JoRMA
JOURNAL OF RESEARCH MANAGEMENT AND ADMINISTRATION

Editorial

NAVIGATING THE EVOLVING LANDSCAPE OF RESEARCHER CAPACITY DEVELOPMENT

Lessing Labuschangne | University of South Africa, Pretoria, South Africa | LLabus@unisa.ac.za

In the ever-evolving realm of research management and administration (RMA), the imperative for nurturing researcher capacity has never been more pronounced (Aithal & Aithal, 2023). As the expectations placed upon researchers continue to grow, the need to strike a delicate balance between research productivity and impact becomes increasingly paramount (Alade et al., 2024). As the research landscape undergoes rapid transformation propelled by technological advancements and shifting societal priorities, opportunities abound for RMAs to play a pivotal role in shaping the future of inquiry and innovation.

This editorial explores three key factors reshaping the research landscape and their implications for researcher capacity development. We also explore vital opportunities emerging from the intersection of the 4th Industrial Revolution, eResearch/Metaverse, and the Sustainable Development Goals (SDGs), presenting avenues for enhancing the support provided by RMAs to researchers. As RMA as a discipline evolves and matures, the need to stay relevant and demonstrate value becomes increasingly critical.

KEY FACTORS RESHAPING THE RESEARCH LANDSCAPE

In an era of relentless innovation and unprecedented interconnectedness, the world is undergoing a transformative evolution across multiple dimensions. From economic upheavals to seismic political shifts and profound social changes, the pace of transformation is accelerating at an unprecedented rate, reshaping the fabric of societies and institutions worldwide.

Economically, the global landscape is witnessing a paradigm shift driven by technological advancements, shifting consumer preferences, and evolving geopolitical dynamics (Jaradat & Sergiu-Vlad, 2023). Traditional industries are being disrupted, giving way to digital economies and the rise of new market players (Daraojimba et al., 2023). The increasing integration of automation, artificial intelligence (Nolan, 2024), and blockchain technology is revolutionising production processes, supply chains, and business models, heralding a new era of economic dynamism and innovation.

Politically, the geopolitical landscape is undergoing tectonic shifts marked by rising nationalism, geopolitical tensions, and the redefinition of global alliances (Luo, 2024). The emergence of populist movements, coupled with growing scepticism towards multilateralism, has challenged traditional norms of diplomacy and cooperation. Moreover, the rapid diffusion of information and the proliferation of social media platforms have empowered citizens to demand greater transparency, accountability, and participation in political processes, reshaping the dynamics of governance and policymaking (Yumame, 2024).

Socially, societies are grappling with profound demographic shifts, cultural transformations, and emergent social movements that are reshaping norms, values, and identities (Stehr, 2023). Rapid urbanisation, demographic ageing, and cultural globalisation redefine social structures and challenge traditional notions of community and belonging. Moreover, the emergence of social justice movements underscores the growing demand for equity, inclusion, and social justice, amplifying voices long marginalised and reshaping the discourse on human rights and equality.

Environmentally, the world faces existential challenges posed by climate change, environmental degradation, and resource depletion (Singh, 2024). The accelerating pace of industrialisation and urbanisation has exerted unprecedented pressure on ecosystems, threatening biodiversity and exacerbating environmental vulnerabilities. The urgent need for sustainable development and climate action has galvanised global efforts to mitigate the impacts of climate change, foster resilience, and transition towards a more sustainable and equitable future.

The rapidly changing world presents both unprecedented challenges and unparalleled opportunities for researchers. Embracing the complexity and dynamism of this evolving landscape requires foresight, adaptability, and a commitment to collective action. By harnessing the power of innovation, collaboration, and creativity, researchers can navigate the uncertainties of change and forge a brighter, more resilient future for generations to come. It is, therefore, crucial for RMA's to understand and appreciate what researchers are confronted with to provide them a broader and deeper range of support.

