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The Value of Tacit Knowledge in Supply Chains

Shedding light on the intricate web of factors contributing to knowledge sharing behavior

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Introduction

The need for modern supply chains to quickly adapt and respond to challenging and increasingly unpredictable market conditions is critical to remaining competitive. In the realm of supply chain operations, where effective knowledge sharing and collaboration are paramount, the insights from this study underscore the importance of tacit knowledge inherent in the workforce. As 90% of the knowledge in any organization remains in the mind of the knower (Smith, 2001), the key intricacy lies in unleashing those embedded resources as intellectual capability is a fundamental asset in today's supply chain organizations.

This study provides valuable insights into team dynamics, particularly the role of intra-team relationships, trust and its influence on tacit knowledge sharing and team performance – answering the research question: How does intrateam trust influence the sharing of tacit knowledge in a supply chain, and how does this affect team performance?

Drawing on Nonaka & Takeuchi's work on tacit knowledge, the study delivers insights into the dynamic nature of knowledge, not merely acting as a transferrable commodity, but as a dynamic entity, intertwined with social relationships, practical skills, individual experiences, and cognitive processes.

Materials and methods

A 36-item questionnaire was developed for this study, using only pre-validated measurement items. The content structure of the questionnaire consisted of a (1) introductory part, a (2) socio-demographic section and finally the (3) questions covering all the variables under investigation. The introductory section focused on providing an overview of the duration and voluntariness of participation. The socio-demographic section aimed to obtain information on nationality, language, age, gender, work experience, current position, company size and company function. The main part of the questionnaire was the question section. Therefore, the first step was to narrow down the relevant literature and identify suitable pre-validated measures. Secondly, the relevant sets of questions were selected for each of the variables under investigation.

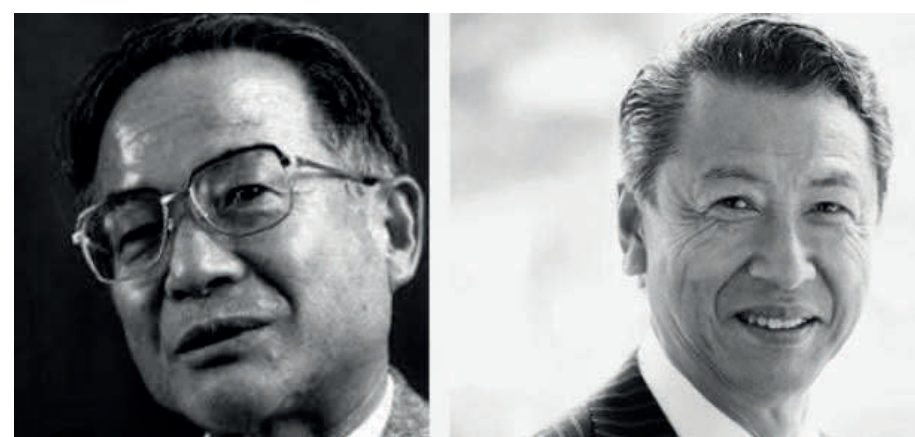
This study used purposive sampling in the form of an in-company supply chain survey, which proved to be a rich and unbiased source of data for further analysis. A total of 89 responses were received, giving a response rate of 39.22%.

Exploratory Factor Analysis (EFA) was used as a data-driven technique in this study and was conducted in SPSS (Statistical Program for Social Sciences). Principal component analysis (PCA) with varimax rotation was used to extract the main independent components.

Results

“ **Tacit knowledge is highly personal and hard to formalize, making it difficult to communicate or to share with others. Furthermore, tacit knowledge is deeply rooted in an individual's action and experience, as well as in the ideals, values, or emotions he or she embraces.** ”

-Nonaka, I., & Takeuchi, H. (1995:8). *The Knowledge Creating Company*.



1 Team Trust mainly revolves around the theme of team relationships, mutual understanding, and cooperation, suggesting that strong relationships and trust between team members are essential for effective teamwork.

2 Skill Awareness focuses on the awareness of team members' skills and knowledge. Organizations should ensure that employees are given ample opportunities to learn and develop.

3 Culture & Knowledge reflects the role of organizational culture in facilitating knowledge sharing among team members. It highlights the need for organizations to create a culture that encourages knowledge sharing.



The Iceberg Metaphor

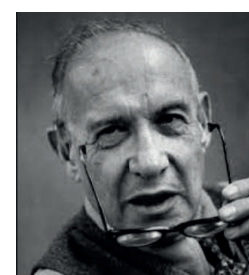
“ **The basic economic resource – the means of production – is no longer capital, nor natural resources, or labor. It is and will be knowledge.** ”

-Drucker, P. (1993:7). *The Rise of the Knowledge Society*.



“ **I shall reconsider human knowledge by starting from the fact that we know more than we can tell. This fact seems obvious enough; but it is not easy to say exactly what it means.** ”

-Polanyi, M. (1966:4). *The Tacit Dimension*.



Conclusions

This study presents an in-depth analysis of the constructs underlying effective teamwork, knowledge sharing and learning in a supply chain context.

The thematic analysis of the components of team trust, skill awareness, culture & knowledge, experiential learning, knowledge sharing and social adaptability sheds light on the intricate web of factors that contribute to successful teamwork and knowledge sharing in supply chains. These components cover a wide range of aspects, from interpersonal dynamics and mutual trust to experiential learning, awareness of colleagues' skills and social adaptability.

In the field of supply chain operations, where effective knowledge sharing and collaboration are paramount, the findings of this study underscore the importance of

- fostering strong inter-team relationships,
- promoting a culture of continuous learning and
- recognizing the wealth of tacit knowledge inherent in the workforce.

Considering these findings, future research should explore strategies for harnessing these forms of tacit knowledge within supply chain teams and further investigate the identified components in shaping team performance.

In summary, this study has highlighted the complex and multifaceted nature of knowledge and teamwork in a supply chain environment, paving the way for further exploration in this fundamental and intriguing area of research.

Literature cited

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