Categorisation of Tacit and Explicit Knowledge and its Implications for Organisational Growth in Higher Education Institutions

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Abstract: In this paper, we report on the categorisation of tacit and explicit knowledge and its implications for organisational growth in higher education institutions (HEIs), which are known as universities. We note that the two types of knowledge- tacit, which resides in a person's mind is acquired through personal experience over time, and explicit, found in manuals and documents- have become increasingly vital for organisational growth, particularly in universities, from the perspectives of operational effectiveness and the sustainability of lecturers' roles. Unfortunately, not all lecturers, students, and staff members in universities are familiar with categorising these two types of knowledge and the implications this knowledge portrays for organisational growth. Two research objectives guided this study: first, to examine how the two types of knowledge can be categorised for better application in universities, and second, to determine which of the two categorised types plays a key role in universities. A quantitative research method of PRISMA and interpretive content analysis was used in this study, wherein the authors examined and synthesised literature on tacit and explicit knowledge sourced from Scopus and Google Scholar databases. The findings revealed that the two types of knowledge were categorised based on their distinct functionalities in universities. The study indicates that lecturers now mix tacit and explicit knowledge for creating lecture notes and modules from diverse reading materials, assessing student submissions, delivering lectures in class, and conceptualising and drafting research papers. Tacit knowledge is more advantageous since much of what occurs in universities relates to lecturers' intuitive knowledge application in teaching, learning, and research, as well as in supporting students. Nevertheless, integrating both enables lecturers to develop, reflect, and gain a comprehensive understanding of their teaching and research practices. To foster engaging dialogue and continued participation in universities, the study suggests enhancing awareness of the various types of knowledge among lecturers and scholars, considering their diverse backgrounds.

Keywords: Tacit, Explicit, Knowledge, Organisational growth, Higher education institutions

1. Introduction

Higher Education Institutions (HEIs), also known as universities, have transformed into commercial enterprises that produce graduates for profit and revenue generation, serving as a means of exchanging goods and services to promote societal advancement. The term' universities' would be used in place of 'HEIs' in this study. The authors were prompted to question the qualifications that graduates obtain from universities, particularly those lacking the necessary knowledge to thrive in the workplace. Ideally, universities are established to foster innovation and creativity among individuals in addressing societal problems (Aithal & Maiya, 2023). As universities evolve through increased knowledge production and transfer from lecturers to students, the development of adaptable skills, critical thinking, and a commitment to lifelong learning in students becomes their core focus, thereby preparing students to handle complex future issues (Aithal & Maiya, 2023). With this continuous progress, mechanisms and tools that promote reflective innovations are needed to realise this lifelong learning, including technological integration, cultural relevance and inclusivity, competency-based education, and upskilling initiatives (Aithal & Maiya, 2023). Nonetheless, several universities in developing nations no longer consider whether students are adequately equipped with the relevant information and knowledge for problem-solving initiatives aimed at societal development. The significance of tacit and explicit knowledge in advancing society has become increasingly vital (Hayek, 2013), thereby encouraging scholars to continuously generate new knowledge that can positively impact humanity. The authors of this study reflect on the significance of knowledge in promoting societal advancement, as previously noted by Hayek (2013). Hayek (2013) emphasises the need to categorise tacit and explicit knowledge for a better understanding of organisational growth. The evolving nature of universities in equipping students for problem-solving initiatives in society necessitates the simplification and categorisation of knowledge. When knowledge is categorised, lecturers, students, and other staff members in universities can determine which type is most suited for addressing specific problems. Given that the human brain and mind hold hidden expertise and experience, tacit knowledge offers a solution to the challenges faced by universities. One of the challenges is the inability to identify the appropriate type of knowledge that addresses certain societal issues. It becomes crucial that when knowledge is categorised according to type and functionality, both lecturers and students will not be novices in selecting the right type of knowledge to apply in solving societal and personal problems. It is anticipated that

when graduates begin their studies in universities, they are equipped with the right type of knowledge to use, regardless of the context, rather than the current scenario in which many graduates are unsure of which type of knowledge can assist in addressing specific workplace problems.

