariness. How often people talk about their activities, priorities, and time management habits affects burden management systems' performance. Openly discussing workload and job distribution can help employees optimize procedures and eliminate duplication, increasing efficiency(Bukari et al., 2023). Knowledge exchange is essential for aligning individual efforts with business goals and ensuring workers focus the most critical tasks. Staff also encourage mutual assistance by providing task-efficiency tips. Team members help each other reach deadlines and performance goals in this culture(Alami et al., 2023). This cooperative technique boosts productivity and team cohesiveness and accountability to achieve organizational goals.Information communication boosts ITSM process improvement and creativity. Knowledge sharing encourages people to try new things, which leads to creative IT solutions(Tuma, 2021). Sharing tacit information through informal networks and collaboration can create new knowledge that boosts organizational performance. ITSM must adapt and innovate to stay ahead of the competition, especially when adopting new technologies. By sharing new trends, best practices, and successful projects, employees help ITSM practices evolve to meet the organization's expanding expectations(Aouad & Bento, 2020). Information exchange drives this cycle of development, which improves employee performance over time. Because humans adapt to new challenges and progress, this happens.Communication is key to bridging employee performance and IT Service Management objectives. It promotes efficient task management, innovation, growth, decision-making, problem-solving, and integrating training outcomes into daily work routines(Kwihangana, 2020). Organizations may improve ITSM procedures and employee effectiveness by encouraging knowledge sharing. Existing research proves that knowledge sharing is essential to achieving ITSM benefits. Businesses seeking to increase employee performance via ITSM should prioritize developing systems and cultures that foster knowledge sharing at all levels.

H2: Knowledge sharing mediates the relationship between IT service management practices and employee performance.

Innovation Capability as a Mediator

Innovation is widely recognized as a key aspect in employee performance and ITSM practices. ITSM advantages are channeled via it to boost organizational performance. IT Service Management (ITSM) approaches include workload management, knowledge management systems, incident management, and employee training and development(Maes, 2022). These methods boost workplace creativity and employee performance. Innovation capability is a company's and its employees' ability to produce new ideas, methods, and solutions to improve operational performance and service delivery. Companies are incentivized to modify the competitive landscape due to this possibility (Permatasari et al., 2023). This study illustrates that innovation capability is crucial to turning ITSM practices into strategic assets that boost company and employee performance. Ability to address complex IT problems and innovate affects IT service management and staff performance. ITSM employs

incident management to fix service issues fast and cheaply (Yu et al., 2024). Complex environments may not suit traditional event management technologies and methods. Innovative staff can enhance incident resolution using innovative approaches and technology. Encouraged creativity inspires employees to find and execute solutions that fix current issues and avoid future ones (Wang et al., 2023). ITSM organizations that focus innovation skills may better handle unexpected obstacles and enhance service delivery. Customer satisfaction and team performance improve.

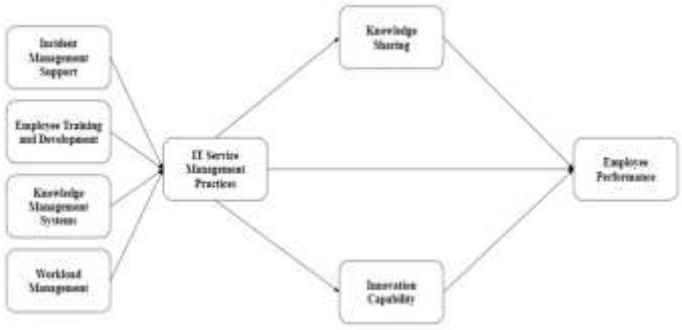
Employee Training and Development must innovate so workers may apply their new skills and knowledge to perform better. Traditional training programs emphasize ITSM-related technical skills(Li et al., 2022). However, these initiatives must also foster employee creativity to be effective. This involves teaching employees how to use existing tools and procedures and encouraging them to think creatively about how to improve or use these technologies in new ways to solve problems. Staff adapt better to technological and business changes when innovation capability is integrated in training and development(Al Daboub et al., 2024). They also learn to create innovative IT service delivery methods. Innovation enables individuals to enhance work processes, boosting productivity and performance(Escrig-Tena et al., 2021). Businesses may ensure that ITSM training programs teach specific skills and encourage creative thinking to develop new capabilities that increase performance over time.Innovation capability, which links employee performance to knowledge management techniques, boosts ITSM's KMS. KMS simplify knowledge creation, storage, and sharing in companies(Huang & Yuan, 2024). Employees can simply get the information they need to work productively. Successful people use their knowledge in innovative ways, not just because they have it. Employees may creatively use KMS knowledge to improve procedures and create new solutions. Instead of following the present methods, an individual who can combine varied KMS data to design a unique approach for balancing workloads or handling issues is more likely to succeed(Lista & Tortorella, 2022). Chichkanov, (2021)suggest that innovative knowledge management techniques may change knowledge management systems (KMS) from passive information storage spaces to active platforms for learning and growth. Dynamic information utilization, driven by innovation, boosts employee performance by helping them to improve work procedures and stay ahead of difficulties.

Innovation capability Workload Management, an important aspect of ITSM, because it improves employee performance. Strategically assigning duties to prevent overworking or underworking employees promotes balance, productivity, and well-being(Escrig-Tena et al., 2021). Innovators may propose new task management methods to simplify processes, remove redundancies, and enhance resource usage. Creative employees can develop new technologies to automate monotonous tasks, freeing up time for more difficult tasks. This proactive task management strategy boosts individual productivity and ITSM framework efficiency, improving corporate performance(Gong & Yang, 2024). Companies that prioritize workload management innovation are more likely to establish flexible work environments that can handle shifting needs and priorities. Thus, even in difficult and changing settings, they may accomplish remarkable employee performance(Al Dabouba et al., 2023).Finally, innovation affects employee performance and IT Service Management techniques. It helps organizations transform ITSM from technical procedures to a strategic accelerator for success by encouraging innovation, flexibility, and improvement. Employees' ability to innovate allows them to actively overcome challenges, enhance processes, and discover new ideas, improving performance and helping the company succeed. Innovation is essential to effective ITSM, and research shows that it is indeed a requirement(Wu & Xiao, 2022). Organisations that invest in this competency should see improved employee performance and outcomes. Businesses may improve IT service dependability and effectiveness by incorporating innovation into their ITSM frameworks. This will help them adjust to changing company demands.

