

Professionalization of Research Management and Administration in Nigeria

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Abstract

Research management and administration play a crucial role in facilitating scientific progress, innovation, and national development. This article explores the professionalization of research management and administration in Nigeria, highlighting its importance, challenges, and potential benefits. Drawing upon existing literature, the article provides an overview of the research landscape in Nigeria, identifies key challenges faced by researchers and higher educational institutions, and examines the need for professionalization to address these challenges. It discusses how professionalization can promote efficiency, transparency, accountability, and quality assurance in research processes, driving research excellence and societal impact. The article offers recommendations for policymakers, institutions, and stakeholders, emphasizing the importance of standardized processes and collaboration as potential benefits which will enhance research outcomes and national development. Also outlines areas for further research and calls for deliberate action. By embracing professionalization and implementing strategic initiatives, Nigeria can strengthen its research ecosystem and contribute to sustainable development and global competitiveness.

Keywords: research management, administration, professionalization, efficiency, accountability, collaboration, global competitiveness

INTRODUCTION

Research management and administration (RMA) provide essential support services that facilitate the planning, coordination, and execution of research projects (Gu, Thoma, Church, & Libbus, 2006). The

responsibility of the RMA includes assisting researchers with proposal development, budgeting, ethics approvals, and project management, ensuring that research activities proceed smoothly and efficiently (Akindele & Kerridge (2019); managing research resources, including funding, personnel, facilities, and equipment. By ensuring that resources are allocated effectively and equitably to support research priorities and objectives, maximizing the impact of available resources on research outcomes (Gleeson & Murphy, 2011); ensure compliance with regulatory requirements, ethical standards, and institutional policies governing research activities. Through the facilitation of the review and approval process for research protocols, ensuring that research is conducted ethically, responsibly, and in accordance with legal and ethical guidelines (Sprague & French, 2010); support the dissemination and translation of research findings into practice and policy.

This is done through the facilitation of knowledge transfer activities such as publication, conference presentations, technology transfer, and community engagement, ensuring that research outcomes reach relevant stakeholders and contribute to societal benefit (Hernandez & Wheeler, 2013); and also contribute to strategic planning and collaboration efforts within and across institutions. They facilitate partnerships, collaborations, and interdisciplinary initiatives, aligning research agendas with institutional priorities, funding opportunities, and societal needs to maximize the impact and relevance of research outcomes (Bishop, Gupta & Su, 2015). As research is regarded as a valuable effort for knowledge creation and value addition (Lesjak, 2019). For developing countries, enhanced scientific research policies, mechanisms and governance (Breznik & Rezk, 2017) are variable tools for a knowledge-based economy.

In essence, RMA are essential functions that support and enhance the research enterprise by providing essential services, ensuring appropriate management of resources, ensuring compliance, facilitating knowledge transfer, and fostering strategic collaboration.

The professionalization of RMA in Nigeria is particularly significant due to factors like increasing research activity. Nigeria has seen a rise in research activity across various disciplines, driven by government initiatives, university reforms, and increased funding for research and development (Adefolalu, 2018). As research activities become more complex and diverse, there is a growing need for professionalized systems and practices to support and manage these endeavors effectively. Also, Nigeria is striving to enhance its global competitiveness in research and innovation to address socio-economic challenges and achieve sustainable development goals. So, the professionalization of RMA is essential for aligning Nigerian research practices with global standards, enhancing the quality and impact of research outcomes, and fostering international collaboration and recognition (Onyeneho, Nwagbara & Akanwa (2019).

Therefore, the professionalization of RMA is critical for advancing research practices, fostering innovation, and enhancing Nigeria's competitiveness and impact in the global research landscape. It is essential for building a robust and sustainable research ecosystem that contributes to national development and addresses pressing societal challenges.

This paper aims to explore the significance and potential benefits of professionalizing RMA in Nigeria, with a focus on addressing challenges, enhancing efficiency, fostering transparency and accountability, and elevating the credibility and competitiveness of Nigerian research on the global landscape. Through an examination of the current state, challenges, and opportunities, as well as best practices and strategies

from global contexts, this paper seeks to provide insights and recommendations for promoting professionalization and strengthening the research ecosystem in Nigeria.

THEORETICAL OVERVIEW

RMA has been recognized as playing a crucial part in institutions and nations that aspire to maintain a highly skilled workforce for sustained competitiveness through the pilot of evolving regulations, facilitating collaborations, and meeting the ever-changing demands of funders and governments. As the focus of the impact of research, today is, amongst others, on human lives, health, organizational capabilities of companies, and the environment, it has become clear that there are issues with research funding policies (Lesjak, 2019); therefore, the professionalization of RMA in ensuring appropriate implementation of guidelines and policies is important.

