



Competencies of strategic leadership in an academic library during a digital era



Authors:

Mbongiseni P. Magagula¹ 
MacDonald Kanyangale¹ 

Affiliations:

¹Graduate School of Business and Leadership, College of Law and Management Studies, University of KwaZulu-Natal, Durban, South Africa

Corresponding author:

Mbongiseni Magagula,
206515011@stu.ukzn.ac.za

Dates:

Received: 04 Feb. 2025

Accepted: 24 Apr. 2025

Published: 11 June 2025

How to cite this article:

Magagula, M.P. & Kanyangale, M., 2025, 'Competencies of strategic leadership in an academic library during a digital era', *Acta Commercii* 25(1), a1403. <https://doi.org/10.4102/ac.v25i1.1403>

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Orientation: Strategic leaders of South African academic libraries are key in strategy work, but researchers lack knowledge about their competencies in leading libraries during the digital era. Academic librarians are reshaping into digital curators and educators, addressing an identity crisis because of the integration of technology into library information services and the transition to the web.

Research purpose: This study investigates the key competencies of strategic academic library leaders in Durban, South Africa, for effective digital leadership in a public university.

Motivation for the study: There is a need for scholarly work to fill the gap in the under-researched area of competencies of strategic leadership considered key to leading an academic library during a digital era.

Research design, approach and method: The study utilised a qualitative approach, collecting interview data from nine top management team members of an academic library and analysing it using thematic analysis.

Main findings: The study identifies eight key competencies: sensing and clarifying strategic direction, strategic thinking, collective and shared excellence, creating and reinforcing strategic alignment, leveraging technological proficiency for productivity, leadership agility, developing people and programmes to navigate digital change and e-leading of hybrid teams.

Practical/managerial implications: Based on these findings, a framework of competencies for the strategic leadership of an academic library during the digital era is proposed.

Contribution/value-add: Strategic leaders, talent managers and line managers can utilise a framework to identify competencies and deficiencies crucial for developing future catalyst strategic leaders in academic libraries, particularly in the digital era.

Keywords: academic library; strategic leader; strategic leadership competence; digital era; library upper echelon.

Introduction

Academic librarians assume new roles in the digital era or information age, such as digital curators and educators. Simultaneously, the library is a digital hub and partner in knowledge creation in the contemporary world (Thirupathi 2024). The digital era, also labelled as the new information age, is characterised by the abundance of information and information overload, the relentless advancement of technology and the changing nature of expectations of product customers and service users (Vinuta 2020). In the academic library, users now expect instant access to information, personalised services, seamless digital experiences, 24/7 online access to resources and expert assistance through virtual services. The diversity of services by some modern libraries also includes lending out technology (e.g. video cameras, iPads and calculators) and enabling access to electronic resources at any time and from anywhere (Ashikuzzaman 2023). Vinuta (2020:728) surmises digital change by highlighting that '[librarians] have transitioned from gatekeepers of physical collections to facilitators of digital access and information literacy'. In the digital era, libraries face an identity crisis from integrating technology into library information services (LIS) and the library's transition onto the web. Thirupathi (2024) knows that librarians are under pressure to become technology experts while libraries democratise access to resources and promote digital literacy and citizenship in the online community (Ashikuzzaman 2023). There is also a new role in offering user-focused smart services such as help with reference and research. These new roles demand that librarians get new and relevant competencies for the digital and changing world (e.g. new research data management skills suited to digital scholarship) (Badenhorst & Raju 2023). Yee (2012) was able to foresee that libraries

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would face the problem of not having a pool of skilled staff ready to assume emerging new roles and leadership responsibilities in the digital environment. Table 1 depicts the variety of changes in the role of libraries and librarians, which are salient in reshaping the competencies of library workers at various levels in the digital age.

Library leaders are also championing digital ethics, bridging the digital divide and pursuing user-centricity (Thiruppathi 2024). Libraries have the potential to benefit from credentialing. In a nutshell, credentialing is about helping people gain skills through low-cost, short and less time-intensive options. Libraries can award badges or certificates for discrete sets of knowledge they provide exemplified by information literacy and digital media competency (ACRL Research Planning and Review Committee 2016).

There are three enthralling gaps in extant research on library leadership competence and strategic leadership relevant to the digital era. Firstly, Wong (2017) asserts that extant research on leadership competencies in the academic library needs to pay more attention to the level and scope of leadership. There is a research stream on academic library leadership, which has focused on skills without distinguishing requirements for tactical, supervisory and strategic levels of leadership (Ashiq, Rehman & Batool 2019). For example, an old but insightful study on essential leadership qualities required for the Association of Research Libraries (ARL) by Hernon, Powell and Young (2002) revealed four critical clusters of (1) managerial qualities, (2) planning skills, (3) personal characteristics and (4) general

areas of knowledge (e.g. scholarly communication and knowledge of financial management). A recent study by Ashiq et al. (2021) revealed that academic library leaders need to be visionary and innovative with effective communication (e.g. higher authorities, library users and the staff) and social skills to encourage a collaborative and agile culture in academic institutions.

Secondly, there is a scholarly gap and a need for research on the competence of academic library leaders to move away from a one-size-fits-all tendency. This move is fruitful for research to fathom more nuanced and contextualised competencies of academic library leadership, which vary according to tactical, supervisory and strategic levels of leadership. Leadership becomes more complex as one goes into higher organisational levels (Kanyangale 2017).