1. Meeting Societal Expectations

Society's expectations of researchers have undergone a profound transformation. Beyond mere academic output, there is a growing emphasis on the societal impact of research. However, how do we measure impact, especially across diverse disciplines (Olavarrieta, 2022)? While fields like Mathematics and Theoretical Physics may yield theoretical breakthroughs, the criteria for impact vary across disciplines and political geographies (McKenna, 2021). Moreover, who determines what research is deemed acceptable, and to what extent does academic freedom play a role in shaping research agendas?

Additionally, researchers are increasingly expected to engage with communities in novel ways, embracing concepts like Community Science, Public Engagement,

Coproduction and Participatory Research (Dosemagen & Parker, 2019). This entails involving communities in problem definition and actively collaborating on solution development and implementation. This shift underscores the need for researchers to transcend traditional academic boundaries and forge meaningful partnerships with diverse stakeholders.

2. Fulfilling Governmental Mandates

Governments play a pivotal role in shaping the research landscape, especially in publicly-funded Higher Education Institutions (HEIs), research institutes/centres, science councils and government laboratories, often with mandates centred around knowledge creation and dissemination. However, political motives and financial considerations can sometimes influence research agendas, raising questions about academic freedom (Hoepner, 2017; Snyder, 2023), and pursuing unbiased inquiry (Hoepner, 2017). Moreover, funding research at HEIs is complex, with questions about who decides what research fields receive funding and how these decisions are made (Montenegro de Lima et al., 2020).

Within this framework, universities are tasked with navigating the delicate balance between fulfilling governmental expectations on the one hand, while preserving academic freedom on the other. This tension underscores the need for robust governance structures that safeguard academic and research integrity while ensuring financial sustainability.

3. Meeting University Expectations

Universities serve as crucibles for researcher development, offering opportunities for career advancement and intellectual growth. However, the proliferation of job opportunities within and outside academia has transformed the traditional career path for researchers (Browning et al., 2017). The concept of a "Researcher Pipeline" has become increasingly nuanced, with individuals navigating a multitude of career trajectories (Shaik, 2016).

Furthermore, the job description of a researcher has expanded, encompassing a growing number of Key Performance Areas (KPAs). No longer is the production of new knowledge sufficient, with expectation growing to include postgraduate supervision, obtaining grants, mentorship, reviewing research publications and policies, and serving scholarly societies. This proliferation raises questions about the focus of researcher roles and the risk of becoming "jacks of all trades and masters of none". Moreover, as universities seek to enhance productivity, there is a pressing need to reevaluate performance assessment metrics, striking a balance between quantitative and qualitative measures (Allio, 2006).

Opportunities for Research Managers and Administrators in a Dynamic Landscape

In a world that has become more complex and challenging than ever before, RMAs need to adapt and align what they do with the needs of those they directly support, and even institutional and national policy expectations. As the research landscape changes, so do the needs of researchers.

1. Harnessing the Power of the 4th Industrial Revolution

The advent of the 4th Industrial Revolution heralds a new era of research possibilities characterised by innovative research focus areas and methodologies. In essence, the 4th Industrial Revolution includes cyber-physical systems (CPS), Internet of Things (IoT), industrial internet of things, cloud computing, cognitive computing, artificial intelligence to mention a few. RMAs can seize the opportunity to explore emerging research domains that transcend traditional disciplinary boundaries, fostering collaboration and cross-pollination of ideas within university structures such as faculties, colleges, and departments (Bayode et al., 2019), but also externally with organisations in industry and government.

Moreover, as research design evolves to accommodate new methodologies and data sources, RMAs can play a pivotal role in facilitating the adoption of robust data curation practices and ensuring the reliability of participant engagement and responses. Additionally, the proliferation of new research tools presents an opportunity for RMAs to spearhead initiatives to acquire and disseminate training on cutting-edge technologies for analysis and visualisation, including graphical representation and infographics.

