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**Leadership and Leadership Development to Transform the Academic Libraries:
A Case of the United Arab Emirates (UAE)**

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Abstract

Purpose –The paper aims to emphasize library leaders' perspectives on leadership and leadership development in the UAE's academic libraries to shed light on identifying best practices to improve the present condition.

Design/methodology/approach– The researchers comprehensively reviewed the appropriate literature related to academic leadership in libraries and the skills required to develop and transform the libraries in the digital age.

Findings –The researchers identified a severe scarcity of inspirational and transformation leaders who influenced the academic institutions' decision-makers to get all types of support and cooperation to enhance the quality service delivery with all the required resources to the patrons of different disciplines.

Research limitations/implications – The study is limited to collect the opinions of only library leaders of academic institutions who are mostly working in the two emirates, viz., Dubai and Sharjah.

Practical implications – The study is beneficial to all the types of academic libraries which require productive leadership by modifying all the managerial functions to direct its future with a more focused approach.

Originality/value – The present research paper is the first of its kind from the middle east part of the world and offers a comprehensive overview of the UAE library leadership and its present state of affairs.

Keywords – Academic libraries, Leadership, Leadership Development, United Arab Emirates, e-Research Support, Digital Scholarship, Research Data Management, Research Data Service.

Paper type: Viewpoint

1. Introduction

Leadership has multiple dimensions and is a complex process with leaders' traits, behaviors, and actions, as a power relationship, as a transformation process, and using skills perspective (Northouse, 2016). Although there are several definitions of leadership skills and leadership qualities, few studies have been conducted on effective leadership in academic libraries. (Fagan, 2012). Successful leadership is based on many vital skills and competencies, although leadership skills and competencies remain challenging to define, and there is little consent on the profile of influential leaders (Sutton and Booth, 2014). Leadership involves reliable determination, self-confidence to achieve the organization's mission and goals and engage with fellow workers to look forward and direct the employees to fulfill the needs of the patrons. Prosperous organizations prepare people to develop their skills to meet future challenges (Spies, 2000; Kotter, 2013) by breaking down the old systems, structure, and processes and adopting new methods and competencies. In the present digital age, library leaders need to be dynamic to navigate the library through uncertainty, and a rapid change is expected not only in libraries but across the profession (Martin, 2015).

Burns (1978) first expressed the transformational method, which articulated in the theory of leadership in institutions. Transformational leadership has been positively associated with employee performance and attitudes, aroused the motives of followers and increased the commitment of leaders's vision (House and Shamir, 1993). Library leaders who embraced transformational management inspire, motivate and facilitate strategic renewal by empowering their staff members to question old assumptions (Avolio et al., 1999). They are role models who encourage instead of stifle challenge, motivate their subordinates, boost their confidence levels, resolve issues, find solutions, open discussions at all levels, and develop a strategic plan to achieve the mission of the organization. It has been noticed that academic libraries have gone through a rapid transit with a demand for a new set of leadership skills among library professionals. In the 21st century, with the digital revolution, technology changed the traditional information forms, digitalization changed the landscape of information access and its use, and information retrieval processes and library services are changed. Today, the successful library professional is

distinguished by the ability to "manage ahead of the curve," expect and prepare the students, faculty, and other stakeholders (Vera and Crossan, 2004). In times of change, library professionals need a new set of skills and competencies to deal with the new trends and change (Kotter, 2013) and keep up the new knowledge and skills (Delaney and Bates, 2015; Leong, 2014). Library professionals are engaged in exploring new aspects of leadership roles and growing with their leadership abilities.

2. Literature review

According to Riggs (2001), corporate leaders' leadership qualities include vision, creativity, innovation and entrepreneurship, planning, transforming, motivation/inspiration, values, and integrity. In a study of Association of Research Libraries (ARL) university regarding the leadership qualities required for today and the near future, conducted by Hernon et al. (2002), are managerial qualities, personal characteristics, and general areas of knowledge. Managerial qualities include effective communication with staff and colleagues, manages and shapes the change, results-oriented, strategic planning with a vision for the library, setting priorities, and responding to stakeholders' needs. Personal characteristics comprise self-confidence, commitment to a set of values and integrity, handle stress, focus on change, and exercise good judgment. Also, leadership involves scholarly communication, familiarity with technology and library operations, financial management, analysis, and evaluation. Ammons-Stephens et al. (2009) delivered a core leadership competency model including four leadership competencies including managerial effectiveness (manage change, resource management, strategic planning, collaboration, flexibility, and adaptability), cognitive ability (problem-solving, decision making, reflective thinking), vision (creative and innovative), interpersonal effectiveness (competent culturally, accountability, team building, development, communication skills). Academic library leadership in the digital age is to embrace continuous change. Riggs (2001) pointed out that: "Human nature appears to resist change and prefers to continue functioning in established patterns." A leader who inspires stimulates, focuses on followers' needs, connects the employee and organization's goals and values, increases their commitment and performance, and brings a transformational change. Today's organizations are looking for transformational leaders who enhance all academic library operations, including diversity, teamwork, and innovation. The process of acquiring new knowledge and skills using new learning methods can be thought-provoking and confronting. It means that library