The activities of teaching, learning, and research conducted in universities are supported by both types of knowledge. A practical example can be illustrated when a student in any university is assigned to write an essay on the "use of digital technologies," and the student is required to summarise the essay in two thousand (2000) words. The student completes the essay but is not sure how to conceptualise and internalise the essay as expected because the appropriate tacit type of knowledge required was not applied. The central issue here is that the student lacks the necessary knowledge to summarise the essay, which may lead to failing the module or course. The expectation is that if the student had known and applied the right type of knowledge, they would have understood how tacit knowledge functions. The understanding surrounding tacit knowledge encompasses experience and beliefs. The tacit type of knowledge is more advantageous than the explicit type, as it involves integrating experience with contextual information. Pears (1971) refers to tacit knowledge that comes with new ideas, insights, and innovations applied to human behaviour and organisational sustainability. These revelations, inventions, intelligence, and novel concepts cannot exist in isolation; therefore, it is essential to categorise and share them among lecturers and students to ensure continuous performance in higher education institutions. The successful outcomes of lecturers' work performance, competitiveness, and effective planning and decision-making in higher education institutions are linked to the various categories of tacit and explicit knowledge utilised.

In section two of this paper, we provided a background of the literature on tacit and explicit knowledge and their categorisation regarding their implications for organisational growth in universities. This was followed by research objectives that aim to close the knowledge gap of tacit and explicit knowledge and its implications for organisational growth in their various types, namely:

- To examine how the two types of knowledge can be categorised for better application in universities.
- Determine which of the two categorised types of knowledge plays a key role in universities.
- Assess the publication of papers by year.
- Analyse published papers by type.

2.   Background of the Study

The categorisation of tacit and explicit knowledge is crucial for the success of lecturers, students, and other individuals' work operations in universities. Most of what is obtainable in universities is the combined elements of tacit and explicit knowledge that enhance the teaching, learning, and research activities occurring in universities.