H3: Innovation capability mediates the relationship between IT service management practices and employee performance.

Based on above discussion and literature review, we developed the following conceptual framework as shown in Figure 1:

Figure 1: Conceptual Framework



Methodology

Research Design

Quantitative research is good for testing hypotheses within a framework and investigating variable interactions (Creswell, 2018). The findings were more relevant since a survey-based method collected data from a large sample. The study methodology examined how IT Service Management (ITSM) practices affect employee performance, focusing on innovation capability and information exchange as intermediaries. The quantitative method was chosen because it can quantify variables and examine correlations using statistical analysis(Chang, 2018). Standardized questionnaires were used to ensure uniformity and participant comparability. This design decision was critical for testing the study's hypotheses and collecting reliable empirical data.

Population

The poll comprised IT staff from technology and service organizations. These sectors were chosen because they rely heavily on ITSM for service delivery and IT infrastructure maintenance. Thus, they are ideal for examining how these practices affect employee performance. Only personnel who directly engaged in IT service management procedures including incident management assignment, and knowledge management were eligible. The respondents were tested for ITSM methodology knowledge in this study. The study examined the effects of various IT service management (ITSM) approaches on firms of various sizes. It acknowledged that organization size may affect ITSM adoption and performance. The population was dispersed throughout metropolitan regions governed by technology and service industries, suggesting the study concentrated on IT-dependent areas. This method ensured that the study's results appropriately mirrored the industrial setting, improving its external validity.

Sample Size Determination and Sampling Technique

The study employed Cochran's methodology, a typical survey research method, for statistical accuracy. This study used Cochran's approach to calculate sample size. Based on projected answer variation, 95% confidence, and 5% margin of error, 454 respondents were sampled. 600 questionnaires were issued to reduce errors and non-responses. Oversampling reduced bias and increased statistical analysis sample size (Braun & Clarke, 2021). Previous research suggests organizational surveys may have less than 80% response. Sent extra surveys instead of the needed sample. The study distributed 600 questionnaires to adjust for non-responders and guarantee accurate replies for analysis. To represent the IT community by region, industry, and organizational size, researchers used stratified random sampling. Organization size (small, medium, major), industrial sector (technology, service), and location (metropolitan areas) separated the population. Survey participants were randomly picked from each stratum to represent each group. By reflecting the population, this technique minimized sample bias and enhanced findings. Researchers examined how ITSM practices impact employee performance across organizations using stratified random sampling. The study was more reliable due to meticulous sampling.

Data Collection Technique

IT professionals from target firms provided data for this study. Data was collected using standardized questionnaires. Despite partial submissions and non-

replies, 600 surveys were disseminated. The questionnaire includes knowledge exchange, innovation, and IT Service Management (ITSM). Systematic quantitative data collection is needed for association analysis and hypothesis testing (Creswell, 2018). Emails and online surveys arrived. It was chosen for its wide coverage and capacity to reach multiple responders from different places. Electronic distribution accelerates data collecting and analysis. Warnings to those who hadn't finished the questionnaire increased attentiveness and involvement. Out of 600 questionnaires, 450 were completed (75%). Organizational surveys had similar response rates. Before further investigation, the 450 questionnaires were verified for logic and completeness. High response rates were needed to accurately represent the population and give reliable statistical data. The abundance of data permitted a rigorous examination of ITSM's impact on staff performance. The study examined innovation potential and information sharing as mediators.

Data Analysis Technique

This study evaluated data using SmartPLS 4.0, a Partial Least Squares Structural Equation Modelling program. PLS-SEM was chosen because it can evaluate complex interactions between multiple factors and manage small to medium sample sizes(Hair et al., 2019). Academics studying and building theoretical models benefit from this technique. To build and evaluate these models, hidden factors including people's performance, knowledge sharing, innovation capability, and IT service management are used. The structural and measurement models were evaluated using SmartPLS 4.0.(Hair et al., 2019) concluded that the latent variable indicators were consistent and accurate through measurement model analysis. The structural model research examined how information exchange and innovation abilities affect employee performance and ITSM practices. SmartPLS 4.0 improves direct and indirect impact research using bootstrapping and route analysis(Hair Jr et al., 2021). SmartPLS 4.0 assessed latent variable relationships and handled complex models in the research. The research used the software's functionality to analyze data and show how ITSM practices affect employee performance. The study also examined innovation capability and information sharing mediation effects.

Results

Reliability Analysis

Table 1 shows the constructions' internal consistency and dependability using Cronbach's Alpha. Cronbach's Alpha is a well-known statistic for scale or test item reliability. It is a 0–1 number. Social science studies often uses 0.7 since higher values indicate greater dependability. Employee Performance's Cronbach's Alpha coefficient is 0.866, indicating good internal consistency among the questions used to measure this topic. The construct is significant to this study since the items used to assess Employee Performance are tightly related and consistently measure the underlying concept. The IT Service Management Practices construct has a strong Cronbach's Alpha coefficient of 0.912, showing internal consistency. The high dependability observed suggests that ITSM procedures like Incident Management, Training and Development, and Knowledge Management are well-synchronized and accurately represent the overall concept. Innovation Capability's Cronbach's Alpha coefficient is 0.719, showing lower internal consistency than other variables. It meets the minimal dependability criteria. This shows that, while Innovation Capability components are consistent, additional modifications may be needed to increase scale reliability. Knowledge Sharing's Cronbach's Alpha score of 0.839 indicates good internal consistency. This shows that the questions used to assess Knowledge Sharing capture its essence, making it a trustworthy measure in this study.