2. Embracing eResearch and the Metaverse

The rise of eResearch and the Metaverse opens up exciting possibilities for RMAs to revolutionise the research data lifecycle (Chai et al., 2023). By leveraging research data repositories and facilitating access to datasets — whether through open access initiatives or proprietary channels — RMAs can empower researchers to explore new frontiers of inquiry while ensuring compliance with data management best practices.

Furthermore, the advent of virtual laboratories and simulations in the Metaverse presents opportunities for RMAs to facilitate collaborative research endeavours transcending geographical boundaries. From coordinating shared facilities to navigating ethical dilemmas arising from data access and legislation compliance, RMAs are crucial in ensuring research activities' integrity and ethical conduct in virtual environments.

3. Advancing the Sustainable Development Goals (SDGs)

The pursuit of the SDGs presents an unprecedented opportunity for RMAs to address real-world challenges through collaborative, multidisciplinary research endeavours

(Salvia et al., 2019). By facilitating partnerships, identifying funding opportunities, and providing administrative support, research managers can enable researchers to define and tackle complex problems requiring concerted efforts and resources (Sari et al., 2023).

Moreover, RMAs are pivotal in navigating the knowledge exchange and technology transfer processes, bridging the gap between conceptual and applied research to drive innovation and societal impact. From managing disclosures and patent applications to facilitating commercialisation efforts, RMAs serve as catalysts for translating research outcomes into tangible solutions that address pressing global challenges.

In conclusion, the research landscape is undergoing a seismic shift driven by societal, governmental, and institutional forces. Navigating this terrain requires a multifaceted approach that acknowledges the diverse expectations placed upon researchers while fostering an environment conducive to meaningful inquiry and innovation. As stewards of the research enterprise, it is incumbent upon us to rise to the challenge and embrace the opportunities for growth and transformation that lie ahead. This evolving landscape presents a myriad of opportunities for RMAs to drive innovation, foster collaboration, and advance societal impact. By embracing emerging technologies, facilitating interdisciplinary collaboration, and supporting the pursuit of the SDGs, RMAs can position themselves as strategic partners in the quest for knowledge creation and societal transformation. It is, therefore, time to rethink and reimagine the role and value of RMAs.

REFERENCES

Aithal, P. S., & Aithal, S. (2023). Key Performance Indicators (KPI) for Researchers at Different Levels & Strategies to Achieve it. *International Journal of Management, Technology, and Social Sciences, 8*(3), 294–325.

Alade, T. T., Opele, J. K., Adeyeye, O. O., & Balogun, B. N. (2024). A Desk Review of the Impact of Open Access and Open Data on Research Productivity of Lecturers in Developing Countries. *Journal of Education in Developing Areas*, *31*(5), 186–195.

Allio, M. (2006). Metrics that matter: seven guidelines for better performance measurement. *Handbook of Business Strategy*, *7*(1), 255–263.

Bayode, A., van der Poll, J. A., & Ramphal, R. R. (2019). 4th industrial revolution: Challenges and opportunities in the South African context. *Proceedings of the 17th Johannesburg International Conference on Science, Engineering, Technology & Waste Management, Johannesburg, South Africa*, 18–19.

Browning, L., Thompson, K., & Dawson, D. (2017). From early career researcher to research leader: Survival of the fittest? *Journal of Higher Education Policy and Management*, *39*(4), 361–377.

Chai, Y., Qian, J., & Younas, M. (2023). Metaverse: Concept, Key Technologies, and Vision. *International Journal of Crowd Science*, *7*(4), 149–157.

Daraojimba, C., Kolade, A. O., Nwankwo, T. C., Agho, M. O., & Okafor, C. M. (2023). A Review of Business Development Strategies in Emerging Markets: Economic Impacts

and Growth Evaluation. *International Journal of Research and Scientific Innovation*, *10*(9), 195–206.

Dosemagen, S., & Parker, A. J. (2019). Citizen Science Across a Spectrum: Broadening the Impact of Citizen Science and Community Science. *Science & Technology Studies*, *32*(2).