2.1   Tacit Knowledge

Tacit knowledge is a type of knowledge that is intrinsically personal, deeply rooted in individual experiences, and often difficult to define and express (Puusa & Eerikäinen, 2010). It relates to ideas, experiences, practical abilities, and intuitive insights that are hard to convey through words or symbols (Hvorecký, Šimúth, & Lipovská, 2015). The productivity of universities largely relies on tacit knowledge, particularly when lecturers carry out their responsibilities effectively. Much of the knowledge acquired by lecturers remains hidden until a specific task is assigned (Enakrire & Smuts, 2022). It consists of the knowledge that individuals retain in their minds, often acquired through practice, firsthand experience, and the environments in which they work. The desire for more tacit knowledge has led academics to take up roles such as editors, navigators, educators, information consultants, and gatekeepers of knowledge (Enakrire, 2025).
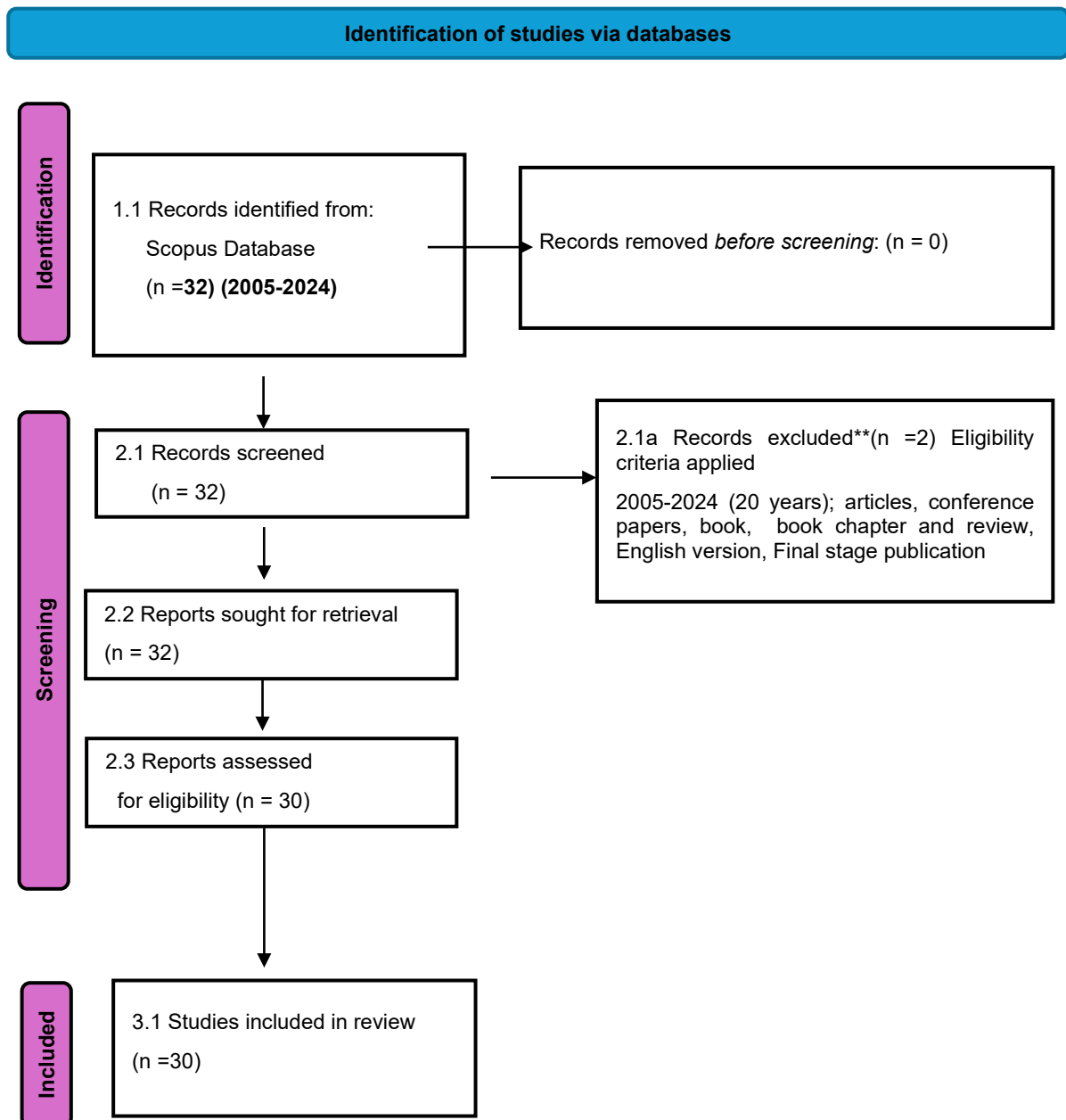
2.2   Explicit Knowledge

Explicit knowledge is a type of knowledge that can be articulated verbally and expressed in a manner that others can understand based on their inquiries (Davies, 2015). This type of knowledge is well-documented and easily shared, comprising facts, formulas, instructions, and everything that can be readily expressed, codified, and stored. Explicit knowledge is portable and can be easily disseminated through written documents and systematic processes (Carr, Miles-Board, Woukeu, Wills, & Hall, 2004). The roles that tacit and explicit knowledge play among lecturers, students, and other staff members are indispensable (Smith, 2001). The strategy for survival depends on how these groups utilise tacit and explicit knowledge in their work operations. Such knowledge can assist them in times of uncertainty, especially when they are uncertain about what actions to take. The availability and accessibility of tacit and explicit knowledge for work operations rely on ongoing engagement in

various responsibilities and discussions. In this sense, tacit knowledge is ingrained in them and is related to human endeavours. The key to the productivity of universities lies in the tacit knowledge embedded within their employees. Much of an employee's knowledge remains hidden until they are assigned a specific task or duty, at which point it begins to surface. Lecturers, students, and other staff members in universities can leverage both tacit and explicit knowledge for their benefit, depending on the tasks at hand. However, it is crucial to consider how both types of knowledge can be shared or disseminated to foster innovation for organisational growth. Many lecturers, students, and staff in universities may not have identified how the different types of knowledge function when applied. The utilisation of these types of knowledge depends on how they are recognised; hence, this study is significant in the context of universities.