Table 1: Cronbach's Alpha

	Cronbach's alpha
Employee Performance	0.866
IT Service Management Practices	0.912
Innovation Capability	0.719
Knowledge Sharing	0.839

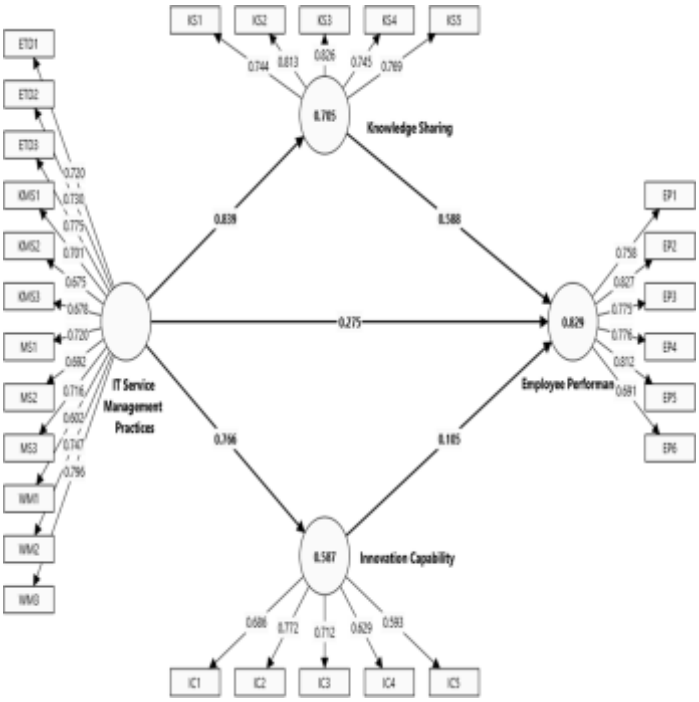
Validity and Reliability

Table 2 uses Composite Reliability (CR) and Average Variance Extracted metrics to evaluate the constructs' validity and reliability. Composite reliability, like Cronbach's Alpha, evaluates construct internal consistency, whereas AVE measures construct variation relative to measurement error. Strong dependability requires CR values over 0.7 and AVE values above 0.5. The Composite Dependability (CR) for Employee Performance is 0.900, suggesting high internal consistency and dependability. The latent construct's Average Variance Extracted (AVE) of 0.600 demonstrates its high convergent validity since it accounts for much of the observable variables' variability. A coefficient of reliability (CR) of 0.926 indicates strong internal consistency in IT Service Management Practices. The average value of this construct is 0.510, just above the cutoff. This shows that the concept captures more variation than measurement error. While the idea is reliable, it might be enhanced with additional refinement. Innovation Capability satisfies convergent validity standards with a CR of 0.811 and an AVE of 0.516. These results show that the construct is valid and dependable and that further improvements may improve measurement precision. AVE (Average Variance Extracted) of 0.609, over the permitted threshold, proves Knowledge Sharing's convergence validity. Its 0.886 CR (Composite Reliability) suggests strong internal consistency. our shows that the construct is durable and trustworthy in our investigation, mirroring the underlying premise.

Table 2: Validity and Reliability Confirmation

	Composite reliability	AVE
Employee Performance	0.900	0.600
IT Service Management Practices	0.926	0.510
Innovation Capability	0.811	0.516
Knowledge Sharing	0.886	0.609

Figure 2: Measurement Model



Outer Loading

Table 3 and Figure 2 shows peripheral loading values, which are essential for assessing the reliability and validity of each study idea's elements. Outer loadings measure how well each variable matches its latent concept. Strong external loadings of 0.7 or above indicate that the item is related to the construct being examined. However, loadings beyond 0.6 are frequently acceptable when the build is reliable and legitimate. All Employee Performance construct characteristics have large external loadings, ranging from 0.691 to 0.827. EP2 and Employee Performance are closely associated with a loading coefficient of 0.827. EP6, however, has a loading of 0.691, which is substantially lower but still adequate. These results show that Employee Performance measurement instruments are closely related to the idea and greatly impact its appraisal. Workload Management, Employee Training and Development, and Knowledge Management Systems are IT Service Management Practices. The

external loadings for these items are 0.602–0.796. While most items meet or exceed the 0.7 threshold, KMS1, KMS2, KMS3, and WM1 have loadings slightly below 0.7, with WM1 showing the lowest loading at 0.602. Although these lower loadings indicate weaker relationships with the overall construct, they are still within an acceptable range, especially when the construct as a whole is reliable. All Knowledge Sharing items had substantial peripheral loadings of 0.744 to 0.826, indicating that they accurately reflect the construct. The items' consistently high loadings imply that they effectively communicate Knowledge Sharing and significantly affect its evaluation. The Innovation Capability construct has outer loadings from 0.593 to 0.772. The IC5, with a loading of 0.593, is much below the threshold, indicating a weaker construct relationship. Other categories, especially IC2 (0.772), are more strongly associated with Innovation Capability. The overall structure of IC5 is dependable despite its lesser capacity. This item may be improved or reevaluated in future research.

Table 3: Outer Loading

Variables	Items	Outer Loading
Employee Performance	EP1	0.758
	EP2	0.827
	EP3	0.775
	EP4	0.776
	EP5	0.812
	EP6	0.691
IT Service Management Practices	ETD1	0.720
	ETD2	0.730
	ETD3	0.775
	KMS1	0.701
	KMS2	0.675
	KMS3	0.678
	MS1	0.720
	MS2	0.692
	MS3	0.716
	WM1	0.602
	WM2	0.747
	WM3	0.796
Knowledge Sharing	KS1	0.744
	KS2	0.813
	KS3	0.826
	KS4	0.745
	KS5	0.769
Innovation Capability	IC1	0.686
	IC2	0.772
	IC3	0.712
	IC4	0.629
	IC5	0.593