Thirdly, existing research on strategic leadership, turbulence and crisis is highly fragmented and has evolved differently to propel the generation of theory and valuable insights for practitioners such as library leaders in digital and turbulent times (Schaedler, Graf-Vlachy & Konig 2022). This article helps fill the gap by addressing the under-researched area of competencies of strategic leadership considered as key to lead an academic library during a digital era.

Research problem

Although leadership in libraries is not a recent phenomenon, limited research is available on the competencies of strategic leaders of the academic library, especially in the digital era in South Africa. Extant studies have focused on the competencies of academic library leadership in general (Ashiq et al. 2023), challenges faced by academic library leaders (Aslam 2020;

TABLE 1: Nature and variety of changes in the library in the digital era.

Area of change	Changes in the library in the digital era - Type of change		Source
	From	To	
Focus	Collection centricity	User-centricity, user-focused smart services	Negi and Srivastava (2014), Vinuta (2020)
Medium of information resource	One medium	Multimedia	Ashikuzzaman (2023), Le (2015)
Ontology of library	Library has wall The library has its collection In-sourcing of all activities	The library is on the web Information resources procured through consortia Outsourcing of most activities	Gabbay and Shoham (2017), Sharma (2019), Thiruppathi (2024)
Access-related role of librarians	Gatekeepers of physical collections	Facilitators of digital access and information literacy	Negi and Srivastav (2014), Vinuta (2020)
User expectations	Service in good time Users want print resources Impersonal service Users go to the library	Service anytime, everywhere Users want print, non-print, online resources Highly personalised service The library comes to users	Badenhorst and Raju, (2023), Cox (2023), Sharma (2019), Vinuta (2020)
Reach of resources	Local Local users	Global through networks Universal user	Thiruppathi (2024) Vinuta (2020)
Role of technology	Technology is not competing with librarians in task execution	Technology substituting, co-existing with librarians and helping them Technology for efficiency, control and consistency of service	Nicholson (2015), Quaquebek and Gerpott (2023)
Relationship of technology with leadership	Social influence and interpersonal trust mediated by face-to-face communication Low-tech	Social influence and interpersonal trust mediated by Advanced Information Technology (AIT). High-tech, selective adoption, practical use and blending of both traditional and digital modes of social interaction	Cox (2023), Van Wart, Roman and Wang (2019)
	Limited diversity of stakeholders	Increasing the diversity of stakeholders	Vinuta (2020)
	Leadership is exclusively in the human domain	Artificial Intelligence (AI) leaders assisting in leadership tasks in the library	Quaquebek and Gerpott (2023)

Le 2015), new roles in the digital era and the role of the public libraries in digital inclusion (Adedokun & Zulu 2022). Research has focused more on the competencies of academic library leadership in general but skirted the competencies of the leaders in the upper echelon or top management team (TMT) of these libraries in the digital era (Wong 2017). In short, competencies of strategic leadership in the academic library in the digital era remain understudied in South Africa. In addition to this gap, scholars such as Ashiq et al. (2023) have called for scholars of leadership in the library to focus on emerging digital and virtual leadership. The objective of this qualitative study is to explore the competencies considered by strategic leaders of an academic library as key to leading effectively in the digital era in South Africa. In pursuit of this research objective, the key research question is: What strategic leadership competencies are required for leading the academic library effectively in the digital era?

There are two distinct ways in which this study is valuable. Firstly, leadership development practitioners may find the identified nature and variety of strategic leadership competencies insightful for designing relevant training at the intersection of strategic leadership, academic library context and emerging digital and virtual leadership vital to leading in the digital era effectively. Secondly, this study has proposed a competence framework for the strategic leadership of academic libraries, which strategic leaders can use to self-assess their existing competencies and identify the need for further development to excel in the digital era. The article discusses the upper echelon theory, competencies and functions of strategic leaders. Subsequently, the article focuses on research methodology, results and findings before the conclusion.

Literature review

As this study focuses on competencies of strategic leadership, a clear understanding of the upper echelon theory, a robust understanding of competence as a concept and what strategic leaders do is cardinal to form a solid conceptual foundation.

The upper echelons theory

Today's history of strategic leadership is traceable to the late 1970s and early 1980s when scholars questioned whether leadership was relevant and affected organisational outcomes. For example, scholars from the field of organisational sociology undermined leadership, asserting that it had a minimal impact on organisational performance compared to environmental or organisational factors (Kanyangale 2017). At that time, leadership scholars were primarily focused on the actions and responsibilities of lower-level leaders related to short-term goals and the dyadic influence of leader and follower. As a result of this disdain, three distinct streams of leadership theory emerged, namely transformational, transactional and strategic leadership, to address the doubts about leadership effectiveness (Kanyangale 2017). Hambrick and Mason (1984) introduced the 'upper echelons perspective' to bolster the importance of

leadership by focusing on influential people at the top of the organisation. The focus on those at the top marked a clear shift and distinction from focusing on supervisory micro-level leadership 'within' an organisation to concentration on overall leadership 'of' the entire organisation (Kanyangale 2017). The upper echelon theory, as the seminal work on strategic leadership, asserts that 'organisational outcomes – both strategies and effectiveness – are viewed as reflections of the values and cognitive bases of powerful actors in the organisation' (Hambrick & Mason 1984:193). In essence:

[S]trategic theories of leadership are concerned with leadership "of" organisations... and are marked by a concern for the evolution of the organisations, including its changing aims and capabilities. In this regard, strategic leadership brings clarity to the issue of the level and scope of responsibility in leadership work. (Samimi et al. 2022:1)

