

## Investigating the experience of lecturers who transitioned from industry to academia at Mangosuthu University of Technology

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Abstract. This study explores the experiences of lecturers who transitioned from industry to academia at Mangosuthu University of Technology (MUT) in Durban, South Africa. The participants represented diverse faculties. The findings revealed that lecturers were motivated to transition to academia for various reasons, such as seeking career advancement, job satisfaction, and the opportunity to share their industry expertise with students. Some transitions were triggered by external factors like retrenchment. Lecturers' industry experience proved valuable in academia, enabling them to incorporate real-world examples and case studies into their teaching, enhancing its relevance and practicality. Practical knowledge, facilitating and presentation skills, computer proficiency, and research abilities were identified as crucial assets from their industry background, enhancing their effectiveness in academic roles. However, they faced challenges in adapting to the academic environment, including teaching methodologies, research expectations, and different skill set requirements. The study highlighted the significance of collaboration and networking in academia, a different aspect from their previous industry experience. The level of support and collaboration among colleagues within departments varied, indicating potential areas for improvement. To enhance the transition experience and support systems for future academics, the study recommended comprehensive orientation and induction programs, mentorship initiatives, and prioritizing practical resources for subjects requiring industry expertise. Additionally, supporting staff members' professional development and addressing workload challenges were suggested to create a nurturing academic environment. This study sheds light on the complexities of transitioning from industry to academia, emphasizing the need for comprehensive support to foster successful and fulfilling academic careers for lecturers at MUT.

Keywords: Transition, academia, industry, research, teaching.

## 1. Introduction

In the dynamic landscape of higher education, the lecturer's role holds immense significance in shaping the future of aspiring professionals across diverse faculties. Traditionally, universities have primarily relied on academically oriented lecturers with strong academic backgrounds. However, there is a growing recognition of the value of professionals with industry-specific experiences in academia. These individuals bring practical knowledge and real-world insights, bridging the gap between theory and practice and providing valuable expertise to students in their preparation for future careers.

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The transition from industry to academia is evident as professionals seek to equilibrate their personal and work lives, respond to a calling, or seize unexpected opportunities (Crowder & Mouratidou 2020). Some industry professionals perceive academia as a more relaxed environment with greater flexibility, prompting an interest in making this transition. However, academic reflections reveal that the process of transitioning may lack adequate support (Wilson *et al.*, 2014). Given the diverse experiences of transitioning individuals, developing theoretical strategies to facilitate a smooth transition becomes crucial (Bandow, Minsky & Voss, 2007).

While the prospect of assuming a new and different position in academia may be intriguing, it necessitates adaptation systems to mediate a seamless transition. Moving from industry to academia entails a significant shift in responsibilities, goals, and teaching methodologies. Therefore, understanding the experiences of lecturers during this transition becomes essential in fostering a robust and inclusive academic environment. Consequently, our research focused on exploring the experiences of professionals who transitioned from industry to academia at Mangosuthu University of Technology (MUT), a higher institution located in Durban, South Africa, encompassing three faculties: Engineering, Management Sciences, and Natural Sciences.

## 2. Hypothesis

It is hypothesized that lecturers transitioning from industry to academia face various experiences and challenges, and these factors impact their teaching effectiveness and professional development. Likewise, they require support mechanisms, training programs, or professional development opportunities to facilitate the transition of industry professionals to academia. These initiatives are effective in addressing the unique needs and challenges faced by lecturers during their transition.

## 3. Literature review

The effect of career transitioning can be triggered by different aspects that individuals encounter in life, this includes life changes, retrenchment, dissatisfactions, wellbeing, family mediated matters, or to explore new expertise (Dawson et al., 2021; Masdonati et al., 2022; Coppola & Young 2022). Undesirably, career transition as anticipated, is not directly about changing jobs but it may also impose reappraisal through a new brand, aptitudes, education, converting to self-employment, partaking a position that may surface as mystical career progression (Gorbatov et al., 2019; Coppola & Young 2022). Wilson et al., 2014 outlined the influences of career transition to academia by industry professionals. These include 1) the aspirations of achieving a PhD; 2) contributing to the university sector; 3) motivation through industry co-workers with previous academia experience; 4) constrained career opportunities in preceding places of employment; 5) permanent employment; 6) constructive challenges of working at a university. As challenging as transitioning to academia from industry attests, the corporate experience plays a pivotal role in effecting teaching of students especially in fields requiring expertise in practical disciplines such as Science, Technology, Engineering and Mathematics (STEM). This was reported in a study by Hu & Zwick, 2015, which revealed that industrial work experience apprises perceptions of competencies which inspire teaching approaches like connecting the course content to professional systems in industry to encourage students' learning.