Discriminant Validity

Table 4 shows the Heterotrait-Monotrait (HTMT) correlation ratio used to assess component discriminant validity. In structural equation modelling, discriminant validity ensures that each construct assesses a distinct concept. The differentiation of structures is assessed using HTMT values. Strong discriminant validity is usually below 0.85. Depending on the research settings, some studies recommend a more cautious 0.90 threshold. In this study, the HTMT scores for Employee Performance, IT Service Management Practices (0.246), Innovation Capability (0.406), and Knowledge Sharing (0.533) are all below 0.85. This suggests that Employee Performance is distinct from IT Service Management Practices, Innovation Capability, and Knowledge Sharing. Employee Performance and IT Service Management Practices have low HTMT scores of 0.246, contrasting these two aspects. The IT Service Management Practices and Innovation Capability HTMT result is 0.718, better than the others but below the 0.85 threshold. This indicates that although IT Service Management Practices and Innovation Capability are related, they are sufficiently distinct constructs. Similarly, the HTMT value of 0.653 between IT Service Management Practices and Knowledge Sharing also supports the discriminant validity between these two constructs. The highest HTMT value observed is 0.778 between Knowledge Sharing and Innovation Capability. Although this value is the closest to the 0.85 threshold, it still falls within the acceptable range, suggesting that Knowledge Sharing and Innovation Capability are distinct, albeit related, constructs. This relationship might reflect the natural interdependence between sharing knowledge and fostering innovation within an organization.

Table 4: Discriminant Validity (HTMT)

	EP	ITSMP	IC	KS
Employee Performance				
IT Service Management Practices	0.246			
Innovation Capability	0.406	0.718		
Knowledge Sharing	0.533	0.653	0.778	

R-square

The R-square values presented in Table 5 reflect the proportion of variance in each dependent variable that can be explained by the independent variables in the study. In other words, R-square indicates the extent to which the predictors account for the variability in the outcome variables. Higher R-square values suggest that the model has strong explanatory power, whereas lower values indicate that a smaller proportion of the variance is being explained. For Employee Performance, the R-square value is 0.829, which means that 82.9% of the variance in Employee Performance is explained by IT Service Management Practices, Knowledge Sharing, and Innovation Capability. This high R-square value indicates that the model has excellent explanatory power in predicting Employee Performance. It suggests that the chosen ITSM practices, along with the mediating roles of Knowledge Sharing and Innovation Capability, are highly effective in explaining variations in how employees perform in the organization. Innovation Capability, with an R-square value of 0.587, indicates that 58.7% of the variance in this construct is explained by IT Service Management Practices and possibly other factors included in the model. This is a relatively strong level of explanatory power, suggesting that ITSM practices play a significant role in shaping an organization's Innovation Capability, though there may be other factors not captured in this model that also influence innovation. For Knowledge Sharing, the R-square value is 0.705, meaning that 70.5% of the variance in Knowledge Sharing is explained by the model's predictors, which likely include IT Service Management Practices and other related factors. This high score shows that the model effectively explains how information is transferred across the organizations, emphasizing the close relationship between ITSM practices and employee knowledge sharing.

Table 5: R-square

	R-square
Employee Performance	0.829
Innovation Capability	0.587
Knowledge Sharing	0.705

Model Fit

Table 6 shows the Standardized Root Mean Square Residual (SRMR) value for this study's structural model. SRMR is a statistical metric that compares anticipated and actual correlations. It indicates how well the model matches the data, with lower values being better. A value of 0.08 or less is usually acceptable, with values near zero suggesting a better fit. The saturated model in this experiment has SRMR 0.063. The outcome is satisfactory, indicating that the model fits the data. The SRMR score of 0.063 shows that the model accurately links IT service management practices, employee performance, knowledge sharing, and innovation capability. The little differences between observed and projected correlations corroborate this. The robust model fit shows that the structural model utilized is adequate and accurately depicts the complex interactions between the variables in the research, supporting the conclusions. This makes study outcomes more reliable and resilient.

Table 6: Model Fit

	Saturated model
SRMR	0.063

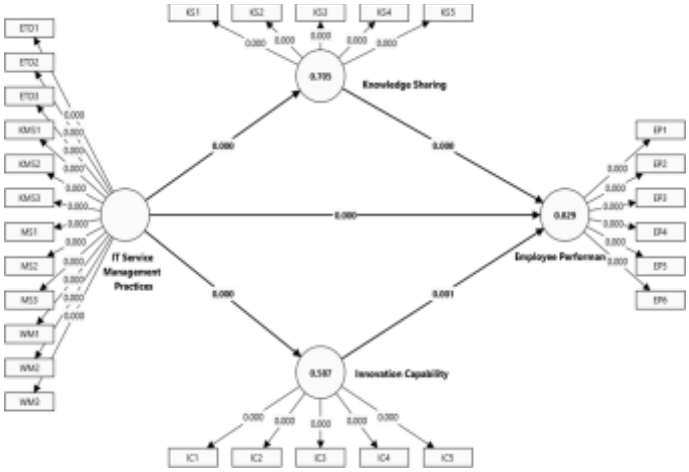
Direct Path Analysis

IT Service Management (ITSM) Practices and Employee Performance are directly analyzed in Table 7 and Figure 3. This investigation shows how ITSM practices affect employee performance without mediating factors. Original sample value, or route coefficient, is 0.275. ITSM techniques shown to positively impact employee performance. This implies that improved ITSM methods like incident management, staff training, knowledge management systems, and task management would increase employee performance. The magnitude of this effect, while moderate, is meaningful and suggests that ITSM practices play a crucial role in enhancing employee productivity and effectiveness. The standard deviation (STDEV) of 0.060 reflects the variability of the path coefficient estimate, indicating the precision of this estimate. A lower standard deviation suggests that the estimate is relatively stable and consistent across different samples, providing confidence in the reliability of the findings. The T-value of 4.558 indicates that the relationship between ITSM practices and employee performance is statistically significant. A T-value greater than 1.96 is typically considered significant at the 0.05 level in two-tailed tests, but in this case, the T-value far exceeds this threshold, demonstrating strong evidence that the relationship is not due to random chance. Finally, the P-value of 0.000 confirms the statistical significance of this relationship. A P-value below 0.05 is generally considered statistically significant, but here, the P-value is effectively zero, reinforcing the conclusion that ITSM practices have a significant and positive impact on employee performance.

