

Knowledge-Sharing Practices in the It Sector: An Empirical Study of Multilevel Managers in Telangana

¹Trishla Teckumetla ²Dr.N.R.Saravanan

¹Research Scholar, Department of Management Studies, Rajagiri Dawood Batcha (RDB) College of Arts and Science (Affiliated to Bharathidasan University, Tiruchirappalli), Papanasam, Tamil Nadu - 614205, India.

²Associate Professor, Department of Management Studies, Rajagiri Dawood Batcha (RDB) College of Arts and Science (Affiliated to Bharathidasan University, Tiruchirappalli), Papanasam, Tamil Nadu - 614205, India.

Abstract:

A digital survey was administered to gather data from 203 information technology managers in the Telangana area on their knowledge-sharing practices and their organization's overall performance. Model validation and hypothesis assessment were based on data analysis using structural equation modelling. The data indicates a robust correlation among the model structures. This has enhanced our comprehension of the factors influencing knowledge sharing in the information technology industry. These studies indicate a positive impact on an organization's performance on cost savings, revenue growth, and other intangible advantages. The findings of this research indicate that the IT sector may enhance its information-sharing practices. This research offers essential information to assist practitioners in enhancing their knowledge-sharing processes inside their organisations. Management should emphasise Web 2.0 and other knowledge-sharing technologies inside their IT architecture to facilitate both tacit and explicit information exchange. Research indicates that enterprises may transmit specialised expertise to younger staff via knowledge-sharing activities. This strategy enables organisations in the information technology sector to enhance employee expertise retention and diminish turnover rates.

Keywords: Knowledge sharing practices – individual factors – organizational factors – technological factors.

Introduction:

The rapid growth of the information technology sector significantly contributes to a country's GDP, with human capital serving as a key source of organizational value. In this context, knowledge has emerged as a critical asset, making knowledge management essential for organizational survival and competitiveness. Organizations must cultivate a strong knowledge-sharing culture to prevent loss of expertise and ensure timely access to relevant information, as delays in accessing knowledge can negatively affect productivity and profitability.

Knowledge sharing refers to the exchange, transfer, and dissemination of information across individuals, teams, and organizations. It includes both declarative knowledge (facts) and procedural knowledge (skills and processes). However, knowledge is inherently complex and rooted in human cognition, making it difficult to transfer directly. Effective knowledge exchange requires interaction, mutual understanding, and behavioral adaptation among individuals. The conversion of individual knowledge into organizational knowledge enhances retention and reduces duplication of efforts. Huysman and De Wit (2024) emphasize that knowledge exchange transforms personal knowledge into organizational knowledge, increasing its long-term retention. This process helps organizations avoid the "reinvention of the wheel" and improves operational efficiency. Tools such as manuals and standard operating procedures (SOPs) support knowledge retention, although they require considerable effort to develop.

The primary objective of knowledge sharing systems is to provide the right information at the right time to support decision-making and problem-solving. However, tacit knowledge remains difficult to capture, as individuals may hesitate to share due to concerns about losing their uniqueness or value. Employee turnover further intensifies the risk of knowledge loss, highlighting the need for effective knowledge retention strategies.

In the contemporary knowledge-based economy, knowledge sharing has become a critical factor for organizational competitiveness. Quigley et al. (2007) highlight the growing importance of knowledge

dissemination within organizations. Silvi and Cuganesan (2006) demonstrate that employee knowledge exchange significantly impacts both public and private sector performance. Similarly, Felin and Hesterly (2007) argue that firms seeking competitive advantage must increasingly rely on effective knowledge sharing practices.

Despite its importance, knowledge sharing is often voluntary and influenced by individual motivation. Lin et al. (2008) assert that organizations can improve knowledge management by encouraging employees to actively share their expertise. Understanding the factors that influence knowledge sharing behavior is therefore essential. However, prior research has been limited in scope, often focusing on private sector employees or student groups (Kwok and Gao, 2005; Hara and Hew, 2007; Land et al., 2009; Li et al., 2020). More recent studies, such as Sandhu et al. (2025), have begun to explore knowledge sharing in public sector contexts, indicating the need for broader and more inclusive research across different organizational settings.