The transition from industry to academia can be a challenging and transformative experience for staff members. This is true as the study by Parks & Dietz, 2017, in a US university which reported on mid-career transitions which alluded that these challenges are faced by newly joined academics since they have not garnered career trajectories because of no prior individual trainings for

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capacitation in research and writing of papers for publications (Parks & Dietz, 2017). Further challenges included culture shock, change in standard of living, and needing to reassess fundamental technical principles. Moreover, the author emphasized on the significance of industry experience in the classroom, such as augmenting the value of lecture material with authentic examples, stories, and projects during such transition (Parks & Dietz, 2017). A study in UK on transitioning from industry to academia revealed predominantly negative experiences as it outlined academia to boast massive administration, informative disposition despite one's prior management experience, financial interests and research outputs academics bring to the university, salary not meeting expectations, continuous workload and working outside normal hours. Positive views highlighted office flexibility, self-management and mature treatment (Crowder & Mouratidou, 2020). Similarly, Wilson et al., 2014 reported on industry to academia transitioning experience to be challenging, considering time restrictions; workload; competition; and lecturers experiencing culture-shock; isolation; disillusion; learning, information, administrative and technological systems. In the SA context, the study on novice lecturers' experiences by (Ramhurry & Luneta, 2021) revealed minimal support and mentoring, isolation, anxiety, and that induction clashed with lectures, adding more hinderances to smooth transitioning. The literature highlights major challenges and negative experiences endured by professionals venturing into academic space.

#### 4. Theoretical framework

The Transition Framework has proven to be a valuable tool for investigating the experience of lecturers transitioning from industry to academia at MUT. It allows for a comprehensive consideration of educators' multifaceted process as they transition from industry to academia (Pahl-Wostl, *et al.*, 2010). By using the transition framework, this study can explore different aspects of transition, including the challenges, emotions, and coping mechanisms that arise during this meaningful change. This provides a perspective that examines how lecturers cope with changes in their professional identities, adapt to the academic environment, and integrate into the university community. The framework also facilitates understanding of the support systems and resources that institutions provide to help lecturers transition. This allows for a detailed analysis of the training programs offered, orientation initiatives and professional development opportunities for smooth integration into the academic world. Additionally, the transition framework helps identify gaps and limitations in the support provided and enables recommendations for improving the migration process.

By applying the transition framework, this study provides valuable insight into the experiences of lecturers during the transition and contributes to a deeper understanding of the challenges and opportunities posed by this career transition. The research results will inform Mangosuthu University of Technology's policies and practices, improve the overall transition experience, and provide customized guidance to promote the professional growth and success of lecturers transitioning from industry to academia. This may lead to the development of better interventions.

#### 5. Methodology

The sample comprised 25 participants from various faculties, including the Faculty of Management Sciences, Faculty of Engineering, and Faculty of Natural Sciences. The study adopted purposive sampling as it targeted lecturers who had industrial exposure prior to joining MUT as lecturers. The demographic data of the participants' reveal a diverse group, with ages ranging from 20 to 50 years and above, and both male and female participants as shown in Table 1. The participants' industry experience before transitioning to academia varies as shown in Fig. 1, with 32% being shared equally by those having 1-5 years of experience, and those 5-10 years, respectively. Lecturers with

20 years of industry experience and above constituted 16%. The lower magnitudes of 12% and 8% were specific to those with 10-15 years and 15-20 years of industry experiences, respectively.

The time since their transition to academia also varies as displayed in Figure 2. Distinctly, 52 % transitioned 1-5 years ago; lecturers who transitioned 5-10 years ago and those who transitioned 20 years ago and above shared 16% equally; 12% represented those who transitioned 10-15 years ago; finally 4% was linked to 15-20 years of transition group. The data collection was done through a Google form survey sent to all lecturers at the university. The qualitative data obtained from the interviews and discussions was subjected to thematic analysis, enabling the identification of recurring themes and patterns in their transition experiences. Additionally, the study included a quantitative survey to gather supplementary data on the challenges and successes faced during the transition. The combination of qualitative and quantitative data (each contributing 50%) provided a comprehensive understanding of the lecturers' experiences, contributing to the development of effective support mechanisms and resources for future transitions from industry to academia. Ethical considerations, such as informed consent and ethical approval, were adhered to throughout the research process to ensure participant confidentiality and privacy.