Table 7: Direct Path Analysis

	Original sample	STDEV	T values	P values
IT Service Management Practices -> Employee Performance	0.275	0.060	4.558	0.000

Figure 3: Structural Model



Mediation Analysis

The mediation analysis presented in Table 8 provides insights into the mediating roles of Knowledge Sharing (KS) and Innovation Capability (IC) in the relationship between IT Service Management Practices (ITSMP) and Employee Performance (EP). Mediation analysis helps in understanding whether the effect of an independent variable (ITSMP) on a dependent variable (EP) is transmitted through a mediator (KS or IC). The first mediation pathway analyzed is ITSMP -> KS -> EP, which examines how Knowledge Sharing mediates the relationship between IT Service Management Practices and Employee Performance. The original sample value, or path coefficient, for this mediation pathway is 0.494, indicating a substantial indirect effect of ITSMP on EP through KS. This suggests that effective ITSM practices significantly enhance Knowledge Sharing within the organization, which in turn leads to improved employee performance. The standard deviation (STDEV) of 0.046 indicates that this estimate is precise and consistent across different samples. The T-value of 10.808 is well above the standard threshold for statistical significance (T > 1.96), and the P-value of 0.000 confirms that this mediating effect is statistically significant. The results conclusively demonstrate that Knowledge Sharing is a key mechanism by which ITSM practices affect employee performance, emphasizing the necessity to promote a knowledge sharing culture to optimize ITSM benefits. Second, ITSMP -> IC -> EP examines Innovation Capability as a mediator between employee performance and ITSM practices. The mediation effect path coefficient of 0.080 shows a significant indirect influence. The coefficient for ITSM practices is lower than that for Knowledge Sharing, but it still shows that they promote Innovation Capability and employee performance. The T-value of 3.162 and P-value of 0.001 show the statistical significance of this mediation pathway. Additionally, the estimate's STDEV of 0.025 implies reliability and consistency. Our findings stress Innovation Capability as a mediator in the ITSM-Employee Performance link, despite the small impact size. The mediation study shows that Knowledge Sharing and Innovation Capability are vital to IT Service Management Practices and Employee Performance. Due to its higher route coefficient, information exchange appears to be the more significant mediator. These findings suggest that a company must effectively distribute and execute information to increase employee performance using ITSM concepts. In the meanwhile, Innovation Capability, albeit to a lesser extent, plays a role, showing that a creative environment is essential for optimizing ITSM practices' beneficial influence on employee outcomes. Businesses must embrace efficient ITSM processes, increase information sharing, and innovate to maximize advantages. These studies demonstrate the varying relationship between ITSM practices and employee performance.

Table 8: Mediation Analysis

	Original sample	STDEV	T values	P values
ITSMP -> KS -> EP	0.494	0.046	10.808	0.000
ITSMP -> IC -> EP	0.080	0.025	3.162	0.001

Discussion:

The deployment of IT Service Management (ITSM) methods enhanced employee performance, supporting Hypothesis 1 (H1). ITSM strategies improve worker performance, according to considerable company efficiency and efficacy studies. ITSM solutions include incident management, staff training, and workload management increase IT service delivery and staff performance (Woo et al., 2020). With Incident Management, IT service issues are managed faster so staff can focus on their primary activities. Operations consistency is essential for worker productivity and well-being (MacLean &Titah, 2023). Employee Training and Development programs in ITSM frameworks enhance job performance by providing personnel with necessary skills and knowledge (Żywiołek et al., 2022). Information Management Systems let individuals work faster and make better decisions by transmitting and using information. Labor management improves work performance, duty distribution, and employee stress, according to Permatasari et al. (2023). The report suggests that ITSM principles improve employee performance by fostering a good workplace. The H1 data reveals how ITSM improves workplace productivity. Studies show that well-designed ITSM procedures improve staff effectiveness and service delivery. Efficient ITSM boosts service quality and decreases downtime. This allows workers focus on their main activities and enhance productivity. ITSM procedures, including rigorous training, ensure employees have the skills and knowledge to accomplish their tasks, increasing productivity (Gunawan et al., 2024). A well-structured and efficient workplace boosts ITSM's performance (Shrestha et al., 2020). This study stresses the relevance of ITSM frameworks for corporate efficiency and staff happiness. ITSM practices improved worker performance. The findings support previous studies and emphasize ITSM's role in company success and labor efficiency.

Knowledge sharing is an intermediate between IT Service Management (ITSM) practices and employee performance, as shown by Hypothesis 2 (H2). Knowledge sharing appears to moderate ITSM's impact on employee performance. The empirical evidence and theoretical framework suggest that knowledge sharing is crucial to the success of IT Service Management (ITSM). Sharing information helps personnel apply their ideas and experiences, enhancing ITSM advantages (Bukari et al., 2023). The information employees share may be utilized to address IT problems, enhance procedures, and improve service. Collaboration speeds up problem-solving and promotes continual growth, enhancing employee performance (Alami et al., 2023). Information sharing relates IT service management approaches to employee performance, highlighting the necessity for enterprise knowledge exchange methods and rewards. structured information systems and collaborative platforms allow employees quickly locate crucial ideas and answers, improving task execution (Kwihangana, 2020). Aouad & Bento (2020) found that organisations that prioritize information exchange and knowledge management are more likely to use ITSM practices to increase performance. Information and experiences may improve employee performance and ITSM success. Knowledge exchange is important and required to optimize ITSM practices' effects on employee performance, according to the study. This demonstrates that companies must prioritize and invest knowledge management.