professionals need to experiment with new software, investigate innovations, and use critical thinking and problem-solving skills to assess new technologies' applicability (Mierke, 2014). Important attributes needed for library leadership in the digital age are vision, integrity and honesty, collaboration, management skills, and communication skills where vision and integrity are often mentioned (Bennis, 1989; Nanus, 1992; Riggs, 1998). A visionary library leader can constantly scan the environment, analyze it, and set a clear direction for the library. Regarding integrity attributes, library users have to know they can trust and rely on what the leader says and does because the library leaders are responsible for the stewardship of financial, human, facilities and resources. Excellent communication skills and collaborative skills are also important leadership attributes (Riggs, 1998). According to Bennis and Goldsmith (2003), one must possess both excellent leadership and management skills where management skills include staff development, personnel management, budgeting skill, team building, and time management, but leadership skills can be improved by attending leadership development programs, seeking mentors, applying self-assessment (knowing your strengths and weaknesses), and attaining practical academic library leadership experience. (Arnold et al., 2008; Kirkland, 1997; Sheldon, 1992). Many library leaders do not show interest in developing new skills and competencies (Yang et al., 2016; Ansari and Khadher, 2011). Taking up projects from various internal units or assisting student groups can provide experience and a different perspective. Aspiring academic library leaders need to acquire diverse leadership experience by working with different types of libraries and institutions and gaining experience outside the library unit, such as business, sales, and technology, to manage and lead the library more effectively. Proficient library leaders can also look for opportunities by taking up leadership roles such as committee chair, task force chair, section chair, and division chair in professional organizations such as ALA, ACRL, and LLAMA. (Le, 2015). Yang et al. (2016) identified that a collaborative mindset skill is essential for library leadership and can be established through formal gatherings, group discussions, team-based learning approaches, and activities across regions. Gwyer (2015) stated that collaboration among libraries increases access to digital resources and the sharing of resources as inter-library loan systems and enhances research output. Effective negotiation skills are also recommended for library leaders to deal with publishers on licensing electronic resources (Achua and Lussier, 2010) and consortium models for collection development in electronic resources (Novak and Day, 2015). Today, education structure is altering, and users require more online services, and their

expectations are beyond the limitations with limited and inadequate library budget (Neufeld, 2014). Dewey (2005) discussed that academic libraries should provide extensive resources for teaching and research, and the library professionals must be trained to retrieve and disseminate appropriate and valuable resources. Therefore library leaders need skills with the latest technological trend and software to search and retrieve and possess strong communication skills to work with faculty and students. With the extensive literature review, the researchers have discussed the transformation of libraries and how to develop new roles and adapt to new changes, especially in the following areas:

- 1) E-research support
- 2) Research Data Management (RDM)
- 3) Digital Scholarship
- 4) Collaboration and collaborative technologies

E-research support

E-research is a multidisciplinary research collaborative movement (Borgman, 2006) that combines the abilities of distributed groups of researchers to achieve research goals with a range of advanced information and communication technology (ICT) based tools such as computer "grids" or "clouds," workflow engines, semantic technologies, and advanced teleconferencing systems (Hey and Hey, 2006; Kesselman, and Forster 2004; Berman et al., 2003) along with the specifically designed research support tools evolving a Virtual Research Environment (VRE), that supports the transition from data to information to knowledge (Hey et al., 2009). In a recent study, Brown and Swan (2007) found that fifty percent of researchers and seventy-five percent of librarians believe that VREs will be essential drivers of change in libraries and that libraries should play a role in creating and managing VREs. Libraries hold the responsibility to make all documents in open access model through institutional repositories, databases, and open sources, enabling both full-text and metadata search through web-interface for end users. Librarians extending support for e-research must be well trained with collaborative technologies, scholarly publishing practices, electronic publishing, computation, visualization, data collection, and analysis techniques. Research support websites with training materials and instructional videos on e-research can be uploaded, accessed, and shared as e-research support services. The emergence of e-research and new forms of scholarly communications has widened librarians' and information professionals'

roles for closer engagement with researchers. Librarians with library qualifications and Information Technology (IT) experience have a potential role alongside technical specialists to enhance research practices and direct developers' work while managing the stakeholders.

