International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Leveraging *Tacit knowledge* for Strategic Marketing Development and Decision Making in a Dynamic Business Environment: A Review

Sofia Yustiani Suryandari [1]

[1,] Faculty of Economics and Islamic Business UIN Prof. KH Saefuddin Zuhri, Doctoral Program in Management Science Faculty of Business and Economics Universitas Islam Indonesia

**Coresponding author: sofiafebi16@uinsaizu.ac.ic, 23935007@uii.student.ac.id*

Abstract

This article examines the pivotal function of tacit knowledge in marketing and organizational decision-making within evolving business contexts. Tacit knowledge, which is often personal and challenging to articulate, serves as a strategic resource that enables organizations to comprehend unstated customer preferences, behaviors, and needs, thereby creating a competitive advantage. The integration of tacit knowledge into marketing strategies is crucial for organizations to respond effectively to market changes and meet customer expectations. The development of effective marketing strategies is increasingly *reliant on the intuition and experience of leadership teams, which are supported by marketing analysis and strategic tools. In complex and rapidly changing business settings, a holistic and intuitive managerial approach is crucial for strategic decision-making, particularly under uncertainty. However, transferring tacit knowledge among team members poses challenges, such as a lack of trust and poor interpersonal relationships. These issues can be addressed by fostering strong communication and a culture of knowledge sharing within organizations. While technology can aid in the transfer of tacit knowledge through knowledge management systems and collaborative platforms, it must be complemented by efforts to build trust among individuals*.

Keywords*: *Tacit Knowledge, Marketing Development, Strategic Decision Making, Intuition and Experience

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

INTRODUCTION

In an increasingly dynamic market, characterized by constant change and heightened customer expectations, knowledge has emerged as a key resource for organizations seeking to build and maintain a competitive advantage. An organization's ability to acquire and disseminate pertinent information about its customers and competitors is a significant determinant of its success. In this context, organizations that excel in this endeavor tend to outperform their competitors (Jaworski & Kohli, 1993). *Tacit knowledge* in marketing is an important factor. Usually in the development of the marketing process, what matters is the creativity and skill of marketing practitioners in advertising, distributing and selling. It consists of concepts and strategies, environmental analysis, product management, organizing partnerships with producers, and building relationships with customers and creating dependencies. These things are called marketing know-how. Sometimes, the experience does not appear in the form of manuals, guidebooks, documents, technical reports, business rules, procedures, databases, and so on. This knowledge is called tacit knowledge (Azmi & Adriman, 2018)

LITERATURE REVIEW

Tacit Knowledge in General and Business Contexts

The conceptualization of tacit knowledge is characterized by a considerable degree of heterogeneity. Some argue that *tacit knowledge* is actual knowledge. It is argued, however, that the articulation of tacit knowledge is ultimately inevitable due to the inherent limitations of time and effort. According to (Dampney et al., 2002) *tacit knowledge*, in practice, includes at least an intermediate foundation, consisting of a set of articulable and non-articulable parts. The majority of collective knowledge capital is embedded in the experiences, knowledge and abilities of individuals (Puusa & Eerikäin, 2002), (Puusa & Eerikäinen, 2010). The majority of collective knowledge capital is shaped by individual experiences, knowledge and capabilities (Ståhle & Grönroos, 2002).. *Tacit knowledge* is often difficult to define, due to its inexpressible characteristics. Literature reviews highlight the impact of *tacit knowledge* on specific knowledge management topics and also include organizational learning, intellectual capital, knowledge management strategies, and so on.(Venkatachalam & Busch, 2012). For any business, access to *tacit knowledge* can represent a competitive advantage, whereas explicit knowledge, on the other hand, is available to all companies. The transformation of *tacit knowledge* into collective explicit knowledge within a company results in greater potential for synergy and innovation (Olaisen & Revang, 2012). (Olaisen & Revang, 2018). The concept of *tacit*