Hoepner, J. E. (2017). *"You need to shut up": Research silencing and what it reveals about academic freedom*.

Jaradat, M., & Sergiu-Vlad, S. (2023). Trends in International Business in Sports. *Social Sciences and Humanities*, 3–11.

Luo, Y. (2024). Paradigm shift and theoretical implications for the era of global disorder. *Journal of International Business Studies*, *55*(2), 127–135.

McKenna, H. P. (2021). Research Impact: A Global Perspective on Its Assessment. In *Research Impact: Guidance on Advancement, Achievement and Assessment* (pp. 119–132). Springer International Publishing. https://doi.org/10.1007/978-3-030-57028-6_9

Montenegro de Lima, C. R., Coelho Soares, T., Andrade de Lima, M., Oliveira Veras, M., & Andrade Guerra, J. B. S. O. de A. (2020). Sustainability funding in higher education: a literature-based review. *International Journal of Sustainability in Higher Education*, *21*(3), 441–464.

Nolan, A. (2024). *Artificial intelligence in science: Challenges, opportunities and the future of research*. France: Fondation Ipsen.

Olavarrieta, S. (2022). Using single impact metrics to assess research in business and economics: why institutions should use multi-criteria systems for assessing research. *Journal of Economics, Finance and Administrative Science*, *27*(53), 6–33.

Salvia, A. L., Leal Filho, W., Brandli, L. L., & Griebeler, J. S. (2019). Assessing research trends related to Sustainable Development Goals: Local and global issues. *Journal of Cleaner Production*, *208*, 841–849.

Sari, R. F., Sidiyanto, Y. A., & Windiatmaja, J. H. (2023). The role of universities in realizing sustainability: Analysis of UI GreenMetric contributions and publications related to sustainability. *E3S Web of Conferences*, *450*, 01001.

Shaik, F. J. (2016). *Experiences of Early Career Researchers/Academics: a Qualitative Research on the Leaky Pipeline and Interrelated Phenomena in six European Countries*. University of Trento, Trento, Italy.

Singh, V. (2024). Environment, Development, and Sustainability. In *Textbook of Environment and Ecology* (pp. 327–339). Springer.

Snyder, J. A. (2023, January 11). *Is Academic Freedom a Human Right?* https://www.chronicle.com/article/is-academic-freedom-a-human-right

Stehr, N. (2023). Political challenges of knowledge societies. In *Understanding Society and Knowledge* (pp. 125–153). Edward Elgar Publishing.

Yumame, J. (2024). Challenges and opportunities of e-government in strengthening the transparency and accountability of the government. *International Journal Of Society Reviews*, *2*(5), 1335–1344.

BIOGRAPHY

Lessing is the Executive Director for Research, Innovation and Commercialisation at the University of South Africa (UNISA) and has been working in Research Management and Administration for the last thirteen years.

In 2021 he was awarded the Senior Research Management Professional professional designation by the International Professional Recognition Council.

Lessing is the author of a chapter in The Emerald Handbook of Research Management and Administration Around the World (2023), a comprehensive book about practitioners working in research management and administration. The book provides essential knowledge for students and professionals considering a career in this field and serves as reference material for policymakers as well as academic researchers.

His career in Higher Education started in 1998 and he established himself as a researcher in his own right. He has published 14 peer-reviewed journal articles, 42 conference papers and 3 book chapters to date. He also supervised 4 Doctoral and 9 Research Masters students to completion.

Lessing is an honorary international academic advisor for the PM World Journal (PMWJ). He also serves on the editorial board of the Journal of Research Management and Administration (JoRMA).

Accepting Editor: Simon Kerridge. | **Received**:3 May 2024 | **Accepted**:17 July 2024.
Cite as: Labuschagne, L. (2024). Navigating the Evolving Landscape of Researcher Capacity Development . *Journal of Research Management and Administration*, *3*(1), 202407194.
https://doi.org/10.18552/jorma.v3i1.1093