Concisely, strategic leadership theory focuses on the dominant coalition or top 'executives who have overall responsibility for an organisation, their characteristics, what they do, and how they affect organisational outcomes' (Samimi et al. 2022:1). Strategic leadership is sometimes used broadly to refer to either a type of leadership style or leadership at the organisation's top levels. Later, strategic leadership was refined and extended to include how strategic leaders (e.g. CEO, TMT and Board of Directors) affect organisational outcomes (Finkelstein & Hambrick 1996). Understanding strategic leadership involves shedding light on what effective strategic leaders are doing to produce an organisation focused on strategy and desirable strategic results. In this study, top leaders or members of the TMT in the academic library are viewed as strategic leaders because they are leaders 'of' the entire academic library and make strategic and long-term decisions. Strategic decisions involve considerable organisational change (Campbell, Bilgili & Ajay 2021). Many strategic leaders, including those in academic libraries in South Africa, need contextualised frameworks and models to guide them in their work in the digital era. Quaquebek and Gerpott (2023) add that leaders in the academic library need e-leadership practices and understand artificial intelligence and how AI enables or takes over some leadership tasks traditionally associated with humans. Unfortunately, strategic leadership research lacks a robust discussion about the potential substitution of leadership skills and tasks with AI leadership. There are three tasks in which AI is already or will soon help human leaders (Quaquebek & Gerpott 2023). Firstly, AI leaders assist with tasks related to observing employees' work progress, offering task-related advice, helping with problems or contributing to effectively structuring the work process. Secondly, AI leaders will help consider followers' needs, motivate employees according to their preferences or bolster work engagement through high-quality interactions. Thirdly, AI will help leaders formulate an attractive vision for employees, spread enthusiasm and energy among followers or initiate change. While AI has mostly substituted tasks by lower to mid-level employees, machines will also perform tasks for strategic leaders.

Critics of the upper echelon theory assert that the theory uses demographic proxies (e.g. age, functional background, top team size and characteristics) to infer strategic leadership behaviours (Kanyangale 2017). Critics mock the seminal work on the upper echelon theory as a 'theory of group composition' because it fails to focus on the behaviour of strategic leaders and their effect on organisational outcomes. The current study adopted the upper echelon theory because it recognises TMT's strong influence and decision-making power to shape Direction, Alignment and Commitment (DAC) and performance outcomes. For this study, strategic leadership is defined as the functions performed by individuals at the top level of an organisation (CEOs, TMT members, Directors, General Managers) who are intended to have strategic consequences for the firm (Samimi et al. 2022). As this study focuses on the competencies of strategic leadership, it is prudent to grapple with the nuances related to the concept of competence.

Task or behaviour orientation in the scholarship of competence

To enhance the conceptual clarity of competence, it is prudent to delve into the nuances of task-oriented views of competence on one hand and person or behavioural-oriented views of competency on the other hand. Firstly, competence describes what people need to perform a job well (Arifin 2021). Competence as ability is uncovered by focusing on a cluster of related skills and knowledge relevant to a particular job, and which, when acquired, allow a person to perform a task or function at a high level of proficiency. In this way, competence is characterised by emphasis on task orientation, focus on results and description of the features of the area of work. Task performance is assessed against established standards and can be cultivated through training and development programmes. Secondly, Boyatzis (2011) upholds competency as a behavioural or person orientation that focuses on superior performers. Competency focuses on a person's behaviours and underlying attributes for exceptional work performance rather than the task. As such, competency is also referred to as behavioural competency (Arifin 2021). Competency describes how people behave when they do their jobs. Competency is traceable to the 1970 quest to understand the talent of outstanding people in their work (Boyatzis 2011). The current study seeks to uncover the required interrelated knowledge, abilities and behaviours that strategic leaders of academic libraries should have to do their job well in the turbulent and digital era. In this way, the focus is on the ability to do the job well rather than the outstanding performer.

Function: What do strategic leaders do?

Functions are the basis of understanding what is needed or done to be competent. However, there is a lack of consensus on strategic leaders' variety and number of functions (Samimi et al. 2022:1). A cursory look into the work of different scholars such as Ireland and Hitt (2005), Boal and Hooijberg (2000), Hart and Quinn (1993), Kanyangale (2017),

TABLE 2: Selected views on the variety and number of functions of strategic leadership.

Author(s)	Number of functions	Strategic leader functions
Ireland and Hitt (2005)	Five different functions	Defining strategic direction, investing strategic capabilities, developing human capital, promoting organisational culture with ethical practices, implementing balanced organisational control
Boal and Hooijberg (2000)	Three functions	Create and maintain absorptive capacity; create and sustain adaptive capacity; demonstrate managerial wisdom
Hart and Quinn (1993)	Four competing functions	Vision setter, motivator, analyzer, taskmaster
Kanyangale (2017)	Three organisational-level functions	Strategically iterate between humanising and commodifying organisational members; align priorities and resources to create value; shape and exploit competitive advantage and promote entrepreneurial culture
	Four different individual-level functions	Display opportunity-seeking wisdom; build appropriate social capital; entrepreneurial resilience and curiosity and practice-led learning
Samimi et al. (2022)	Eight different functions	Making strategic decisions, engaging with external stakeholders, performing human resource management activities, motivating and influencing, managing information, overseeing operations and administration, managing social and ethical issues and managing conflicting demands
Covey (1996)	Four basic roles or functions	<ul style="list-style-type: none"> • Pathfinding • Aligning • Empowering • Modelling

Samimi et al. (2022) and Covey (1996) is fruitful to gain some insights into the nature and variety of functions of strategic leaders. Without being exhaustive, Table 2 exemplifies the diversity of functions of what strategic leaders do.