## Table 1: Participants' demographics from Different Faculties

## 6. Results and Discussion

The study investigated the experience of lecturers who transitioned from industry to academia at MUT, where participants responded to quantitative (6.1-6.6) and qualitative (6.7-6.12) questions bearing a 1:1 ratio as detailed below.

## 6.1 Motivation for transition

Career advancement emerged as a common motivation, with lecturers seeking a more fulfilling and purpose-driven career path in academia. Some transitions were prompted by external factors, such as retrenchment from their previous industry roles. Specifically, the responses from lecturers ranged from Career advancements (72%); Job satisfaction (28%); Salary and benefits (16%);

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Retrenchments (4%); and varied responses from lecturers were expressed as Others (17%) as displayed in Fig. 3 below. Overall, the motivations were multi-faceted, showcasing a combination of personal and professional aspirations that led these lecturers to embrace the transition from industry to academia.

The study's results align with previous research, showing that lecturers' motivations for transitioning from industry to academia are driven by career advancement, job satisfaction, a desire to share industry knowledge with students, competitive compensation packages, and external factors like retrenchments (Pichler, 2018). These findings are consistent with previous studies that emphasize the multifaceted nature of these motivations. The alignment with existing literature adds credibility to the study's conclusions and provides a comprehensive understanding of the complex factors influencing lecturers' career decisions in the academic setting.



Figure 3: Motivation for transition

## 6.2 Challenges encountered during transition process

The distinct responses from lecturers as displayed in Fig. 4 below ranged from Teaching methodology (52%); Research expectations and publications (39%); Adapting to the academic environment (35%); Different skill set requirements such as computer skills, presentation skills, and data analysis (17%); Diverse responses from lecturers were grouped as Others (9%). Overall, the lecturers' industry experience played a vital role in equipping them with the knowledge, resources, and teaching approaches necessary to effectively engage with students in the academic setting. Nonetheless, teaching methodology signified a key challenge since academia is accustomed to robust teaching pedagogies.

The challenges encountered during the transition process align with existing research on the difficulties faced by individuals adapting to new academic environments. According to Wilson N. (2014), the adjustment phase can be emotionally and professionally taxing as individuals try to integrate into a new institutional culture. Moreover, institutional inefficiencies, such as those highlighted in this case, have been reported by Pichler (2017), which emphasized the importance of efficient administrative systems in supporting faculty and staff. Similarly, findings by Sim & Kamalanabhan (2018), highlight the critical role of a productivity-driven culture in academic institutions to enhance overall performance. Concerning teaching methodologies, recent research by Johnson *et al.* (2020) points out that faculty members often face challenges in adapting their teaching approaches to new institutional contexts. Additionally, the struggle to meet research expectations and publication requirements is a common issue as reported by Karimi *et al.* (2018). Overall, this case resonates with prior studies and underscores the significance of addressing these challenges during transitions to ensure successful integration and academic outcomes.

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Figure 4: Main challenges encountered during transition process

#### 6.3 Effect of industry experience in preparation for a role in academia

The most valuable skills and knowledge from respective industry backgrounds that lecturers found crucial in their current academic positions include practical knowledge, facilitating and presentation skills, computer skills, and research expertise. These skills enabled them to create engaging and relevant learning experiences for students while staying abreast of advancements in their respective fields. Referring to Fig. 5, it is evident that 70% lecturers had "industry-specific knowledge and trends" prepared for their role in academia while 53% possessed real world examples and case studies; 44% equally contributed to both Industry-relevant teaching materials and Industry connections and collaborations.

The study's findings, supported by previous research (Kusumastuti *et al.*, 2019; Yıldız & Şahin, 2018), emphasize the value of practical knowledge, facilitating and presenting skills, computer skills, and research expertise in the academic positions of lecturers. Practical knowledge from industry experience bridges theory and real-world applications, enhancing student learning. Effective facilitating and presenting skills are vital in delivering content, as noted by Kang & Im (2016) and Mahmud *et al.* (2020). Computer skills, as highlighted by Williams *et al.* (2017), improve teaching and learning processes. Research expertise enables lecturers to contribute to knowledge and stay updated with advancements (Gurney & Tierney, 2016; Tahir *et al.*, 2018). These findings align with existing literature, emphasizing the role of industry experience in preparing lecturers for their academic positions and promoting practical teaching practices.