In section three, we presented the research methodology for the study.

3. Methods

We applied two methods in this study. The PRISMA for data gathering and interpretive content analysis of documents. The PRISMA method harvested 32 articles from the Scopus database for data screening using a search string of *Article title, Abstracts and Keywords* of ("tacit AND explicit knowledge") AND (university). The eligibility criteria applied between 2005-2024 (20 years), focusing on articles, conference papers, books, book chapters and reviews. The selected papers were in the English version and final stage of publication, hence the 30 articles collated after included and exclusion criteria in the PRISMA process. The second stage employed interpretive content analysis (Drisko & Tina Maschi, 2015) of documents, harvesting 35 articles from the Google Scholar database. The essence is to critically evaluate each of the articles that relate to tacit and explicit knowledge. While the authors were scanning and reading through each of the articles, they identified those in the areas of tacit and explicit knowledge and how they were also categorised based on the interpretive content analysis method. The authors considered that interpretive content analysis is a research technique that focuses on comprehending the underlying meanings, contexts, and nuances within the data. This helps to obtain a deeper, more nuanced understanding of the content rather than merely counting words or themes in the text. The researchers selected 35 research papers that were different from the previously identified database of Google Scholar using the keywords "tacit knowledge and explicit knowledge" and categorisations of both the tacit and explicit knowledge that support the organisational growth in universities." How the authors of this paper came about this method was the interpretive content analysis method used, where they scanned and read through the title, abstract and content of each of the 35 articles. The articles examined showcased how organisational growth in universities has been impacted by the classified tacit and explicit knowledge articles harvested from the database. The authors concluded that this method provides a deeper comprehension of internalised literature associated with various occurrences. The conclusions of the study are covered in the following section, based on the interpretive content analysis of documents taken from the Google Scholar and Scopus databases. In universities, the focus on classifying explicit and tacit knowledge and how it affects organisational development was substantiated. Before conducting this study, the researchers submitted an ethical clearance application form to the School of Consumer Intelligence and Information Systems Research Ethics Committee of the University of Johannesburg, for a secondary data research project, with the title "categorisation of tacit and explicit knowledge and its implications for organisational growth in Higher Education Institutions" which was approved with the ethical number of 2025SCiiS025. Since the study primarily used secondary data, all consulted sources were referenced in the paper. The next sections address the PRISMA diagram, the study's findings of both PRISMA and the interpretive content analysis of the literature harvested. The main emphasis of the result highlights the publication by year, different types of papers harvested, categorised into tacit and explicit knowledge and their characteristics in universities.

Identification of studies via databases

Identification

1.1 Records identified from:

Scopus Database

(n =**32) (2005-2024)**

Records removed *before screening*: (n = 0)

Screening

2.1 Records screened

(n = 32)

2.1a Records excluded**(n =2) Eligibility criteria applied

2005-2024 (20 years); articles, conference papers, book, book chapter and review, English version, Final stage publication

2.2 Reports sought for retrieval

(n = 32)

2.3 Reports assessed

for eligibility (n = 30)

Included

3.1 Studies included in review

(n =30)

In Section four, the study's findings and contribution were presented, and the paper's conclusion is hinted at in Section 5.

4. Findings

4.1 Description of Tacit and Explicit Knowledge

This segment summarises the publication of papers by year, descriptions of tacit and explicit knowledge and sources from which they were extracted in the literature.