For this study, the functions proposed by Samimi et al. (2022) are adopted because of two reasons. Firstly, these functions of strategic leaders are relatively new and were conceived after a systematic literature after the disruptions by COVID-19. The eight functions by Samimi et al. (2022) are not only recent but also embrace most functions highlighted by other scholars. Secondly, the functions are more refined to capture the complexity and variety of what strategic leaders in the academic library do.

Research methodology

This section describes how strategic leaders of the academic library in a selected university in South Africa were chosen and how data were collected and analysed.

Research paradigm

This inductive study adopted an interpretive paradigm because it is suitable for gaining multiple diverse, in-depth

and subjective perspectives of reality from the research participants. The interpretive paradigm resonates with this current study, which focused on exploring strategic leaders' views regarding the competencies considered vital to effectively lead an academic library in the digital era in Durban, South Africa.

Research design

The study adopted a qualitative exploratory research design as the focus was on collecting non-numerical data and inducing insights from participants' views of strategic leadership competencies necessary to lead the academic library effectively in the digital era. The exploratory and inductive research design was suitable for this qualitative study in exploring the different views of those in strategic leadership positions, mindful that there is limited existing research on strategic leadership competencies in the South African academic library, especially in the digital era.

Sampling

Purposive sampling was used to identify nine leaders (four men and five women) in TMT of a selected public university in Durban, South Africa. The criteria used to select participants hinged on (1) employment in the university library, (2) minimum of 3 years' experience of working as a strategic leader in the academic library, (3) membership of the academic library TMT and (4) willingness to openly discuss nature and variety of competencies considered key for academic library strategic leadership in a digital era, tasks and roles related to identified competencies. The strategic leaders at the university library were between 30 and 65 years old. Table 3 provides the profile of the strategic leaders who participated in this qualitative study.

Data collection

In-depth, semi-structured and virtual interviews using an interview guide were conducted with each member of the TMT in the selected academic library. The interview guide helped the strategic leaders reflect on their lived experiences and critical incidents, depicting the nature and variety of competencies they consider key to effectively leading the academic library in a turbulent digital era. Each virtual interview lasted about 40 min and was audio-recorded on MS Team. Follow-up interviews were conducted to fill any gaps in the collected data. Data collection ceased when further interviews could not generate any new data.

TABLE 3: Leadership level and number of participants ($N = 9$).

Leadership level	Leadership function	Department	<i>n</i>
1	Library director	n/a	1
2	Portfolio managers	n/a	2
3	Principal librarians	Library and information services	2
5	Principal	Special collections	1
6	Principal	Cataloguing and acquisitions	1
7	Principal	Circulation services	2

n/a, not applicable.

Data analysis

Participants checked the accuracy of transcribed data before thematic analysis, which involved open coding and constant comparison techniques by the researcher. Open coding was used to initially break down data into codes related to knowledge, skills and behaviours, which revealed competencies to perform tasks well.

The codes induced from line-by-line analysis of interview data by the researcher were constantly compared to each other to primarily group similar codes together before developing them into broad categories, revealing patterns of shared meaning regarding interrelated knowledge, skills and behaviours related to the competencies of strategic leadership to perform tasks well. Subsequently, the identified categories were also constantly compared to each other, grouping similar categories into rich and dominant themes of competencies of strategic leadership of academic libraries. In short, theme development involved organising codes into meaningful similar groups, creating categories to identify patterns and relationships, thereby capturing recurring elements into themes on the competencies of strategic leadership of academic libraries.

Research quality

Member checking allowed strategic leaders to give feedback on the accuracy of transcriptions and enhance data integrity. Member checks allowed participants to review, validate or correct any inaccuracies in the transcripts to achieve credibility.

To ensure dependability, this study has provided sufficient and detailed audit trail and information so that another researcher can replicate the research easily. Confirmability was achieved through the detailed description of findings and the use of direct quotes from strategic leaders of an academic library to express their views in their own words. The rich details of the research process, participants, context and results are key for transferability of results to similar contexts.

Ethical considerations

Ethical clearance to conduct this study was obtained from the University of KwaZulu-Natal Humanities and Social Sciences Research Ethics Committee (No. HSSREC/00006126/2023).

Results

Academic library strategic leaders considered eight competencies as key to the effective strategic leadership of an academic library in the digital era. Each of these competencies is presented in detail below:

Theme 1: Sensing and clarifying the strategic direction

Strategic leaders of the academic library revealed that the ability to sense (e.g. analyse situations and identify patterns)

and anticipate potential outcomes with a long-term perspective is a key competence. One strategic leader reflected on how members of the TMT in the selected university library were sensing, anticipating and strategising for the long-term direction up to 2030 but found that a strong emphasis on compliance with policies constrained innovation:

'Library leaders are sensing how to contribute towards the University's 2030 Agenda. The long-term direction of the library and how it has to adapt to current changes and technologies is crucial. However, in our case, there is conservatism on the side of library leaders and university IT teams collaborating with the library on future issues. The first thing library leaders do is observe policies. If everything concerns compliance with policies, it is difficult to bring about desired change and allow people to innovate.' (Participant 9)

Making sense of what technology to adopt, gains on operational efficiency and ensuring clarity on the dark side of substituting qualified staff with machines in the library was evident in this way:

'In the pipeline is the introduction of robots in [XXX] library services. When we introduce robots, they will take over the circulation functions currently performed by our circulation staff. The skills audit revealed that most of our circulation staff are qualified and able to perform more professional tasks than the tasks they are performing at the issue desk right now. Robots are essential to gain efficiency in our services or our operations, but there are conflicts with the better use of the skills of our circulation staff...so we are weighing the options.' (Participant 5).