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

knowledge plays a very important role in the theoretical framework of "Knowledge-Creating Firms"(I. Nonaka, 2009). Implicit knowledge as an important strategic resource for the company (Spender, 1996)It has been demonstrated that knowledge transfer is a positive correlate of team performance. In addition, knowledge sharing among team members is essential for effective and efficient task completion. (Wang et al., 2018)

Introduction to the concept of tacit knowledge in marketing

Organizations develop customer satisfaction-oriented strategies to achieve strategic and sustainable business success. To execute a successful customer-focused strategy, organizations must integrate their internal and external marketing activities (Ferdous et al., 2013). The challenge organizations face in achieving competitive advantage through effective *tacit knowledge* management lies in how to capture such *tacit knowledge*, which is inherently personal and subjective. In contrast, knowledge that has been "mechanized" can be accessed and used even when the original source of the knowledge has left the organization. (Ikujiro Nonaka et al., 1996). *Tacit knowledge* can be defined as the ability of employees to solve problems, sell findings within the organization, and develop innovative solutions. This ability is further augmented by political skills, intuitive abilities and sensitivities, analytical abilities, the ability to develop ideas and design innovative products or services, and an understanding of the company's strategic issues. (Hackley, 1999). For a company to adopt a market-oriented attitude, it must first generate information regarding customer needs and preferences, as well as the external factors that influence them. This information must then be disseminated to all departments of the company, so that they can respond by designing and implementing products and services that meet the identified customer needs and expectations (Kohli & Jaworski, 1999). (Kohli & Jaworski, 1990)

The importance of tacit knowledge in decision-making and marketing strategy

Tacit knowledge of construction organizations is considered as the most important strategic asset, which is the only renewable and sustainable foundation for organizational operations and competitive advantage. (Chen & Mohamed, 2010). *Knowledge management* activities related to *tacit knowledge* must be carried out by the organization to facilitate the achievement of its long-term organizational goals. (Yuliasih et al., 2018).. In addition, it is very important to understand that managerial competence and effectiveness cannot be achieved just like that, such competence and effectiveness will emerge over time as managers become familiar with the norms, routines, and practices

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

that define their roles (Bennett III, 1998). According to (Haddad, 1996), there are five fundamental characteristics of the decision-making process that are important for making good economic decisions. These characteristics include: the structure or level of decision-making, decision-making procedures, the way information flows, the criteria used to evaluate decisions, and the incentives that drive the formulation and implementation of decisions. *Tacit knowledge* is essential in decision-making, especially in complex and dynamic environments. The concept of *tacit knowledge* encompasses the intuitive understanding and experience that individuals use when making decisions, often without being able to explicitly articulate the reasons behind their choices. This form of knowledge is deeply embedded in the cognitive processes of experts, allowing them to recognize patterns and make judgments based on past experiences and situational cues. In the context of marketing, for example, *tacit knowledge* enables managers to respond effectively to changes in market and consumer behavior, even when those responses cannot be fully explained through formal models or codified knowledge. (Hackley, 1999). The role of *tacit knowledge* in marketing strategy has significant consequences, encompassing unarticulated insights and experiential understandings that provide the basis for strategic decision-making processes. This form of knowledge provides marketing professionals with the capacity to respond intuitively to market dynamics and consumer behavior, often in ways that cannot be fully captured by formal models or codified knowledge (Henry, 2006). This requires the application of competencies including sensitivity to market fluctuations, the capacity to conceptualize strategic concepts, and the ability to align these concepts with consumer needs and production capabilities. (Hackley, 1999). The subject of *tacit knowledge* has attracted the attention of scientists in various disciplinary fields. Nevertheless, a comprehensive understanding of the mechanisms through which *tacit knowledge* is conveyed in an organizational context and, subsequently, the formulation of effective strategies for its acquisition and utilization is still underway (Arnett et al., 2021).