Professionalization in the context of RMA refers to the process of developing and implementing standardized practices, policies, (Adeyemo, 2017) and competencies to enhance the professionalism, efficiency, and effectiveness of managing research activities within institutions and organizations (Moses & Ayodele, 2019), promotion of ethical conduct and integrity (Obiajunwa, 2017) and fostering a culture of continuous improvement and innovation (Gleeson & Murphy, 2011). It involves recognizing RMA as distinct professional roles that require specialized knowledge, skills, and training, and establishing mechanisms for professional development, certification, and recognition within the field (NCURA, 2021). Generally, professionalization of RMA is essential for enhancing the professionalism, efficiency, and effectiveness of managing research activities, ultimately contributing to the advancement of research quality, integrity, and impact within institutions and across the broader research ecosystem.

Professionalization of RMA offers numerous benefits for research outcomes and national development. It ensures that research activities are conducted according to standardized processes, best practices, and ethical standards, leading to higher-quality research outcomes and enhanced research quality and impact (Adeyemo, 2017). It provides researchers and research administrators with the necessary support, resources, and skills to enhance their productivity and foster innovation. By streamlining administrative processes, facilitating access to funding and facilities, and promoting collaboration and networking, professionalization enables researchers to focus more on their research activities, leading to increased productivity and innovation (Okebukola & Maku, 2018). It improves the efficiency and effectiveness of resource allocation and management in research activities (Fasasi & Ojelabi, 2019), strengthens institutional capacity and reputation (Oladosu & Esse, 2019) and contributes to national development goals by generating evidence-based solutions to societal challenges, driving innovation and technological advancements, and fostering economic growth and competitiveness (Adebayo et al., 2017).

Comparing the professionalization of RMA in Nigeria with global best practices involves assessing various aspects such as competency development, accreditation, funding mechanisms, and institutional support (as seen in Table 1 and Table 2).

Table 1: Comparison of RMA Practices

Aspect	Nigeria	Global Best Practices
Competency Development	Limited formal training programs	Comprehensive training and certification programs

Accreditation	Lack of accreditation standards	Accreditation bodies and standards (e.g., National Council of Research Administration (NCURA), Association of Research Managers and Administrators (ARMA))
Funding Mechanisms	Reliance on government funding	Diverse funding sources (government, industry, philanthropy)
Institutional Support	Varied levels of support and resources	Strong institutional support and infrastructure
Ethics and Compliance	Adherence to regulatory requirements	Comprehensive ethical guidelines and oversight
Collaboration and Networking	Limited collaboration initiatives	Extensive international collaboration networks

Adapted from NCURA, 2021; UNESCO, 2021.

Table 2: Comparison of Research Management Training Programs

Program	Nigeria	Global Best Practices
Research Management Certification	Limited availability and recognition	Widely recognized certification programs (e.g., CRA, CRAP)
Professional Development Workshops	Occasional workshops and seminars	Regularly scheduled workshops and training events
Online Training Resources	Limited access to online training materials	Abundance of online courses and resources

Adapted from NCURA, 2021; UNESCO, 2021.

Professionalization no doubt will contribute to the development of a vibrant research culture and ecosystem in Nigeria. By promoting professionalism, integrity, and excellence in RMA (Okebukola & Maku, 2018), professionalization will enhance the credibility, visibility, and impact of Nigerian research both nationally and internationally, thereby driving innovation, knowledge creation, and socio-economic development.

CURRENT STATE OF RESEARCH MANAGEMENT AND ADMINISTRATION IN NIGERIA

Overview of RMA in Nigeria

An overview of the Research Landscape in Nigeria shows that Nigeria has made significant strides in research output over the years. According to data from the AD Scientific Index (2024), Nigerian researchers have about 22,906 citation rankings, covering a wide range of disciplines including health sciences, engineering, social sciences, and agriculture.

Research Institutions in Nigeria includes 265 universities (NUC, 2024), research institutes and government agencies, which serve as hubs for research and innovation. The funding of research in Nigeria is primarily from government sources, particularly through the Tertiary Education Trust Fund (TETFund), and various ministries and agencies. However, funding levels remain relatively low compared to other countries, with limited investment in research and development (R&D) as a percentage of GDP (TETFund, 2020).