Hypothesis 3 (H3) states that innovation capability mediates IT Service Management (ITSM) practices and employee performance, suggesting that innovation is essential to ITSM. The research reveals that innovation capabilities is key to improving ITSM processes and employee outcomes. It shows that innovation greatly mediates this relationship. This supports empirical and theoretical research that stress innovation's role in IT service management effectiveness(Maes, 2022). Empowering people to investigate new technologies, create innovative solutions, and streamline processes boosts ITSM benefits (Tidd and Bessant, 2013). Encouragement of new ITSM approaches improves staff performance and adaptability to changing organizational demands(Huang & Yuan, 2024). Employee creativity improves performance by solving complex problems and improving service

delivery.Their ability to innovate emphasizes the necessity of organisations building inventive capabilities. Innovative organisations use ITSM to boost employee performance better. Previous study has shown that ITSM ideas need innovation. Employees can innovate to boost output (Al Dabouba et al., 2023). Modern companies should develop, assess, and improve their IT Service Management (ITSM) strategies to meet changing needs. Innovation can boost corporate success, according to Wu & Xiao, (2022). The data shows that innovation boosts ITSM practices' impact on employee performance. A problem-solving and innovative corporate culture is needed.

Conclusion

Knowledge sharing, IT Service Management (ITSM), and employee performance are all examined in this study. ITSM principles improve employee performance, making organizations more efficient and productive, according to previous studies. Effective IT Service Management (ITSM) strategies include incident management, staff training and development, knowledge management systems, and workload management. These solutions manage activities, train people, make essential information available, and eliminate IT interruptions. These elements increase pleasure and productivity. Comprehensive IT Service Management (ITSM) frameworks are recommended for company success. ITSM can boost operations and staff performance. The poll found that information exchange and creativity improve employee performance and IT service management. Sharing essential information enhances performance and ITSM operations, according to the figures. Enterprises must promote knowledge exchange for ITSM advantages. Employee achievements and IT service management affect innovation. Collaboration lets staff create and implement new performance and service delivery strategies. ITSM techniques may boost employee performance and profitability in innovative firms. This study found that ITSM expertise and creativity boost employee effectiveness. The research shows that ITSM, effective information sharing, and innovation improve employee and organizational performance.

Implications

Businesses that use IT Service Management (ITSM) to improve employee performance need the study's practical implications. Knowledge Management Systems, Employee Training and Development, and Incident Management are studied. These methods improve operational efficiency, avoid disturbances, and teach essential skills, boosting employee performance. A productive, high-performing workplace requires IT Service Management (ITSM) efforts. Using incident management to fix IT issues promptly reduces downtime and lets personnel focus on their jobs. Comprehensive Employee Training and Development programs improve workplace effectiveness by teaching workers new skills. Knowledge Management Systems boost work effectiveness by providing essential information and best practices. Effective task management minimizes stress and improves work-life balance and performance. Information exchange is key to ITSM success, another practical issue. The study finds that information sharing affects staff performance and ITSM practices. Therefore, organizations should foster a culture of collaborative problem-solving and information sharing. Create venues and incentives for knowledge exchange to help workers discover and implement excellent ideas and solutions to enhance ITSM processes. Forums, collaborative knowledge repositories, and regular team meetings can help businesses share information and experience to solve problems and develop best practices to improve performance.

This study proves that knowledge sharing and innovation capabilities mediate the relationship between employee performance and ITSM practices. These are theoretical implications. The findings help us understand how these mediators affect performance in the ITSM framework. Effective ITSM processes are heavily influenced by corporate activities like innovation and information sharing, according to study. This study expands theoretical frameworks on how ITSM practices affect employee performance. It shows that mediators enhance ITSM procedures. The research theoretically explains how innovation capability mediates ITSM-performance relationships. Showing innovation allows employees to

create and use innovative ideas that increase performance, making ITSM principles simpler to adopt. This study supports modern ideas of innovation, which argue that innovation helps firms improve processes and results. This study highlights how innovation capacity adapts and enhances ITSM procedures to meet shifting needs, advancing our theoretical understanding. In addition, adding information sharing and innovation into the link between IT service management (ITSM) and performance helps explain how ITSM processes may be changed to increase performance. The study found that information sharing, ITSM, and innovation skills create a dynamic workplace that boosts employee performance. This theoretical approach supports the resource-based view (RBV) of organizations, which emphasizes using internal resources and skills to obtain a competitive edge and improve performance (Barney, 1991). ITSM performance depends on organizational resources and competences, according to the study. The intermediary functions of information exchange and innovation capability show this.

Limitations and Future Direction

This work has provided important insights, but its limitations may affect future research methods. A major weakness of the study is its cross-sectional design. Employee performance, knowledge sharing, innovation skills, and IT Service Management (ITSM) approaches cannot be linked because the study only collected data at one time. Cross-sectional data can reveal relationships, but it cannot analyze their evolution. ITSM practices and staff performance must be monitored over time through longitudinal assessments. This study seeks to investigate the causal pathways and probable variations in ITSM practices and their mediators, which may be affected by external factors or organizational phases. The study's focus on one industry or business may limit its application. Since the research focused on IT professionals, the results may not apply to other sectors or organizations with different operational dynamics and constraints. Future study on comparable links in other organizations or sectors can solve this challenge. This more comprehensive technique would increase findings applicability and help explain how ITSM practices, knowledge exchange, and innovation skills effect employee performance. New insights and generally applicable concepts can be gained by comparing results from diverse fields.

Response bias was increased by the study's reliance on employee self-reported data. Individual opinions can distort self-reported assessments, which may not accurately reflect real behaviors or performance results. Future research may use objective performance indicators, supervisor evaluations, and peer assessments to overcome this barrier. Data from several sources must be triangulated to better understand the relationships between employee performance, innovation capabilities, knowledge sharing, and ITSM practices. This method would yield better data and a more complete ITSM effect evaluation. While analyzing knowledge sharing and innovation abilities as mediators of employee performance and ITSM practices, the study did not examine any other relevant factors. Organizational culture, leadership styles, and employee motivation can also affect these linkages. Thus, future research must address these issues. Explore additional mediators and moderators to better understand how ITSM practices affect employee performance. This would help develop focused and effective management tactics.