How *tacit knowledge* helps in understanding unwritten customer preferences, behaviors, and needs

Recent literature on corporate strategy and entrepreneurship strongly advocates a shift in focus back to customer needs, arguing that theories of strategic entrepreneurship should include consideration of customer needs, as customer needs signal opportunities to create value and are integral to the design of business and entrepreneurial models.(Amit & Zott, 2012). The example in Chin illustrates that the impact of rising

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

disposable incomes and rapid demographic changes on the evolving consumer landscape. In this context, the term "consumer" is becoming increasingly vague, reflecting a shift towards more complex, differentiated and refined needs. (Conick, 2019). At the same time, a large proportion of the population in developing countries can be placed in the so-called "base of the pyramid" segment. This includes individuals who are unaware of or unable to articulate their needs due to factors such as illiteracy and lack of consumption experience. (Nakata & Weidner, 2012).. The role of *tacit knowledge* in understanding unwritten customer preferences, behaviors, and needs cannot be underestimated. By facilitating experiential learning from past marketing actions, companies can interpret and encode new market developments, thereby gaining invaluable insights into unspoken customer wants and needs. (Christensen et al., 2016). This path-dependent *tacit knowledge* fosters an absorptive capacity that enables companies to understand the causal patterns of market events and pain points of customer experiences in a given context. In the event of unexpected events or behaviors, experiential market learning enables firms to identify mismatches between current and past market experiences. This encourages companies to challenge existing assumptions about customers and pushes them to diagnose patterns that cause anomalies, which in turn leads to new understandings that reveal customers' unconscious desires. (Day & Schoemaker, 2006)

Development of effective marketing strategies through intuition and experience

Corporate leadership teams are increasingly using core marketing analytics and strategic tools to understand market dynamics, revenue impact and customer value. Non-marketers are using these frameworks to shape new business strategies, positioning marketing's analytical and strategic components at the forefront of corporate decision-making. (Patterson et al., 2014). The contemporary business environment presents an unprecedented level of turbulence, complexity and change for organizations. Traditional managerial approaches must be upgraded to ensure business survival. The ability to make sense of complexity requires holistic, lateral and intuitive ways of thinking, which can be developed through the development of right-brain skills. These skills should be recognized as critical components for identifying, discussing, and driving growth in the business environment Right-brain skills are indispensable for the advancement of the five core qualities of a continuously learning organization, customer-centric vision, systemic thinking, alignment, empowerment, and openness. (Lank & Lank, 1995). In the field of social psychology, the concept of intuition has been a major focus. In this context, it has

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

been asserted that "intuition plays an important role in interpersonal interactions, influencing our perceptions of and responses to others" (Neisser, 1963). (Neisser, 1963). Intuitive processes are particularly important in the context of marketing strategy, especially when the environment is defined by dynamics and uncertainty. Intuition allows marketers to synthesize large amounts of data and make rapid decisions when information is incomplete or when conventional analysis techniques prove inadequate. This factor is particularly important in high-velocity markets, where the capacity to adapt quickly to emerging trends is critical. Intuitive synthesis enables the identification of subtle and qualitative balances that may not be captured through rigorous models, thus improving the quality of decision-making in such contexts. In addition, intuition is based on a comprehensive understanding of the situation and past experience, thus making it a valuable asset in strategic decision-making (Quinn, 1985). Intuition is a process that involves synthesizing large amounts of information and drawing on past experience to make decisions, particularly when knowledge is limited or incomplete or when traditional methods of analysis prove inadequate. Intuition is thus different from traditional management theories, which often emphasize systematic and careful analysis as the superior approach to decision-making. Traditional theories rely heavily on quantitative data and formal planning, whereas intuition is a more holistic and experience-based process of understanding a situation. Managers can reduce the bias associated with expert intuition by explicitly checking for discrepancies between the current situation and their previous experience before making a decision. This requires recognizing that small differences in a situation can create new opportunities and may require a different response than previously experienced. For example, marketing teams can utilize their tacit knowledge of cultural nuances and consumer trends to develop campaigns that evoke emotional responses from target audiences. These campaigns may include the selection of imagery, language or themes that align with the unspoken values and desires of the audience, ultimately leading to more impactful and engaging campaigns. Such insights are usually gained through years of experience and engagement in the market, allowing marketers to intuitively understand what will appeal to their audience without relying solely on explicit data or analysis (Walsh et al., 2022).