Theme 2: Strategic thinking

Strategic thinking was considered vital for strategic leaders of an academic library if it was about the future direction combined with innovation, searching for creative solutions and clarity of digital vision. Participant 7 asserted that strategic thinking with vision and innovation was needed, but problematic when the digital vision of the library was missing:

'Strategic thinking without digital vision is not enough. You can have a strategy, but if you are not clear on the digital vision of the library, then it is a problem. The desired digital future must be clear, not blurred.' (Participant 7)

Another strategic leader added that timely thinking about interdependencies and proactive and creative solutions is very crucial in the digital era:

'Strategic thinking is about possessing creative ideas and seeing how technology enables and impedes interdependencies. Strategic thinkers analyse issues and develop new and proactive responses to changes as they occur.' (Participant 9)

However, creative and divergent thinking in the library was constrained by a strong rule-based culture, as exemplified by Participant 5:

'Here, crafting creative solutions is allowed if it is within the rules. Rules constrain creative thinking and thinking about the long-term very much.' (Participant 5)

Theme 3: Demonstrating collective and shared excellence

Participative decision-making, sharing responsibilities and accountabilities for results were critical elements of collective and shared excellence as key competencies. Below is how Participant 3 emphasised the collaborative and shared responsibility evident in the library to timely and effectively deal with issues:

'We have the director, three senior managers, and a group of managers who form part of the Library Executive. For example, if the director is not around, the principal librarian can make necessary decisions to deal with matters. When something goes right, it is celebrated collectively, and when something goes wrong, each involved team member is accountable.' (Participant 3)

Inclusivity and open decisions on technology adoption and use in the academic library were elaborated by Participant 4 in this way:

'If you look at how this library works, each librarian is part of the daily functioning of the library. Anyone can suggest that we introduce new technologies and new services. We discuss the ideas together. The library holds a weekly meeting, and everyone is expected to contribute to the open discussion and give their views on what technology changes are to happen or have happened already.' (Participant 4)

Theme 4: Create and reinforce strategic alignment in pursuit of a vision

Senior leaders were mindful of how to align themselves and people with the mission and vision of the university during the digital era. Participant 2 had the following to say:

'We align ourselves with the mission and vision of the University. We always emphasise to everyone: Subject specialists, Subject and Principal Librarians, staff in research commons..., and everyone here to align themselves with the mission and vision of the University.' (Participant 2)

Participant 7 elaborated on the role of horizontal alignment across units within the library, schools and IT but also vertical alignment across levels in the library hierarchy to get stakeholder buy-in as follows:

'We have library management meetings where we openly raise issues, discuss and make decisions. Sharing things openly in staff meetings is key to getting buy-in and developing trust. We hear and discuss operational and technology issues that have taken place in the library. Library staff are also members of school meetings where they update academics so that we are all one.' (Participant 7)

Theme 5: Leverage technological proficiency for productivity

The competence of leveraging technological proficiency for productivity entailed introducing and institutionalising digital technologies and associated efficiency gains in internal processes, which improve user experience in the digital era in the library. Participant 7 had this to say:

'A significant change is the introduction of technologies that serve our users better. The first was the introduction of RFID at the Medical Library. This technology allows self-checkout, a changed system and our circulation functions where the issuing and the returning of library material are no longer dependent on human intervention. We planned to roll this out in all our other branch libraries.' (Participant 7)

Enabling internal stakeholders through collaborative Internet, Computer, and Technology (ICT) tools, digital resources, skills acquisition and use of platforms to engage employees remotely and easily is part of leveraging technology, as illustrated below:

'In our work life, remote work and technology enable us and staff to efficiently work remotely on Zoom and Microsoft Teams as teams. The difficulty is for us leaders to motivate and influence remote workers. We need new IT and social skills for ourselves. We also have to support library staff and leaders in getting IT skills and effectively blend online and traditional social influence to get the best out of staff in a hybrid mode.' (Participant 3)

Employee and student-focused development was evident through online training, as reported in the quote below:

'Online training and several library guides, such as common styles of APA, Harvard, Chicago and South African Law Journal catering, are accessible in electronic form for new undergraduate and postgraduate students. Our plagiarism training is online; students self-enrol to gain knowledge about plagiarism. There is also literature search and electronic referencing training, such as EndNote.' (Participant 5)

Theme 6: Leadership agility

Leadership flexibility by quickly switching between styles where appropriate and consulting with users, schools and IT departments when adapting to the digital era was highlighted as crucial for strategic leadership:

'... [S]ome changes are taking place, such as remote working and access to e-resources in our library and those from other libraries. As a leader, you have to adapt to those changes. But there is no uniform style for every situation. Connecting quickly and consulting with users, schools, and IT is essential. I reflect, move to act soon, then go back and forth between what I have done and reflect again. I apply and switch leadership styles to suit the specific situation or trend changing our work.' (Participant 2).