This segment presents the publication of papers by year.
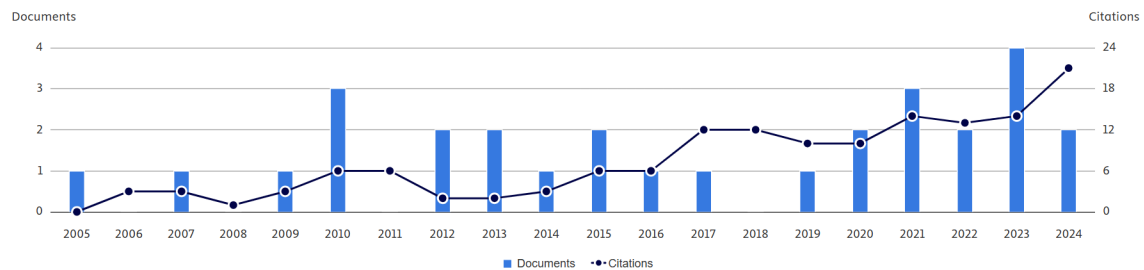
Figure 1: Publication of papers by year

The result in Figure 1, which reflects the publication by year, indicates that the progression of papers started rising from 2016 to 2018, but then it plateaued from 2019 to 2020. In 2021, it rose but dropped again in 2022, but took off from 2023 to 2024. The reason the progression of paper publication was not stable could be that the lecturers/scholars who publish were busy with other academic activities. There are situations where some papers take more than two years, especially those submitted to top journals, before they can go through all the stages of review, acceptance, corrections and publication. Interestingly, there were 162 citations with a 7 h-index over these periods.

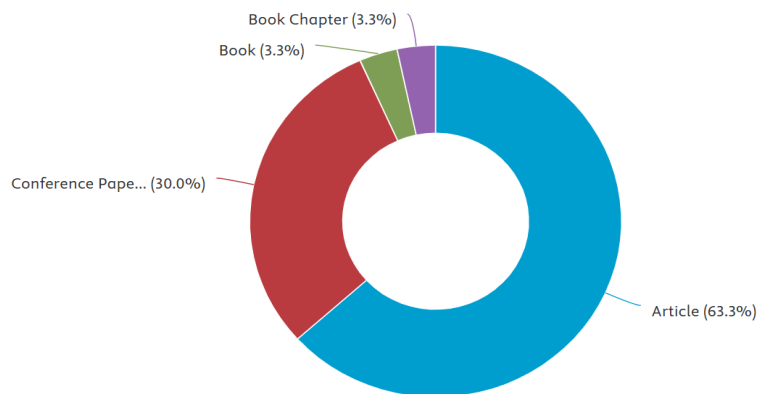This segment presents the publication of papers by type.

Figure 2: Publication of papers by year

The result in Figure 2 indicates that of the papers harvested from Scopus, the majority were communication through articles (63.3%), followed by conference papers (30.0%), and book/book chapters (3.3%). It is envisioned that the reason we have more papers in article form is that many recent happenings are publicised in articles. Many universities prefer their lecturers to publish their research findings in article form, and many scholars and researchers tend to consult articles more as they are used for promotion. Many universities also get incentives when their lecturers publish in articles.

This segment presents the categorisation of tacit and explicit knowledge.

Table 1: Categorisation of tacit and explicit knowledge

Tacit	Explicit
Individual skills	Manuals
Expertise	Procedures
Education	Documents
Experience	Video
Insights	How to guide
Intuition	Databases
Observation	Memos
Cultural beliefs	Records
Values	Notes
Mental model	Communicated data
Attitudes	