References

Al-Hawari, F., & Barham, H. (2021). A machine learning based help desk system for IT service management. *Journal of King Saud University - Computer and Information Sciences*, *33*(6), 702–718. https://doi.org/10.1016/j.jksuci.2019.04.001

Al Daboub, R. S., Al-Madadha, A., & Al-Adwan, A. S. (2024). Fostering firm innovativeness: Understanding the sequential relationships between human resource practices, psychological empowerment, innovative work behavior, and firm innovative capability. *International Journal of Innovation Studies*, *8*(1), 76–91. https://doi.org/10.1016/j.ijis.2023.12.001

Al Dabouba, R. S., Al-Madadha, A., & Al-Adwan, A. S. (2023). Fostering Firm Innovativeness: Understanding the Sequential Relationships between Human Resource Practices, Psychological Empowerment, Innovative Work Behavior, and Firm Innovative Capability.

International Journal of Innovation Studies. https://doi.org/10.1016/j.ijis.2023.12.001

Alami, A., Zahedi, M., & Krancher, O. (2023). Antecedents of psychological safety in agile software development teams. *Information and Software Technology*, *162*, 107267. https://doi.org/10.1016/j.infsof.2023.107267

Aouad, J., & Bento, F. (2020). A Complexity Perspective on Parent–Teacher Collaboration in Special Education: Narratives from the Field in Lebanon. *Journal of Open Innovation: Technology, Market, and Complexity*, *6*(1), 4. https://doi.org/10.3390/joitmc6010004

Beck, D., Ferasso, M., Storopoli, J., & Vigoda-Gadot, E. (2023). Achieving the sustainable development goals through stakeholder value creation: Building up smart sustainable cities and communities. *Journal of Cleaner Production*, *399*, 136501. https://doi.org/10.1016/j.jclepro.2023.136501

Braun, V., & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, *13*(2), 201–216. https://doi.org/10.1080/2159676X.2019.1704846

Bukari, C., Kheni, N. A., Boateng, I., Owusu-Ansah, C. M., Gyenfie, P. E., Bukari, C., Kheni, N. A., Boateng, I., Owusu-Ansah, C. M., & Gyenfie, P. E. (2023). Integrating Knowledge Management Processes with Total Quality Management Principles in the Construction Industry: Meta Review, Gap Analysis and Scientometric Analysis. *Journal of Service Science and Management*, *16*(5), 501–525. https://doi.org/10.4236/JSSM.2023.165027

Chang, C.-C. (2018). Outdoor ubiquitous learning or indoor CAL? Achievement and different cognitive loads of college students. *Behaviour and Information Technology*, *37*(1), 38–49. https://doi.org/10.1080/0144929X.2017.1394366

Chichkanov, N. (2021). The role of client knowledge absorptive capacity for innovation in KIBS. *Journal of Knowledge Management*, *25*(5), 1194–1218. https://doi.org/10.1108/JKM-05-2020-0334

Creswell, J. (2018). Research Design Qualitative, Quantitative, and Mixed Methods Approaches. *SAGE Publishing*, *66*, 37–39.

da Silva, F. P., Mosquera, P., & Soares, M. E. (2022). Factors influencing knowledge sharing among IT geographically dispersed teams. *Technological Forecasting and Social Change*, *174*, 121299. https://doi.org/10.1016/j.techfore.2021.121299

Drljevic, N., Aranda, D. A., & Stantchev, V. (2020). Perspectives on risks and standards that affect the requirements engineering of blockchain technology. *Computer Standards & Interfaces*, *69*, 103409. https://doi.org/10.1016/j.csi.2019.103409

Escrig-Tena, A. B., Segarra-Ciprés, M., & García-Juan, B. (2021). Incremental and radical product innovation capabilities in a quality management context: Exploring the moderating effects of control mechanisms. *International Journal of Production Economics*, *232*, 107994. https://doi.org/10.1016/j.ijpe.2020.107994

Fajrillah, A. A., Lubis, M., & Pasa, A. R. (2022). Towards the smart industry for the sustainability through open innovation based on ITSM (Information Technology Service Management). *International Journal of Advanced Computer Science and Applications*, *13*(6).

Fast-Berglund, Å., Salunkhe, O., & Åkerman, M. (2020). Low-cost Automation – changing the traditional view on automation strategies using collaborative applications. *IFAC-PapersOnLine*, *53*(2), 10285–10290. https://doi.org/10.1016/j.ifacol.2020.12.2762

Gong, Y., & Yang, X. (2024). Understanding strategies for digital government transformation: A strategic action fields perspective. *International Journal of Information Management*, *76*, 102766. https://doi.org/10.1016/j.ijinfomgt.2024.102766

Gunawan, H., Irianto, A. B. P., & Negara, J. G. P. (2024). IMPLEMENTATION OF SUSTAINABLE SERVICE IMPROVEMENT IN ORGANIZATIONS USING

FRAMEWORK INFORMATION TECHNOLOGY INFRASTRUCTURE LIBRARY (ITIL). *Procedia Computer Science*, *234*, 748–755. https://doi.org/10.1016/j.procs.2024.03.061

Haddad, M. El, Faithfull-Byrne, A., Thompson, L., Wilkinson, G., & Moss, C. (2022). Nurse unit managers' work and impacts on clinical leadership: A cross-sectional study. *Collegian*, *29*(5), 635–644. https://doi.org/10.1016/j.colegn.2022.02.004

Hair, J. F., Sarstedt, M., & Ringle, C. M. (2019). Rethinking some of the rethinking of partial least squares. *European Journal of Marketing*, *53*(4), 566–584. https://doi.org/10.1108/EJM-10-2018-0665

Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. Springer Nature.

Hogan, C., Kinsella, J., O'Brien, B., Markey, A., & Beecher, M. (2022). Estimating the effect of different work practices and technologies on labor efficiency within pasture-based dairy systems. *Journal of Dairy Science*, *105*(6), 5109–5123. https://doi.org/10.3168/jds.2021-21216

Hong, Y., Xie, H., Bhumbra, G., & Brilakis, I. (2022). Improving the accuracy of schedule information communication between humans and data. *Advanced Engineering Informatics*, *53*, 101645. https://doi.org/10.1016/j.aei.2022.101645

Huang, Z., & Yuan, L. (2024). Enhancing learning and exploratory search with concept semantics in online healthcare knowledge management systems: An interactive knowledge visualization approach. *Expert Systems with Applications*, *237*, 121558. https://doi.org/10.1016/j.eswa.2023.121558

Kahfi, A., & Legowo, N. (2024). Implementation Planning Information Technology Service Management (ITSM) Iso 20000-Based in Guarantee Companies. *Jurnal Indonesia Sosial Teknologi*, *5*(4), 1682–1693.