The Nigerian research landscape faces some challenges despite the progress made. These include inadequate funding, limited research infrastructure and facilities, brain drain of skilled researchers,

bureaucratic hurdles, and insufficient collaboration between academia, industry, and government (Adebayo et al. (2017). According to UNESCO, Nigeria's investment in research and development (R&D) as a percentage of GDP was only 0.22% in 2018, far below the global average. A survey conducted by the Nigerian Academy of Science found that only 30% of Nigerian researchers had access to basic research facilities and equipment (National Academy of Science, 2019). The World Bank estimated that Nigeria experienced an annual brain drain of approximately 12,000 skilled professionals, including researchers, between 2010 and 2019 (World Bank, 2020). Fasasi and Ojelabi (2019) reported that 70% of Nigerian researchers experienced delays in obtaining research permits and approvals due to bureaucratic processes. Only 20% of Nigerian universities had established standardized processes for RMA, NUC (2024). Also, study has shown that only 40% of research administrators in Nigerian universities had received formal training in RMA, Adeyemo (2017).

These challenges have hindered the effectiveness and efficiency of RMA in Nigeria, undermining the country's research potential and capacity to address societal needs and contribute to national development. Addressing these challenges requires concerted efforts from stakeholders, including government agencies, research institutions, funding bodies, and policymakers.

To mitigate some of these challenges, the government has initiated various programs and policies to promote research and innovation, including the National Research Fund (TETFund, 2020), the National Science, Technology, and Innovation Roadmap, the National Research and Innovation Council, and the Nigerian Research and Education Network (NgREN), FMST (2017). These initiatives aim to strengthen the research ecosystem, enhance collaboration, and drive socio-economic development through research and innovation.

Existing structures and practices in RMA in Nigeria show that there are 265 universities, including federal, state, and private institutions (NUC, 2024), which serve as key hubs for research and innovation. The National Universities Commission (NUC) is the primary regulatory body responsible for overseeing university education and research in Nigeria. (NUC, 2024). Additionally, agencies such as the Tertiary Education Trust Fund (TETFund) provide funding and support for research activities (TETFund, 2020). The Tertiary Education Trust Fund (TETFund) is a key funding mechanism for research in Nigerian universities. TETFund allocates an annual intervention fund to support research, infrastructure development, and capacity building in tertiary institutions. Also, there are several research institutes in Nigeria that specialized in various fields, including agriculture, health, technology, and social sciences. Examples include the International Institute of Tropical Agriculture (IITA), the Nigerian Institute of Medical Research (NIMR), the National Animal Production Research Institute (NAPRI) and the Nigerian Institute of Social and Economic Research (NISER). To review and approve research proposals involving human subjects, animals, and biohazardous materials, Nigerian universities and research institutions have established Ethics Committees. These committees ensure compliance with ethical standards and regulatory requirements. To be competitive in the research landscape, Nigeria actively participates in regional and international collaborative research initiatives. For example, the West African Research and Innovation Management Association (WARIMA) promotes collaboration and capacity building in research management across West Africa.

These existing structures and practices form the foundation of RMA in Nigeria. While they provide essential support for research activities, challenges such as limited funding, bureaucratic hurdles, and

inadequate infrastructure persists, highlighting the need for continuous improvement and innovation in research management practices.

Barriers to Professionalization in Nigeria

Despite these interventions by the government, there are barriers hindering the professionalization process of RMA in Nigeria, such as resistance due to lack of recognition of RMA as distinct professional roles, Fasasi & Ojelabi (2019), shortage of formal training programs and professional development opportunities (Adeyemo, 2017) which has inhibited the acquisition of necessary skills and competencies, thereby hindering the professionalization process. Other barriers are insufficient institutional support (Ogunleye, 2017), bureaucratic and regulatory constraints (Fasasi & Ojelabi, 2019), and limited awareness and advocacy (Okebukola & Maku, 2018). Addressing these barriers requires coordinated efforts from various stakeholders, including government agencies, research institutions, professional associations, and funding bodies, to prioritize and support the professionalization of RMA in Nigeria.

Socio-economic factors like limited funding and resources (Onyeneho et al. 2019), educational attainment and skills gap (Adeyemo, 2017), employment opportunities and job security (Moses & Ayodele, 2019), infrastructure and access to technology (Gleeson & Murphy, 2011), and policy environment and government support (Adeyemo, 2017) can significantly influence the professionalization process of RMA in Nigeria. Tackling socio-economic factors will require comprehensive strategies that include educational reforms, skills development programs, employment opportunities, infrastructure investments, and supportive policies to create an enabling environment for the professionalization of RMA in Nigeria.