The result obtained in Table 1 indicates that the different categorisation of tacit and explicit knowledge is unique. Some of the identified elements in the tacit type of knowledge are difficult to convey through words or symbols because they are embedded in human thoughts, experiences, practical abilities, and intuitive insights. These elements reside in the human mind or brain. Another crucial issue is that they take much longer to attain. For instance, education, expertise, experience, individual skills, ideas, attitudes, values, observation, and cultural beliefs are built up over a long time. The more the individual engages in certain activities, the more these elements develop and enhance in the workplace. Drawing an analogy from the tasks of lecturers and medical doctors, we see how they interplay, particularly employing more of a tacit type of knowledge in rendering services. For example, when lecturers teach in the classroom environment, they apply tacit knowledge to unveil issues related to real-life situations. The lecturer uses various examples that are not completely present in the study modules, all to ensure that the students have a better understanding of the course or module being taught. Another example is Polanyi's (1967) theory of tacit knowledge dimension, where human knowledge exceeds what they can communicate. The expectation here is that lecturers know more than they can articulate because, during the delivery of lectures, lecturers elaborate more on the subject and concept under discussion with relevant examples, facts, experiences, values, and beliefs to support their argument. Lecturers in universities rely more on tacit knowledge when fulfilling their professional duties (Enakrire & Uloma, 2012). Drawing an analogy from a different perspective, let us consider the approach applied by medical doctors, who use their real-life experience in medical practices to understand the cause of ailments and consequently proffer solutions for treatment and permanent cures. Medical doctors who utilise evidence-based diagnostic analysis to make judgments based on explicit knowledge, and these insights are cross-fertilised to offer substantive recommendations to patients (Wyatt, 2001). This is also applicable to lecturers who teach and conduct research investigations in universities. The tacit knowledge of lecturers is concealed in their minds, which does not unfold as expected when delivering lectures in classrooms or academic forums, except during conversation and sharing of knowledge with others. This implies that knowledge sharing enhances professional growth among colleagues (Enakrire, Chisita & Chigwada, 2019).

In the case of explicit knowledge, most of the components consist of manuals, procedures, documents, videos, memos, notes, and records that could be communicated easily through diagrams, formulas, and language. The authors of this paper establish that any layman should understand and engage with explicit knowledge because it has been substantiated compared to the tacit type. Much of what we read in books, manuals, and research papers results from the transition of tacit to explicit knowledge. Someone may possess wonderful ideas, insights, or innovations, but if they are not made explicit, it might be difficult for someone to access them. Consequently, universities globally are spending millions of dollars reviewing and regulating curricula that address certain innovations that could be transformed into explicit knowledge for lecturers to utilise in supporting students, researchers, and other anticipated staff members in the institutions. This analogy aligns with Nonaka's SECI model, known as Nonaka's model of knowledge creation (Nonaka, 1994; Nonaka, Byosiere, Borucki, Konno, 1994; Nonaka & Takeuchi, 1995; Nonaka, Toyama, Konno, 2000; Nonaka, Toyama, Byosière, 2001a; Nonaka & Toyama, 2003). The SECI model originated from the information creation in innovating companies (Imai, Nonaka, & Takeuchi, 1985; Nonaka, 1988a; Nonaka, 1988b; Nonaka & Yamanouchi, 1989). In the SECI theory, four modes are identified, namely, Socialisation, which is tacit to tacit; Externalisation, tacit to explicit; Combination, explicit

to explicit; and Internalisation, explicit to tacit. The process proceeds to a new "level" following internalisation, which is why a "spiral" of knowledge generation is used as a metaphor. This study reflects that the categorisation of tacit and explicit knowledge can be likened to the SECI model postulated by Nonaka because every activity in universities carried out by lecturers, students, and staff members applies the SECI model in various ways, depending on the task. The SECI procedures are essential in universities, ranging from knowledge generation to sharing among lecturers and students in all academic teaching, learning, and research.

4.2 Characteristics of Tacit and Explicit Knowledge

This segment summarises the characteristics of tacit and explicit knowledge based on extracts from the literature.

Table 2: Characteristics of tacit and explicit knowledge

Characteristics	Tacit	Explicit	Ways of Capturing	Examples
Form of knowledge	Greater intuition	Tangible	Documents databases	Training
Transferability	During the discussion, task execution	Easily transferred	Manuals	Specific recipes
Codification	Challenges to codify	Codified and stored in documents	Procedures	Performing tasks
Storage	Peoples' brain	Libraries, databases, internet	Observation	Sharing best practices
Acquisition	Personal beliefs, experiences and mental models	formal education, reading	Experience	Initiating innovation
Expression	Social interactions, skills, and habits	Communicated in language	Mentorship	Building relationships
Dependence on Context	Highly context-dependent	Context-independent	Storytelling	videos
Learning Process	Subconscious immersion, activities over time	Conscious/deliberate study	Communities of practice	Memos
Replicability	Complex interplay; not easily replicable	Replicable or duplicated	Knowledge sharing platforms	Standard operating procedures
Documentation Effort	Documentation is challenging	Minimal to document	Person to person	Databases
Value in Innovation	Source of innovation: problem-solving	Develop new ideas	Discussion	Documents
Accessibility	Limited to the owner	Easily accessible	Learning under tutorship	Feedback
Measurement and Evaluation	Difficult to measure	Quantified and measured	Long years of experience passed to others	Personal wisdom