The UAE Situation: Khalifa University of Science and Technology (KUST) is the only top-ranked university in the UAE with research programs dealing with strategic, industrial, and scientific challenges facing the UAE's knowledge economy transformation. Khalifa University's three flagship research institutes include the Masdar Institute, the Petroleum Institute, and the Robotics and Intelligent Systems Institute and serve as interdisciplinary research units focused on long-term strategic priorities. Ankabut, the UAE's Advanced Network for Research and Education, interconnects universities with a 10G backbone and 1G access links and provides international connectivity. It enables a network of schools, higher education institutions, and libraries that allow the transfer of services in real-time such as instant messaging, video communication, cloud computing, and services that are not completed in real-time such as e-mail, e-learning, off-site disaster recovery libraries' interconnectivity, off-campus disaster recovery and unified single sign registration.

Research Data Management (RDM)

Research data management (RDM) is a prioritized strategy in many academic libraries today. RDM refers to the institution's storage and preservation of research covering the initial planning, day-to-day processes, and longtime archiving and sharing. Research data exists in different forms to support the research conclusions, examples: video and voice recordings; questionnaires and interview transcripts; test results held in text files and spreadsheets; archive materials and handwritten notes; code and software; photographs and slides; laboratory notebooks.

Studies in the UK and North America found that libraries have been developing technology support, such as a repository for data storage and informational support, such as advice-giving and researchers' training (Cox and Pinfield, 2014; Tenopir et al., 2014). The research data management is a set of wide-ranging activities not individually completed but performed by library potentially by caring for research data, facilitating access to it, preserving data throughout its lifecycle. It enables finding and understanding data, avoiding unnecessary duplication and validating results (University of Edinburgh, 2015). RDM is a crucial element in the publication of research data sets,

especially if we endeavor data openness. It is also a principal constituent of data curation services (Si et al., 2013). Librarians and library professionals contribute to metadata management, digital infrastructure, and user education and service design. Librarians should have a clear picture and acquaintance about the research data needs of different disciplines and support innovative publishing models, including open access publishing and develop the necessary abilities to manage data (Hswe and Holt, 2012).

Research Data Service (RDS) is a system of services all through the library to assist every patron during all phases of the research data lifecycle. Developing RDM service is an adaptive challenge and calls for changes in librarians' skill gaps, resources, and service culture as most RDS has to be mastered by librarians themselves. Researchers from all disciplines expect persistent cooperation from their libraries to get the required research data, data citation, intellectual property and copyright, privacy, and confidentiality. At the same time, librarians provide reference support to find and cite data, promote tools to track the impact of data sharing, and help to connect data sets to other scholarly output through linked data and citation tools (Flores et al., 2015).

The UAE Situation: The UAE librarians' community plays a vital role in changing research behavior by supporting the researchers in building the knowledge and skills required to retrieve and manage data by conducting hands-on workshops, seminars, and data skill development programs. Reference Management software or Citation Management software viz. Mendeley, Zotero, RefWorks, Endnote are commonly used to generate references, citations, and bibliographies in various referencing styles (Johnson and Potluri, 2020). New York University in Abu Dhabi (NYUAD) offers Research data services where data librarians offer assistance with the discovery, acquisition, and use of social science data resources to promote research data management, data literacy, and data resources for the NYUAD community. Data librarians provide consultation in support of quantitative and qualitative data collection and analyses, support faculty using data-driven assignments through course-integrated library instruction, build and promote data collection and services, and serve as subject liaison to many programs. The faculty and students are assisted with quantitative analysis software such as Qualtrics, SPSS, Stata, and R/R Studio; and qualitative analysis software like Atlas Ti and NVivo.

Digital Scholarship

Digital scholarship uses factual or non-factual digital evidence and methods, digital authoring, digital publishing, digital preservation, and digital use and reuse of scholarship (Schlosser, 2013). In other words, digital scholarship is extended traditional methods of research by applying new technologies to advance the teaching and learning processes. Digital scholarship is new ground for most academic libraries and many librarians' digital leadership roles. With tons of interactive, curated and publicly available resources on the web, academic libraries play an essential role in creating, preserving, and disseminating information and resources called the "digital scholarship incubator." These incubators create innovative-virtual-shared spaces that support learning and discovery at different scales. At low and mid-level, the incubator can assist junior scholars or topper students exploring or evaluating tools for data visualizations, simulations, mash-ups, or prototypes; at a high level, the incubator can assist a team of scholars working on big data or longitudinal studies to produce and publish digital reports on their findings (Vuksan, 2017). According to University of Washington libraries, digital scholarship is open, interdisciplinary, collaborative, and community-engaged and may interconnect with public scholarship, community-based learning, digital and open pedagogy, and digital archives. It is a scholarly activity that makes extensive use of one or more new possibilities for teaching and research through collaboration, new forms of publication, and new methods for visualizing and analyzing data.