Kwihangana, F. (2020). Making sense of teachers' (dis)belief in the educational value of social media: A case of two language teachers in Rwanda. *International Journal of Technology Enhanced Learning*, *12*(3), 290–305. https://doi.org/10.1504/IJTEL.2020.107983

Li, Y., Zhu, Z., Guan, Y., & Kang, Y. (2022). Research on the structural features and influence mechanism of the green ICT transnational cooperation network. *Economic Analysis and Policy*, *75*, 734–749. https://doi.org/10.1016/j.eap.2022.07.003

Lim, A., Arora, G., McInerney, B., Vienet, M., Stewart, K., & Galbraith, K. (2020). Evaluation of a new educational workplace-based program for provisionally registered pharmacists in Australia. *Currents in Pharmacy Teaching and Learning*, *12*(12), 1410–1416. https://doi.org/10.1016/j.cptl.2020.07.008

Lista, A. P., & Tortorella, G. L. (2022). Integration of Industry 4.0 technologies and Knowledge Management Systems for Operational Performance improvement. *IFAC-PapersOnLine*, *55*(10), 2042–2047. https://doi.org/10.1016/j.ifacol.2022.10.008

MacLean, D., & Titah, R. (2023). Implementation and impacts of IT Service Management in the IT function. *International Journal of Information Management*, *70*, 102628. https://doi.org/10.1016/j.ijinfomgt.2023.102628

Maes, S. (2022). ITSM and ESM in the Bigger World. Separation of concerns: A Modern Approach of ITIL for the Enterprise. *Hal.Science*. https://hal.science/hal-03797929/

McIntosh, T. R., Susnjak, T., Liu, T., Watters, P., Xu, D., Liu, D., Nowrozy, R., & Halgamuge, M. N. (2024). From COBIT to ISO 42001: Evaluating cybersecurity frameworks for opportunities, risks, and regulatory compliance in commercializing large language models. *Computers & Security*, *144*, 103964. https://doi.org/10.1016/j.cose.2024.103964

Permatasari, R., Ridwandono, D., Afandi, M. I., Zamzami, M. R., Trinanda, F. A., & Wibowo, A. H. (2023). Comparison Analysis of Information Technology Service Management Software. *Proceeding of International E-Conference On Management & Small Medium Enterprise*, 240–255.

Rizun, N., Revina, A., & Meister, V. G. (2021).

Analyzing content of tasks in Business Process Management. Blending task execution and organization perspectives. *Computers in Industry*, *130*, 103463. https://doi.org/10.1016/j.compind.2021.103463

Shrestha, A., Cater-Steel, A., Toleman, M., Behari, S., & Rajaeian, M. M. (2020). Development and evaluation of a software-mediated process assessment method for IT service management. *Information & Management*, *57*(4), 103213. https://doi.org/10.1016/j.im.2019.103213

Swarnakar, V., Singh, A. R., Antony, J., Tiwari, A. K., & Cudney, E. (2021). Development of a conceptual method for sustainability assessment in manufacturing. *Computers & Industrial Engineering*, *158*, 107403. https://doi.org/10.1016/j.cie.2021.107403

Tuma, F. (2021). The use of educational technology for interactive teaching in lectures. *Annals of Medicine and Surgery*, *62*, 231–235. https://doi.org/10.1016/j.amsu.2021.01.051

Wang, M., Wang, Y., & Mardani, A. (2023). Empirical analysis of the influencing factors of knowledge sharing in industrial technology innovation strategic alliances. *Journal of Business Research*, *157*, 113635. https://doi.org/10.1016/j.jbusres.2022.113635

Woo, H., Jeong, S.-J., & Huh, J.-H. (2020). Improvement of ITSM IT Service Efficiency in Military Electronic Service. *Journal of Information Processing Systems*, *16*(2).

Wright, M., Wayman, M., Zuo, W., Markham, D., & Haughey, F. (2022). Performance review of surfacing materials with enhanced levels of reclaimed asphalt. *Proceedings of the Institution of Civil Engineers - Transport*, *177*(3), 129–138. https://doi.org/10.1680/jtran.21.00008

Wu, J., & Xiao, J. (2022). Development path based on the equalization of public services under the management mode of the Internet of Things. *Socio-Economic Planning Sciences*, *80*, 101027. https://doi.org/10.1016/j.seps.2021.101027

Wubante, S. M., Tegegne, M. D., Melaku, M. S., Walle, A. D., & Demsash, addisalem workie. (2022). Knowledge sharing practice and its associated factors among health professionals in Ethiopia: Systematic review and meta-analysis. *Informatics in Medicine Unlocked*, *31*, 100967. https://doi.org/10.1016/j.imu.2022.100967

Xia, H., An, W., Li, J., & Zhang, Z. (Justin). (2022). Outlier knowledge management for extreme public health events: Understanding public opinions about COVID-19 based on microblog data. *Socio-Economic Planning Sciences*, *80*, 100941. https://doi.org/10.1016/j.seps.2020.100941

Yu, Q., Zhao, N., Li, M., Li, Z., Wang, H., Zhang, W., Sui, K., & Pei, D. (2024). A survey on intelligent management of alerts and incidents in IT services. *Journal of Network and Computer Applications*, *224*, 103842. https://doi.org/10.1016/j.jnca.2024.103842

Żywiołek, J., Tucmeanu, E. R., Tucmeanu, A. I., Isac, N., & Yousaf, Z. (2022). Nexus of Transformational Leadership, Employee Adaptiveness, Knowledge Sharing, and Employee Creativity. *Sustainability (Switzerland)*, *14*(18), 1–16. https://doi.org/10.3390/su141811607