Tacit Knowledge Management in the Marketing Team

Challenges in transferring *tacit knowledge* between team members

The transfer of *tacit knowledge* among team members is a complex process, which is fraught with various challenges. First, *tacit* knowledge is inherently difficult to articulate

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

and transfer because it is acquired through experience, deep interaction, and learning-by-doing, thus making it a highly memorable and challenging form of knowledge to convey (Kotler et al., 2006). (Kotler et al., 2006). Moreover, the absence of mutual understanding and trust among team members can increase these challenges, as effective transfer of tacit knowledge often relies on strong interpersonal relationships and communication (Arnett & Wittmann, 2006). (Arnett & Wittmann, 2014).. The existence of dysfunctional relationships, such as those often found between sales and marketing teams, can hinder the process, as conflict and mistrust create an environment where individuals can ignore or antagonize each other, thus further complicating the knowledge sharing process (Hughes et al., 2012).(Hughes et al., 2012)

Approaches to managing *tacit knowledge* in organizations

Approaches to managing *tacit knowledge* in organizations include fostering strong interpersonal and communication relationships, which are essential for effective *tacit knowledge* transfer. Organizations can enhance knowledge sharing by developing mutual understanding and trust among team members, as these factors mediate the relationship between knowledge sharing and its effectiveness. (Arnett & Wittmann, 2014)Socialization efforts, such as team building activities and cross-functional collaboration, can encourage the development of mutual understanding, facilitating the transfer of *tacit* knowledge (Becerra et al., 2014). (Becerra et al., 2008).. In addition, developing an organizational culture that prioritizes and encourages knowledge sharing can help overcome the challenges inherent in *tacit* knowledge transfer (Becerra et al., 2008). (Becerra et al., 2008).. Some strategies for managing *tacit knowledge* according to (Basit et al., 2017) may include:

1. Socialization: Encourage informal interactions and social networks within the organization to facilitate the sharing of *tacit knowledge* through direct experience and observation.
2. Formal and Informal Meetings: Organize structured and casual meetings to provide a platform for employees to share their insights and experiences, which helps in capturing *tacit knowledge.*
3. Cross-Functional Teams: Utilize teams consisting of members from different departments to combine diverse expertise, which helps in the interpretation and dissemination of *tacit knowledge* across the organization.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

4. Institutionalizing Knowledge: Developing practices and systems that embed tacit knowledge into organizational processes, thereby expanding the organization's knowledge base.

Integrating *Tacit Knowledge* with Technology

How technology can support or facilitate the application of *tacit knowledge* in marketing

Integrating *tacit knowledge* with technology involves utilizing tools and systems to facilitate the sharing and management of this inherently complex form of knowledge. While technology is highly effective in collecting and transferring explicit knowledge, it can also support the transfer of *tacit knowledge* by improving communication and collaboration among team members. For example, technologies such as collaborative platforms and knowledge management systems can provide an environment where employees can share experiences and insights, thus aiding the socialization process required for *tacit knowledge* transfer. However, it is important to note that technology alone cannot capture the depth of *tacit knowledge* technology must be complemented by efforts to build trust and mutual understanding among individuals (Arnett et al., 2021). According to (Basit et al., 2017), technology can support or facilitate the application of tacit knowledge in marketing through several mechanisms:

1. Enhanced *Customer Relationship Management* (CRM) system: Technology can enhance *Customer Relationship Management* (CRM) systems by integrating employees' *tacit knowledge* about customers. This integration enables more informed strategic marketing decisions by capturing insights that are not easily codified.
2. Knowledge Sharing Platforms: Technology platforms such as collaborative tools and social media can facilitate the sharing of *tacit knowledge* among employees. These platforms enable the exchange of experiences and insights, which can be crucial for developing effective marketing strategies.
3. Cross-Functional Team Interaction: Technology can support cross-functional team interactions by providing tools that enable collaboration and communication. These interactions help in exploring and integrating explicit and tacit knowledge, leading to a more comprehensive marketing strategy.
4. Customer Knowledge Management System: IT systems can capture and analyze customer interactions, integrating *tacit knowledge* into marketing strategies. This approach helps in understanding customer needs and behavior more deeply, leading to innovative business models.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