The UAE Situation: New York University Abu Dhabi (NYUAD) 's has developed the Center for Digital Scholarship (CDS), which partners with faculty and students for digital designing, implementation, and circulation of their research. CDS assists researchers in completing digital projects and providing related data. CDS works closely with Archives and Special Collections unit to bring ancient hardbound resources into the digital world, retrieve and archive new resources, and make them available to faculty, students, and researchers within and outside the UAE. CDS offers access to the reading room, short-term loans for teaching, and provide digital photography services. Additionally, the CDS routinely collaborates on programs around digital humanities, intellectual property, and scholarly communication. Data Librarians offer assistance with discovering, acquiring, and using social science data and related software programs. CDS also offers Geospatial Services Program and work with students and faculty on specific research needs related to geospatial data; offers workshops and programming on digital scholarship topics; host

interdisciplinary faculty research projects; provide support for student and faculty digital scholarly projects; make available incubator space with Scholar-in-Residence program.

Collaboration and collaborative technologies

Libraries collaborate with academic departments and administrative units, cooperate on many programs and activities and effectively share the experience. In the exploration with faculty of different programs and courses, librarians encountered different ideas and demands. Consortial collaboration and cooperation can be beneficial for industry-related training to share expertise and learn from one another to stay abreast of current trends and challenges and to remain relevant in this ever-changing information environment (Mierke, 2014). Collaboration with researchers needs a different mindset and technological skills. Collaborative technologies that facilitate the collaboration between researchers and librarians regardless of the situation include video-, teleconferencing, web- conferencing technologies, instant messaging, website links, google groups, social bookmarking, content management systems, and online workflow tools (Thomas, 2011).

The UAE Situation: The consortium of academic and research libraries in the UAE has been created to enhance the education and research resources available to stimulate the country's knowledge economy by establishing a shared union catalog, engaging in cooperative collection development, and developing a national digital institutional repository, called eFADA. The consortium's mission is to create and provide access to a shared knowledge environment that supports teaching, learning and research. The repositories are the primary tools for preserving institutions' intellectual assets, and they facilitate digital preservation and scholarly communication. BSpace and DSpace are digital repositories in British University in Dubai (BUiD) and American University of Sharjah (AUS), respectively, that provides access to dissertations, theses, research projects, faculty publications, and archives. The University of Dubai (UD) and the Sorbonne University of Abu Dhabi are using Corepaedia, which is a repository that collates research work, supports local and regional research with data reliability, linking entities, research outlining, and research productivity and is indexed in Directory of Open Access Repositories (DOAR). The Khalifa University of Science, Technology, and Research (KUSTAR) in Abu Dhabi have developed Al Khazna institutional repository to share resources with its faculty and students.

KUSTAR is encouraging and supporting faculty to use Open Access (OA) publishing for their scholarly work to make it freely available to everyone in the world, which will increase faculty outreach. Libraries promote institutional repositories and the Library and Information Web Access (LIWA) for library lending and document delivery among member institutions of UAE. The need for developing new relationships and enhancing existing partnerships across campus is persistent among educational institutions (Clement et al., 2017), and the same is also enforced by the Ministry of Higher Education of UAE. Uniquely, the UAE's library leadership established a collaboration networking system among private higher educational institutions by signing a Memorandum of Understanding (MOU) and a cooperative agreement between the libraries and the same facility also directly avail by the faculty members who are extensively needing the support of library resources for their research as well as teaching (Johnson and Potluri, 2020).

Conclusion and directions for further research

Like other organizations, library professionals also need practical and competitive skills for future leadership. Managing change requires a different set of leadership skills (Shoaf, 2004), and the continuous technological change has challenged the librarians to create inspiring and transformational leadership skills to develop new digital services. The skills can be developed by attending workshops and through regular networking and collaboration among the library professionals. There is also a need for mentorship and training (Ross, 2013), regular practice, and constant exercise to enhance leadership skills (Fallon et al.). To work in this dynamic information environment, librarians need to be comfortable experimenting with new software, investigating innovations, and using critical thinking and problem-solving skills to assess new technologies' applicability. Libraries need a fundamental shift towards digital publishing by developing digital publishing programs enabling wider exposure of institutional publications, datasets, teaching materials, and unique collections. Librarians must develop an awareness of e-research skills and knowledge of research data management, knowledge of qualitative data analysis, copyright & intellectual property rights, legal issues surrounding data management and publishing, metadata generation, alongside their work in partnership with others. Open scholarship calls for a new and distinctive level of engagement by libraries, promoting institutional participation on a shared and global basis.

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