Review Of Literature:

i. Individual Factors:

Interpersonal trust, reciprocity, and personal motivation play a crucial role in influencing individuals' willingness to share knowledge and experiences (Ajzen, 1991; Seba et al., 2022; Holste, 2020). The Theory of Planned Behaviour proposed by Ajzen (1991) explains that individuals with favourable attitudes, social norms, and perceived control are more likely to engage in knowledge-sharing behaviour.

Planned behaviour is widely used to understand individuals' intentions to share information. Factors such as personal beliefs, ethical standards, and perceived autonomy significantly influence their willingness to disclose knowledge. Lin (2007a) highlights that a deeper understanding of knowledge-sharing behaviour requires examining additional motivational factors. In this context, the inclusion of "enjoyment" as a variable helps capture the intrinsic satisfaction individuals derive from sharing knowledge, thereby enhancing their intention to participate in such activities.

Knowledge sharing is also driven by an individual's interest in helping others learn and grow (Paulin and Suneson, 2022). However, research indicates that employees are often reluctant to share their expertise due to personal or organizational barriers (Barner-Rasmussen, 2025). Amayah (2023) further identifies that individual benefits, social norms, and community interests significantly influence knowledge-sharing practices. Therefore, understanding these factors is essential for organizations to foster a culture that encourages effective knowledge exchange.

ii. ORGANIZATIONAL FACTORS:

Knowledge sharing among employees is significantly influenced by managerial support and organizational culture. Chen and Cheng (2022) emphasize that upper and middle management play a crucial role in fostering knowledge-sharing practices by implementing strategies and providing support that encourage employees to exchange information. Such support includes creating systems, policies, and an environment that promotes open communication and collaboration. Additionally, knowledge sharing is deeply embedded in the organizational culture, which comprises shared values, beliefs, rituals, language, and symbolic practices. Lee et al. (2024) highlight that employees' perceptions of knowledge sharing are shaped by this culture, which can either facilitate or hinder such practices. Furthermore, studies by Abili et al. (2025) and Han et al. (2025) indicate that organizations with cultures that actively promote knowledge exchange and integrate it into daily operations are more successful in sustaining effective information-sharing behaviours.

iii. TECHNOLOGY FACTORS:

Communities of Practice are groups of individuals who have a similar interest in common activities (Wenger and Snyder, 2000). Aljuwaiber et al. (2024) report that the knowledge sharing in the firms may be enhanced by the introduction of Communities of Practice (CoPs). Contextualized Play is a form of virtual interaction that is replicable. The other alternative to face to face interaction may be Virtual/Online Communities of Practice that can address the problem of the personnel being in different locations. The advantage of online or virtual Communities of Practice is in the fact that they enhance the degree of workplace communication and sharing information as they foster trust among people (Panahi et al., 2023). But, the failure of users to maintain these

sites would make meaningless and perception of Virtual/Online Codes of Conduct meaningless at the least (Hidayanto et al).

Research Gap:

Researchers are now examining the factors that affect the dissemination of information and its modes of transmission. The results indicate that the deficiency of IT-related research is associated with the industry's inadequate channels for information exchange compared to other sectors, such as academia and healthcare. Consequently, IT administrators in Telangana must be informed about the advantages of information-sharing programs.

Research Methodology:

A theoretical model based on the earlier studies of knowledge sharing was developed to explore the relationships that affect the information sharing behaviors in the IT industry. Finally, researcher would like to learn more about the interplay of individuals, processes, and technology to influence information sharing and the benefits that may result therewith.

Hypotheses:

The assumptions have been set through the available literature. The model of the research consists of three dimensions, which are person factors, organisational factors, and technology elements.

H1: Individual characteristics impact knowledge-sharing habits.

H2: Organisational characteristics affect knowledge-sharing behaviours.

H3: Technological considerations impact knowledge-sharing behaviours.

Results And Discussions:

The demographic profile of the respondents indicates a strong male dominance, with 81.3% male and only 18.7% female participants. The majority of respondents fall within the 25–34 age group (62.6%), followed by 35–44 (25.6%), suggesting a relatively young and mid-career workforce. In terms of job roles, most participants are senior staff (56.2%) and junior staff (38.9%), with very few in managerial positions, indicating limited representation from higher-level management. Regarding educational qualifications, a significant proportion hold a degree (64%), while 33.5% are postgraduates, reflecting a well-educated sample. Experience levels show that the largest group has 7–10 years of experience (32.5%), followed by 1–3 years (20.7%) and 11–15 years (19.7%), indicating a mix of early and mid-career professionals. Finally, the majority of respondents belong to technical roles (77.3%), while only 22.7% are from non-technical functions, highlighting a predominantly technical workforce in the study.