DISCUSSION

By utilizing *tacit knowledge*, companies can improve their marketing strategies through a deeper understanding of customers' needs and preferences that are not explicitly stated. This comprehension facilitates the formulation of more efficacious and customer-centric marketing initiatives, which ultimately culminates in augmented customer satisfaction and loyalty. Moreover, incorporating tacit knowledge into business processes has the potential to stimulate innovation and adaptability, enabling companies to respond more swiftly and effectively to changes in the market and to maintain a competitive advantage. Furthermore, harnessing tacit knowledge can enhance cross-functional collaboration and the dissemination of knowledge throughout the organization, thereby facilitating more comprehensive and well-informed decision-making processes.

CONCLUSIOM

The role of tacit knowledge in marketing development can help organizations understand customer preferences, behaviors, and needs that are not explicitly stated. By utilizing experiential learning from past marketing actions, companies can interpret and encode new market developments, gaining invaluable insights into unspoken customer desires. Tacit knowledge drives absorptive capacity, allowing companies to understand causal patterns in market events and customer experiences, which is crucial for diagnosing anomalies and uncovering unrecognized customer desires. In improving team performance, *tacit knowledge* is a strategic resource and facilitates effective task completion through knowledge sharing among team members. The aforementioned approach may be leveraged to devise customer-oriented strategies that culminate in strategic and sustainable business success.

REFERENCE

Amit, R., & Zott, C. (2012). Creating value through business model innovation. MIT Sloan Management Review.

Arnett, D. B., & Wittmann, C. M. (2014). Improving marketing success: The role of tacit knowledge exchange between sales and marketing. Journal of Business Research, 67(3), 324-331. https://doi.org/https://doi.org/10.1016/j.jbusres.2013.01.018

Arnett, D. B., Wittmann, C. M., & Hansen, J. D. (2021). A process model of tacit knowledge transfer between sales and marketing. Industrial Marketing Management, 93 (December 2020), 259-269.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

https://doi.org/10.1016/j.indmarman.2021.01.012

Azmi, A., & Adriman, R. (2018). Marketing practitioner's tacit knowledge acquisition using Repertory Grid Technique (RTG). IOP Conference Series: Materials Science and Engineering, 352(1), 1-8. https://doi.org/10.1088/1757-899X/352/1/012059

Basit, A., Commer, P. J., Sci, S., Tahir, A., Khan, M. M., & Latif, M. I. (2017). Tacit Knowledge Augmented Customer Relationship Management Systems: An Empirical Investigation. Pakistan Journal of Commerce and Social Sciences, 11(3), 1005-1026. https://www.researchgate.net/publication/322330372

Becerra, M., Lunnan, R., & Huemer, L. (2008). Trustworthiness, risk, and the transfer of tacit and explicit knowledge between alliance partners. Journal of Management Studies, 45(4), 691-713.

Bennett III, R. H. (1998). The importance of tacit knowledge in strategic deliberations and decisions. Decision Management, 36(9), 589-597.

Chen, L., & Mohamed, S. (2010). The strategic importance of tacit knowledge management activities in construction. Construction Innovation, 10(2), 138-163. https://doi.org/10.1108/14714171011037165

Christensen, C., Hall, T., Dillon, K., & Duncan, D. S. (2016). Competing against luck. The Story of Innovation and Customer Choice. First Edition. New York, NY: HarperBusiness an Imprint of HarperCollins Publishers.

Conick, H. (2019). The west's great marketing opportunity in China. American Marketing Association, Available at: www. Ama. Org/Marketing-News/the-Wests-Great-Marketing-Opportunityin-China.