Furthermore, scanning the environment, identifying what needs to be done and considering outcomes in the rapidly changing and dynamic digital situations are key for the agility of strategic leaders, as exemplified below:

'... As a library leader, I must constantly scan the environment, identify suitable technologies, and be clear on the outcomes. If we do not adapt quickly to changes as they occur, we will be behind.' (Participant 4)

Theme 7: Developing people and programmes to achieve change within rules

Below is how Participant 8 expressed her views regarding the necessity of strategic leaders to develop people to achieve change within the boundaries imposed by rules:

'Many programmes are aligned with the University's vision. Library leaders develop programmes, including training workshops and meetings, which help where it's more about adhering to rules and not innovation. The leaders also ensure others are developed to provide virtual services to students and researchers who may be off campus sometimes.' (Participant 7)

Theme 8: E-leading of hybrid teams

The effective use and blending of electronic and traditional, low-tech methods of social influence and leadership flexibility were necessary for team communication and performance as a strategic e-leader:

'We are careful when deciding whether to have in person functions and meetings or meet on virtual platforms to ensure we communicate as a team and our teams perform well. These days, we bring together all library members in person to interact, discuss, and share issues ranging from challenges to failures and improvements in our university library and community.' (Participant 4).

Leadership adaptability emerged as part of strategic e-leadership competence, especially after COVID-19:

'One has to lead teams in various contexts, both online and face-to-face. Selecting and using appropriate ICT tools or face-to-face to influence people is a critical competence after Covid 19. We want teams to adapt whenever there is a change or to drive change. As leaders, we should demonstrate flexibility and adaptability before team members can do that.' (Participant 6).

Discussion

This study explored the competencies of academic library strategic leadership to lead in the digital era in South Africa effectively. The findings reveal eight competencies of strategic leadership of an academic library in the digital era. Sensing and clarifying the strategic direction of an academic library are one of these key competencies for strategic leaders to be effective. Relentless focus on long-term orientation, an effort to gain operational efficiency and sensing the profound tensions between humans and machines such as robots are essential for the strategic direction of the academic library. Hart and Quinn (1993) see a strategic leader as a vision setter, while Covey (1996) thinks strategic leaders are pathfinders.

Nonetheless, this study asserts that strategic leaders in the academic library are less effective when they overlook the need to espouse an inspiring digital dimension of the vision of the academic library. Often, academic libraries are so focused on aligning with the university vision that they ignore clarifying their specific and inspiring digital vision (Harland, Stewart & Bruce 2021). Nicholson (2015) agrees that academic libraries are short sighted and need strategic thinking and fiscal agility. In a volatile, uncertain, complex and ambiguous context (VUCA) and digital era, sensing and clarifying strategic direction is challenging as one has to scan and understand the rapidly changing environment to avoid issues such as the uncritical adoption of technology. Strategic leaders must be well informed on the dark side of substituting people with machines in the library, especially in a country already facing significant unemployment.

Strategic thinking by strategic leaders of the academic library as a key competence constitutes elements such as future-oriented thinking, creative thinking and solutions and timely thinking about interdependencies of various aspects of an academic library. However, a robust rule-based culture constrains creative and divergent dimensions of strategic thinking necessary to rewrite the rules of the game and envision potential futures. The old but still insightful five-dimensional model of strategic thinking by Liedtka (1998) pronounces the necessity of systems perspective, intent-focused thinking and thinking in time, which connects the past, present and future to focus on what needs to be done to get the desired future. The model also applauds hypothesis-driven thinking as key to seeing and formulating future possibilities and plans. Intelligent opportunism, as part of strategic thinking, helps to re-examine and balance strategic intent with the flexibility to adapt strategy to emerging opportunities and changing situations.

Nicholson (2015) laments that the pursuit of transformation in academic libraries suffers because most librarians are 'boxed in' to predominantly think within regulations and strict guidelines rather than 'think outside the box' as the university academic library is interconnected not only to the university community but also local and global society in a digital era. The digital vision of the academic library is a strategic tool if individuals within the library are to marshal and leverage their strategic thinking capabilities, focus attention, resist distraction and concentrate for as long as it takes to achieve the strategic digital goal. More importantly, effective strategic thinking by strategic leaders in a VUCA is crucial to isolate and focus on a few critical and game-changing issues with the most significant impact on the academic library.

Notably, collective and shared excellence was also identified as key for the strategic leadership of an academic library. This finding resonates with the view that strategic leadership is about the individual leader, the relational, collective identity and performance (Kjellstrom, Stalne & Tornblom 2020). When there is mutual influence, team members collectively wield leadership influence, take on tasks typically reserved for a single leader and, when appropriate, offer guidance to fellow members to advance group objectives (Wu, Cormican & Chen 2020). A study conducted by Aslam (2019) in the United States (US) involving library directors, managers and senior librarians found that a shared vision is integral to collective library leadership, fostering readiness and empowerment for organisational change. Strategic leaders should not overlook the power of internal and external capital to build collective capacity through bonding social capital (e.g. solid connections and trust among homogeneous or similar people such as staff within library departments) and bridging social capital (e.g. benefits arising from connections, networks and trust between heterogeneous people such as staff in the library with schools, students, faculty and IT departments outside the library and University) (Claridge 2018). A study of the academic library at Mzuzu University (Mzuni) by

Kanyangale and Njoloma (2020) confirmed that social capital at the individual and organisational levels is crucial in building resilience within the library, the university and beyond for the library. However, it is unclear in the current study how strategic leaders in the academic library link up vertically with influential people in the hierarchy inside and outside the university as part of linking social capital.