Evaluation of measurement models Measurement models.

Latent variables and their indicators have been measured using scales, which are proved to be accurate. Hair et al. (2020) observed that structural research is weakened by a poor measurement framework. The Chi-Square 2/df, CFI, NFI, GFI, IFI, RMR and RMSEA were used as model fit evaluation measures. The measurement model had an RMR 0.04, RMSEA 0.06 and CFI 0.883. The NFI was 0.787. The IFI index registered at 0.888. The GFI is 0.764. The criteria of measurement model fit show that the model is fitted well.

Measurement Model:

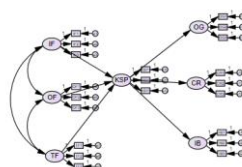


Figure 1 : Measurement Model

TABLE 2: Goodness of fit indices

Fit Index	Bench Range	Measurement Model
χ^2/df	<3; <5	1.903
CFI NFI	≤ 0.90 ; ≤ 0.80	0.883
IFI GFI	≤ 0.90 ; ≤ 0.80	0.787
RMSEA	≤ 0.90	0.885
RMR	0.060 to 0.08	0.067

TABLE 3: Hypotheses Testing Results

No.	Hypothesized Path	Standardized	Outcome
H1	Individual factors have an influence on knowledge sharing practices.	0.623	Supported
H2	Organisational factors have an influence on knowledge sharing practices	0.323	Supported
H3	Technological factors have an influence on knowledge sharing practices.	0.253	Supported

Path Model:

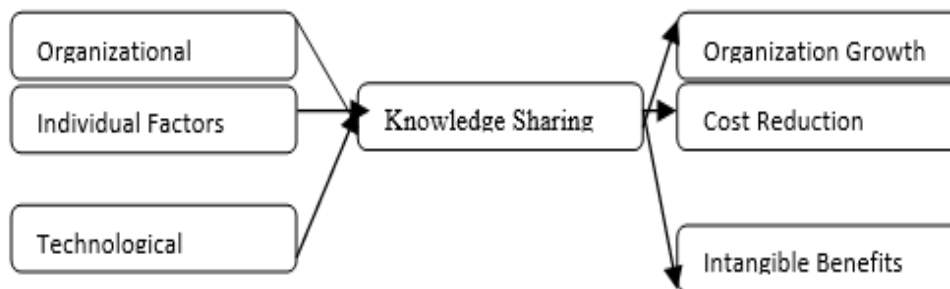


Figure 2: Path Model

Discussion:

The findings of this study highlight that knowledge sharing in the IT sector is significantly influenced by individual, organizational, and technological factors. Individual attributes such as self-confidence, motivation, trust, and reciprocity play a critical role in determining employees' willingness to share knowledge. Employees are more likely to engage in knowledge-sharing practices when they perceive mutual benefits and feel valued within a collaborative environment. Consistent with Hau et al. (2023) and Amayah (2023), the study confirms that trust and reciprocity enhance knowledge exchange, while subjective norms and self-efficacy further strengthen participation. Organizational factors, including top management support, reward systems, teamwork, and a culture that promotes openness, were also found to positively influence knowledge sharing. Additionally, technological advancements such as Web 2.0 platforms facilitate the transfer of both explicit and tacit knowledge, thereby improving communication and collaboration across the organization.

Conclusion:

The study concludes that effective knowledge-sharing practices are essential for improving organizational performance, especially in the dynamic and complex IT sector. Human factors such as willingness to share, reciprocity, sense of belonging, and perceived security, along with organizational support and technological infrastructure, collectively determine the success of knowledge-sharing initiatives. From a managerial perspective, adopting supportive human resource practices and fostering a positive organizational culture are crucial for encouraging knowledge exchange. As highlighted by Barney (1991), employees' knowledge, skills, and abilities serve as a source of sustainable competitive advantage, making it imperative for organizations to retain and leverage this intellectual capital. Despite its contributions, the study is limited by unexamined cultural differences and uncontrollable external factors. Future research should explore cross-cultural dimensions, mediating variables, and barriers to knowledge-sharing adoption to enhance the generalizability and effectiveness of such practices.

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