Dampney, K., Busch, P., & Richards, D. (2002). The Meaning of Tacit Knowledge. Australasian Journal of Information Systems, 10(1 SE-Selected Papers from the Information Systems Foundations Conference (ISF)). https://doi.org/10.3127/ajis.v10i1.438

Day, G. S., & Schoemaker, P. J. H. (2006). Peripheral vision: Detecting the weak signals that will make or break your company. (No Title).

Ferdous, A. S., Herington, C., & Merrilees, B. (2013). Developing an integrative model of internal and external marketing. Journal of Strategic Marketing, 21(7), 637-649.

Hackley, C. E. (1999). Tacit knowledge and the epistemology of expertise in strategic marketing management. European Journal of Marketing, 33(7/8), 720-736.

Haddad, L. (1996). The characteristics of decision making in a well-functioning economy. International Journal of Social Economics, 23(4/5/6), 207-220.

Henry, J. (2006). Creative management and development. Sage.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Hughes, D. E., Le Bon, J., & Malshe, A. (2012). The marketing-sales interface at the interface: Creating market-based capabilities through organizational synergy. Journal of Personal Selling & Sales Management, 32(1), 57-72.

Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. Journal of Marketing, 57(3), 53-70.

Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: the construct, research propositions, and managerial implications. Journal of Marketing, 54(2), 1-18.

Kotler, P., Rackham, N., & Krishnaswamy, S. (2006). Ending the war between sales and marketing. Harvard Business Review, 84(7/8), 68.

Lank, A. G., & Lank, E. A. (1995). Legitimizing the gut feel: the role of intuition in business. Journal of Managerial Psychology, 10(5), 18-23. https://doi.org/10.1108/02683949510085947

Nakata, C., & Weidner, K. (2012). Enhancing new product adoption at the base of the pyramid: A contextualized model. Journal of Product Innovation Management, 29(1), 21-32.

Neisser, U. (1963). The multiplicity of thought. British Journal of Psychology, 54(1), 1-14.

Nonaka, Ikujiro, Takeuchi, H., & Umemoto, K. (1996). A theory of organizational knowledge creation. International Journal of Technology Management, 11(7-8), 833-845.

Nonaka, I. (2009). The knowledge-creating company. In The economic impact of knowledge (pp. 175-187). Routledge.

Olaisen, J., & Revang, O. (2018). Exploring the performance of tacit knowledge: How to make ordinary people deliver extraordinary results in teams. International Journal of Information Management, 43, 295-304. https://doi.org/https://doi.org/10.1016/j.ijinfomgt.2018.08.016

Patterson, A., Quinn, L., & Baron, S. (2014). The power of intuitive thinking: a devalued heuristic of strategic marketing. In Competitive Intelligence, Analysis and Strategy (pp. 109-118). Routledge.

Puusa, A., & Eerikäinen, M. (2010). Is tacit knowledge really tacit? Electronic Journal of Knowledge Management, 8(3), pp. 307-318.

Quinn, J. B. (1985). Strategies for change: Logical incrementalism. Irwin.

Spender, J. (1996). Making knowledge the basis of a dynamic theory of the firm. Strategic Management Journal, 17(S2), 45-62.

Ståhle, P., & Grönroos, M. (2002). Knowledge management-tietopääoma yrityksen kilpailutekijäksi. 3. painos. Porvoo, WSOY.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Venkitachalam, K., & Busch, P. (2012). Tacit knowledge: a review and possible research directions. Journal of Knowledge Management, 16(2), 357-372. https://doi.org/10.1108/13673271211218915

Walsh, C., Collins, J., & Knott, P. (2022). The four types of intuition managers need to know. Business Horizons, 65(5), 697-708. https://doi.org/10.1016/j.bushor.2021.12.003

Wang, Y., Huang, Q., Davison, R. M., & Yang, F. (2018). Effect of transactive memory systems on team performance mediated by knowledge transfer. International Journal of Information Management, 41, 65-79.

Yuliasih, M., Mohamed, M., Yusliza, M. Y., Saputra, J., & ... (2018). A review of purchase intention, marketing mix and brand loyalty literature: Mini-review approach. Evaluation. http://www.ieomsociety.org/singapore2021/papers/948.pdf

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.