The current study also found that leveraging tech-savvy for productivity (e.g. introducing and institutionalising public-facing digital technologies and technologies for efficiency of internal tasks, processes and staff) is critical for strategic leaders to lead an academic library. Research on the practice of McDonaldization of the library has focused on four dimensions, namely efficiency (e.g. the systematic removal of unnecessary time or effort in pursuit of an objective), calculability (the tendency to measure quality in terms of quantity), predictability (assurance that products and services are expected to be the same over time and avoiding giving surprises to customer) and control (replace humans with technology as it is easy to manage) in the academic library (Nicholson 2015). McDonaldization of the academic library reinforces standards and maximises resource efficiencies while also raising library users' expectations (e.g. fast service and less waiting in line for reference assistance) (Cho 2015).

Another notable finding is that leadership agility is critical for strategic leaders but may need to be more holistic. Overlooking creative and self-leadership agility weakens the overall agility of strategic leaders. Joiner (2019) developed a holistic leadership agility campus that integrates four agility types: context-setting, stakeholder, creative and self-leadership agility. Firstly, context-setting agility is the ability to scan the environment, discern opportunities and threats and set the strategic direction accordingly.

Strategic leaders in this study were effective in scanning the environment, framing initiatives (e.g. self-checking, RFID) to be taken and clarifying the outcomes that needed to be achieved. Secondly, strategic leaders were also effective in engaging internal stakeholders to address differences and gain alignment and buy-in, which is part of stakeholder agility. However, the stakeholder agility of strategic leaders was predominantly inward, overlooking the external, ad hoc and strategic approach to partnerships. In this way, the agility of strategic leaders was not holistic because of weak creative and self-leadership agility. Joiner and Josephs (2006) assert that creative agility is about solving problems and innovation by thinking outside the box and being resourceful to overcome obstacles. Self-leadership agility brings to the fore the significance of leading with self-awareness, using experience and feedback to accelerate learning and adapting to a leadership approach. In this study, strategic leaders were silent on whether and how they ensured accurate self-awareness but also accelerated their learning. Kanyangale and Pearse (2014) confirmed the weakness of self-awareness among junior leaders in South Africa who needed help identifying and specifying the leadership competencies they

had developed during a leadership programme and dynamic pathways of how their competencies evolved and developed over time. Strategic leaders in the academic library need to improve the creative and self-leadership dimensions of their agility (Nguyen et al. 2024).

As strategic leaders of an academic library focused predominantly on achieving strategic outcomes through stakeholder engagement and collaboration during the digital era, it is arguable that they were achiever leaders, according to the vocabulary of Joiner (2019). An achiever leader is distinct from an expert leader, who is a tactical problem solver with little stakeholder engagement (Joiner 2019). However, the most desirable level of agility and style of leadership when both the pace of change and complexity are high is called catalyst leadership (Joiner & Josephs 2006). A catalyst leader goes beyond achieving strategic outcomes to build individual and organisational capacity to meet any challenge in the most complex context with the high pace of change (Joiner & Josephs 2006).

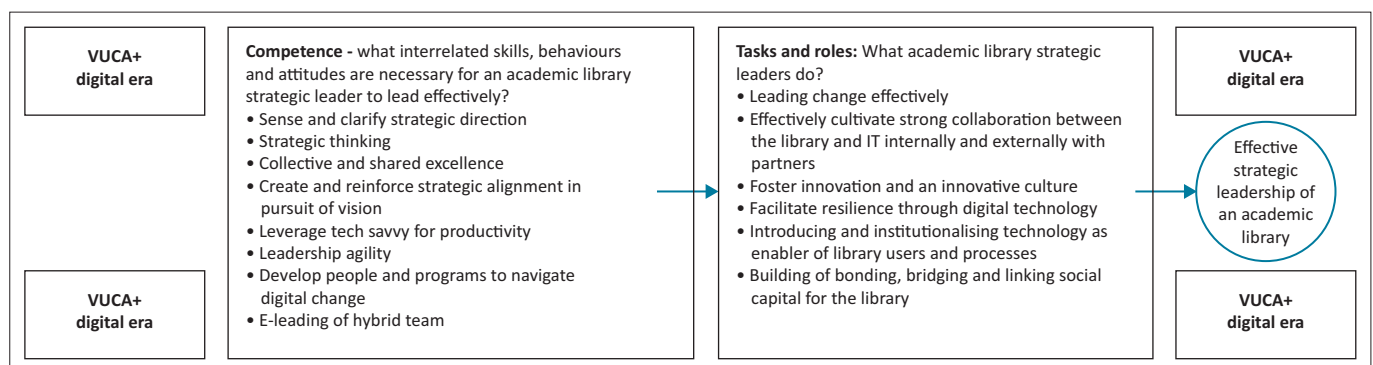
Notably, this study also found that developing others and programmes to navigate digital change is critical for strategic leaders in the digital era. However, strategic leaders in the current study could not craft and communicate an inspiring digital vision for the library. A study by Harris (2019) illuminated that library directors are significantly weak in strategic planning and budget management. These deficiencies illuminate the need for strategic thinking competence to enable strategic leaders to analyse strategic positions, create and evaluate strategic choices and put strategy into action in the academic library. The complaint by Harris (2019) that library directors perceive essential leadership skills development to happen at the director level rather than at other positions in librarianship is enough to call for timely and holistic leadership development of potential strategic leaders in the academic library.

Lastly, the study found that strategic e-leadership, typified by the social influence process mediated by technology, is a new and critical competence in the academic library. For members of Top Management Team (TMT) to excel, they

need strategic e-leadership, which is more than using and blending ICT with traditional methods to affect team members' output directly. Strategic e-leaders must be effective in ensuring that public-facing tech and in-ward-facing tech contribute to the building of inclusive community and interpersonal trust if employees are to deliver results and engage fully irrespective of their location.