Cultural and attitudinal barriers also pose major challenges to the professionalization process. Hierarchy and respect for authority (Adeyemo, 2017), resistance to change (Ogunleye, 2017), perception of research management as secondary (Moses & Ayodele, 2019), informal networks and personal relationships (Okebukola & Maku, 2018), and stigma associated with administrative roles (Fasasi & Ojelabi, 2019) are some of the cultural and attitudinal barriers. Cultural sensitivity, awareness-building, and efforts to change perceptions about the importance and value of RMA roles are some of the requirements for tackling cultural and attitudinal barriers.

Initiatives and Strategies for Professionalization

In order to improve RMA in Nigeria, some stakeholders developed and implemented some initiatives to address various aspects of RMA in Nigeria, like the National Universities Commission (NUC) guidelines, which provide standards and benchmarks for research activities, infrastructure, and governance (NUC, 2024). The Tertiary Education Trust Fund (TETFund) provides intervention funds to support research, infrastructure development, and capacity building in Nigerian universities. These funds aim to improve research management and administration practices. Also, some universities and research institutions in Nigeria offer professional development programs for RMA professionals. These programs provide training and capacity-building opportunities to enhance skills and competencies (Fasasi & Ojelabi, 2019). There have been collaborative efforts through networking and the establishment of associations, such as the West African Research and Innovation Management Association (WARIMA) which aims to promote collaboration and capacity building in research management across

West Africa (WARIMA, 2021) and facilitation of knowledge sharing and best practice dissemination. The establishment of ethics committees to review and approve research proposals involving human subjects, animals, and biohazardous materials (FMH, 2021) and to ensure compliance with ethical standards and regulatory requirements. While progress has been made, continued investment and collaboration are essential to further improve research management practices and foster professionalization in the country.

The promotion of professionalization of research management and administration at both institutional and national levels requires a multidimensional approach involving various stakeholders. Some strategic approaches to use are institutional capacity building (Adeyemo, 2017), standardization of processes and policies (Ogunleye, 2017), promoting collaboration and networking among research institutions (Moses & Ayodele, 2019), advocacy and awareness (Okebukola & Maku, 2018) and policy support and funding (Fasasi & Ojelabi, 2019). By implementing these strategies at both institutional and national levels, stakeholders can work together to foster the professionalization of RMA, ultimately enhancing the quality, efficiency, and impact of research activities in Nigeria.

Role of Stakeholders

To gain insight into the collaborative efforts required to achieve the strategies outlined, it is imperative to examine the roles of different stakeholders in promoting the professionalization of RMA. Stakeholders, such as the government, will provide policies, regulations, and frameworks that prioritize RMA and allocate funding and resources to support research management activities (NUC, 2024). The academia should support the institutionalization of research management offices or units within universities to provide centralized support and coordination for research activities and support capacity-building programmes (University of Ibadan, 2021). The industry should collaborate with academia and research institutions to identify research priorities, funding opportunities, and industry-relevant projects and provide financial support (AAS, 2021), while international organization should facilitate knowledge exchange, capacity building, and best practice dissemination through collaborative initiatives, training programs, and provide funding opportunities, technical assistance, and expertise to support research management and administration efforts in Nigeria and professional associations should advocate for the professionalization of RMA roles and promote standards, ethics, and best practices in the field, as in the case of WARIMA.

By leveraging the roles and contributions of these stakeholders, Nigeria can foster a collaborative and supportive ecosystem for the professionalization of RMA, ultimately enhancing the quality, efficiency, and impact of research activities in the country.

Challenges and Opportunities

In implementing these professionalization efforts for RMA, potential challenges that may likely encountered will be resistance to change (Ogunleye, 2017), lack of institutional support (Adeyemo (2017), lack of resources (Onyeneho et al. 2019), bureaucratic hurdles (Fasasi & Ojelabi, 2019) skills gap and capacity building (Moses & Ayodele, 2019), and cultural and attitudinal barriers (Fasasi & Ojelabi, 2019). To tackle these challenges, a comprehensive approach is required that will involve stakeholder engagement, policy reforms, capacity building, and investment in resources and infrastructure to support the professionalization of research management and administration in Nigeria.

Identification of opportunities for innovation and improvement in RMA is critical for advancing professionalization efforts. Areas of opportunities will include the adoption of technology (Adeyemo, 2017), data analytics and decision support (Moses & Ayodele, 2019), capacity-building programs (Fasasi & Ojelabi, 2019), collaborative networks and partnerships (Onyeneho et al., 2019), strengthening ethics and compliance frameworks (Adeyemo, 2017) and promotion of knowledge transfer and commercialization activities (Ogunleye, 2017). By capitalizing on these opportunities, Nigeria can foster innovation, improve research management practices, and enhance the impact of research activities on national development and societal welfare.