Source: Ashikuzzaman (2024) and Bloomfire (Understanding the different types of knowledge)

The result in Table 2 indicates that the diverse characteristics of tacit and explicit knowledge have distinguished various forms of knowledge existence, emphasising transferability, codification, storage, acquisition, expression, dependence on context, learning processes, replicability, documentation efforts, value in innovation, accessibility, and measurement and evaluation between tacit and explicit knowledge. These determinants serve as a panacea for solving real-life problems in universities and workplaces alike. The pervasiveness surrounding the characteristics of tacit and explicit knowledge is far richer than the disparities in the experiences of individuals unwilling to showcase what they possess within the organisation. This supports Oranga's (2023) claim that tacit knowledge has driven improvement through the learning occurring in universities. Oranga (2023) further notes that approximately 90% of the total knowledge within universities is tacit, which influences their overall output and effectiveness. Therefore, understanding the characteristics of explicit and tacit knowledge is crucial for efficiently managing and applying knowledge in any university.

5. Conclusion

The study highlights that tacit and explicit knowledge are fundamental for organisational growth in universities. These enable lecturers to perform the core function of teaching and learning daily. The elements that constitute the classification of tacit and explicit knowledge are multifarious. Tacit and explicit knowledge are believed to affect the organisational growth of universities, especially where knowledge is transferred among lecturers, students, and other staff. Although the classified types of knowledge exhibit some similarities and differences. The categorisation is vital because it indicates how and when tacit and explicit knowledge are utilised to improve research, teaching, and learning in universities. The research determined that certain aspects of tacit knowledge may be challenging to express through language or symbols, as they are rooted in human concepts, experiences, practical skills, and intuitive understandings. Nonetheless, the Nonaka SECI model of internalisation (from explicit to tacit), externalisation (from tacit to explicit), combination (from explicit to explicit), and socialisation (from tacit to tacit) has shown its ability to connect knowledge gaps regarding how the organisation should grow. This has enhanced the relationships and social interactions necessary for assisting students in their academic endeavours and objectives, tackling organisational issues, and promoting the professional growth of university staff. It has been shown that both tacit and explicit knowledge can support lecturers in their various job functions when they consistently share what is known with the unknown. This would assist every area of the lecturer's expertise in determining the best daily practices while adhering to policies and procedures in universities.

The study highlights that universities should build resilience by equipping instructors, students, and staff with relevant competencies (knowledge, skills, and attitudes) to effectively promote the organisation's goals and objectives. As uncertainty prevails and the information needs of students increase within this dynamic knowledge economy, universities are tasked with developing strategic methods to ensure that appropriately categorised knowledge, both explicit and tacit, is utilised to inform students about what they need to know for a strategic approach to guarantee success in their key performance areas upon graduation. Even as the study emphasises the vital importance of applying tacit knowledge for organisational growth within universities, it acknowledges the contextual variations that underscore the necessity for genuine types of knowledge that facilitate university development. Thus, the study advocates for the cultivation of both tacit and explicit knowledge in a classified manner to carry out tasks effectively. Nevertheless, a limitation of this study is that it does not investigate African universities. By integrating both, lecturers can develop, engage in critical thinking, and gain a thorough understanding of their teaching methods and research. To promote stimulating dialogue and sustained participation in universities, the study advises professors and other academics to enhance their comprehension of the diverse types of knowledge, given their different backgrounds.

AI and Ethics declarations: The use of AI was not part of this study while developing and writing the paper. Ethical considerations were adhered to where the topic investigated was approved. This means that declarations indicate that all consulted sources were referenced and cited during the research investigation.

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