Proposing a competence framework for academic library strategic leadership

The current study has identified eight different competencies of strategic leadership key to effectively lead a South African academic library during VUCA and the digital era. Additionally, there are six identifiable tasks and roles associated with these eight competencies. For example, individual-centric competencies of strategic thinking, sensing and clarifying strategic direction are related to leading change to adapt to the digital era. Academic library strategic leaders need to assume the role of vision setter and change leader in the academic library. The relational-oriented competence of shared and collective excellence demands the building of social capital and the pursuit of the connector role by the strategic leader and the library. Other collective and relational-oriented competencies, such as developing people and reinforcing strategic alignment, entail the key tasks of leading change, fostering innovation and creating an innovative culture. Leveraging technological proficiency is crucial not only in the tasks of leading change but also in leading teams, integrating individual and organisational-level efforts for efficiencies and resilience through digital technology. The competence of strategic e-leadership of teams is crucial for building community, social capital and social influence through the blending of traditional and digital tools across a range of contexts. Lastly, the competence of leadership agility is pivotal for rapidly introducing and institutionalising technology for productivity and efficiency and engaging stakeholders to get buy-in. The identified eight competencies and their related tasks and roles are presented in Figure 1, showing the proposed competence framework for academic library strategic leadership in the digital era.



VUCA, volatility, uncertainty, complexity, and ambiguity.

FIGURE 1: Proposed competence framework for academic library strategic leadership in the digital era.

Implications

The study has three implications for strategic leadership development, self-assessment of strategic leadership competencies and a steady supply of strategic leaders to lead academic libraries in the digital era.

Comprehensive and holistic approach to strategic leadership development

The multidimensional and multilevel nature of the competencies of academic library strategic leaders unveiled in this study not only implies a need for comprehensive and timely developmental effort on both the strategic leader (individual-centric) and strategic leadership (relational, collective and organisational in nature) but also focuses on dimensions of each identified competence. The comprehensive and multidimensional view of strategic leadership competencies is fruitful for developing strategic leaders capable of building individual and institutional capacity to enhance collective performance and effectively manage change and resistance in the digital era.

Self-assessment and targeted development map

The proposed competence framework for academic library strategic leadership is helpful as a behaviour, attitude and task-oriented map for prospective strategic leaders to quickly assess the state of their competencies and identify deficiencies and possible pathways to develop along their careers as they progress into the upper echelon. The framework is a nuanced tool with various competencies necessary to build and shift from supervisory to strategic leadership in the academic library. The framework will help potential strategic leaders see the learning pathways and development opportunities in their current jobs and environments to develop the identified competencies.

Developing strategic e-leaders

The competence framework for academic library strategic leadership provides the basis for developing catalyst strategic e-leadership needed for the digital era in the academic library. Strategic e-leaders must demonstrate visionary thinking and facilitative and capacity-building orientation to create agile, resilient and adaptable individuals, teams and organisations to meet upcoming challenges in the digital era. The article calls for developing strategic e-leaders with a repertoire of competencies not only to be agile and fluid in switching between leadership styles but also blending whatever technologies and traditional communication are appropriate based on the situation and people (Joiner & Josephs 2006). The challenge is for leadership development practitioners to design robust programmes to develop catalyst strategic e-leaders characterised by leadership adaptability and responsiveness to match their actions and behaviours with the people and situations (Lankisa 2022).

Conclusion

This study is a valuable contribution to research on the competencies of strategic leadership situated at the

intersection of the upper echelon theory, academic library leadership and the digital era in South Africa. This study has identified eight key competencies for a strategic leader to effectively lead an academic library in the digital era. The multidimensional and multilevel nature of the competencies of strategic leadership is illuminated for leadership development practitioners to comprehensively and holistically develop lower-level leaders into strategic leadership in the academic library. Regular self-assessment of strategic leadership by those in the upper echelon, identification of deficiencies by line managers and prioritisation of competence development by leadership development practitioners are critical and possible using the proposed framework. Those aspiring towards strategic leadership positions in the academic library now have an instructive framework of competencies to use when considering and prioritising their development and learning pathways. The proposed framework is a developmental tool that can assist in increasing the supply of agile and catalyst strategic leaders of academic libraries in the digital era. The major limitation is using one academic library and a small sample, such that the results are not generalisable but transferable to a similar context. Future research needs to use a diverse and large sample to enrich the framework and validate the identified competencies of strategic leadership of an academic library in the digital era.

Acknowledgements

The authors acknowledge the role of research participants and the University of KwaZulu-Natal in providing ethical clearance for this study.

This article is partially based on M.P.M.'s dissertation entitled 'Exploring leadership competencies at the University of KwaZulu-Natal Library in a digital age' towards the degree of Master of Commerce in Leadership Studies, College of Law and Management Studies Graduate School of Business and Leadership in 2024, with supervisor Prof. MacDonald Kanyangale.

Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

M.P.M. established the study's concept, conducted the research and collected and analysed the data. The study was supervised by M.K., who also provided guidance on methodology and analysis and assisted in revising and refining the final article. However, M.K. converted the study into a journal article. The finished article was reviewed and approved by both authors.

Funding information

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Data availability

Research data were uploaded to the UKZN data repository, named Yabelana, accessible at <https://yabelana.ukzn.ac.za/>. These access rights would be determined based on role-based access control.

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