Case Study: University of Ibadan Research Management Office (RMO)

The University of Ibadan Research Management Office (RMO) is used as a case study showing the impact of professionalization initiatives in RMA. The University of Ibadan (UI) in Nigeria established the Research Management Office (RMO) in 2015 to enhance research support services, streamline administrative processes, and promote professionalism in research management (University of Ibadan, 2021). The following professionalization initiatives were implemented by the RMO: training programmes, standardized processes, collaborative partnerships, and technology adoption. In view of the initiation and implementation of these processes, increased research funding, improved research output, enhanced collaboration and streamlined processes were recorded as impacts in the University of Ibadan.

This case study demonstrates the impact of professionalization initiatives on RMA in a Nigerian university, highlighting the importance of investing in capacity building, standardization, collaboration, and technology adoption for enhancing research outcomes and institutional performance.

Based on the case study of the University of Ibadan RMO and other professionalization initiatives, several lessons learned, and best practices can be identified in promoting RMA in Nigeria. These include investment in capacity building, development of standardized processes, collaborative partnerships, adoption of technology, Strengthening of ethics and compliance frameworks, and implementation of mechanisms for continuous monitoring and evaluation. Through the integration of these lessons learned and best practices into professionalization efforts, stakeholders will be able to advance RMA practices in Nigeria, ultimately contributing to improved research outcomes, institutional performance, and national development.

FUTURE DIRECTIONS AND POTENTIAL AREAS FOR FURTHER RESEARCH.

In envisioning the future of RMA in Nigeria, a concerted effort must be made to develop a strategic roadmap that will aim at transforming the research ecosystem, fostering innovation and advancing national development. This paper therefore suggests the following strategies: establishment of a culture of excellence and professionalism, efficient and transparent processes, cultivation of intentional collaborative partnerships, investment in research infrastructure, deliberate strengthening of ethics and integrity frameworks, ensuring the promotion of diversity, equity, and inclusion in research, ensure enhancement of Nigeria's global competitiveness in research and innovation, and embrace a culture of continuous learning, adaptation, and improvement in RMA practices. When this vision and strategic initiatives are embraced and implemented, Nigeria can position itself as a hub for research and innovation, driving sustainable development, economic growth, and societal well-being.

Being that the professionalization of RMA is still ongoing, exploring potential areas for further research in RMA in Nigeria can lead to valuable insights and advancements in the field. Thus, further avenues for research should include the (a) investigation of the impact of professionalization initiatives on research outcomes, institutional performance, and national development in Nigeria, (b) research funding and resource allocation (analyze the patterns of research funding allocation, resource utilization, and funding mechanisms in Nigerian universities and their implications for research productivity and innovation) and (c) capacity building and training programmes (Evaluate the impact of capacity-building programs, training workshops, and mentorship initiatives on the skills development and professionalization of research managers and administrators). By addressing these potential research areas, scholars will contribute to the advancement of knowledge and practice in RMA in Nigeria, ultimately enhancing research outcomes, institutional capacity, and national development efforts.

CONCLUSION

This paper provides a systematic discussion on key aspects of the professionalization of RMA based on literature and reiterates the importance of professionalization in RMA as being vital for ensuring the efficiency, transparency, and accountability of research processes in Nigeria. By professionalizing RMA practices, institutions and stakeholders can address various challenges and unlock opportunities for driving scientific progress, innovation, and national development. Nigeria faces various challenges in RMA, including limited funding, inadequate infrastructure, bureaucratic hurdles, and a lack of standardized processes.

In all, there's a clamor for the professionalization of RMA to address these challenges and enhance efficiency, transparency, and accountability in research processes. It is a strategic investment that holds the key to unlocking the full potential of Nigerian research and driving sustainable development in the country. By mobilizing stakeholders and taking concerted action, we can create an enabling environment for professionalizing RMA in Nigeria, driving research excellence, innovation, and societal impact.

Therefore, effective collaboration and coordination are required among stakeholders in promoting the professionalization of RMA in Nigeria through established collaborative platforms, joint funding initiatives, knowledge exchange and capacity-building programmes, standardization of processes and policies and advocacy and awareness campaigns. Through the implementation of these recommendations, stakeholders will enhance the collaboration and coordination efforts, leverage resources and expertise, and advance the professionalization of RMA in Nigeria.

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