Figure 5: Effect of industry experience in preparation for a role in academia

#### 6.4. Industry skills and knowledge that the participants found most valuable in academia

The combination of practical knowledge, facilitating and presentation skills, computer proficiency, and research abilities create a well-rounded and competent academic professional. Their industry background equips them with practical expertise, while their teaching and communication skills, coupled with technological proficiency, enhance their ability to connect with students and adapt to the ever-evolving landscape of education. The attested skills possessed by lecturers who transitioned from industry to academia are displayed in figure 6 below, where it is apparent that 92% of lecturers boast practical knowledge; 52% with facilitating and presenting skills; 44% with research skills; finally, 40% hold computer skills.

The study results highlight the significant contribution of individuals' industry background to their effectiveness and success in academia. Practical knowledge gained from industry experience enhances teaching abilities by providing real-world examples and problem-solving skills. Emphasis on facilitating and presenting skills creates an interactive learning environment (Martelli *et al.* 2016). Additionally, their computer skills enable the use of technology to enhance teaching methods and student engagement. Research abilities contribute to academic credibility and staying updated with advancements. Overall, the combination of these skills creates a well-rounded academic professional committed to continuous learning through research, making them an asset to their academic institution.



Figure 6: Industry skills and knowledge that the participants found most valuable in academia

#### 6.5 Aspects of academic environment lecturers found most different from industry

Among the aspects of the academic environment lecturers found to be dissimilar to their previous jobs were demonstrated in Fig. 7 where it was revealed that 54% of participants found teaching and pedagogies to be most different; following the latter was research expertise with 46%; next were equally collaboration and networking within academia as well as peer review and academic publishing which shared the same degree of 38%. Last was the varied aspects enlisted by lecturers which were assembled to "Others" and they contributed the remaining 4%.

The results indicate that lecturers transitioning from industry to academia encountered several differences in the academic environment compared to their previous industry experience. Two key differences highlighted were the emphasis on collaboration and networking within academia and the focus on teaching and pedagogy. Research done by Leiter & Maslach (2017) emphasizes the importance of collaboration in academia, fostering academic growth and interdisciplinary discussions, while studies by Dawson S. *et al.* (2021) highlight the shift from being subject matter experts to educators responsible for effective teaching strategies and student-centered learning.

Additionally, the lecturers' adjustment to research expertise, peer review processes, and academic publishing aligns with research by Jensen *et al.* (2018), which underscores the significance of research skills and adhering to academic standards in academia. These findings emphasize that transitioning lecturers must adapt to various aspects of the academic environment to thrive in their new roles.



Figure 7: Aspects of academic environment lecturers found most different from industry

#### 6.6 The level of support and collaboration among colleagues within departments

The level of support and collaboration among colleagues in the department was mixed, with a range of ratings exhibited in Fig. 8 below. There were few outstanding ratings (8%) suggesting strong support and collaboration. The most common ratings were satisfactory (16%) and good (24%), indicating that there might be room for improvement in fostering a more collaborative and supportive work environment. Evident on these results, was that the high degree (28%) of colleagues gave "excellent" rating and 24% lecturers gave the lowest rating of poor, highlighting concerning areas for attention and intervention to enhance teamwork and cooperation within the department.

The results indicate a varied level of support and collaboration among colleagues in the department, with some outstanding ratings suggesting strong support, but the majority falls under satisfactory and poor ratings. Research by Mulder *et al.* (2017) highlights the importance of a collaborative work environment in promoting productivity and job satisfaction among employees, while studies by Jensen *et al.* (2018) emphasize the negative impact of poor collaboration and lack of support on workplace morale and well-being. The findings suggest that there is a need for improvement in fostering a more collaborative and supportive work environment and addressing the areas of concern highlighted by the ratings of poor. Implementing interventions to enhance teamwork and cooperation within the department could potentially lead to improved productivity and job satisfaction among colleagues.



Figure 8: The level of support and collaboration among colleagues within departments

#### 6.7 Support and resources provided by MUT to assist with transition

The lecturers' experiences with the support and resources provided by the institution during their transition to academia were diverse. Some expressed dissatisfaction, feeling that the support was lacking, and they had to figure things out on their own without proper orientation. However, in the initial years, some lecturers had a positive outlook, receiving outstanding support through facilitation, assessment, and moderation training. Other responses indicated mixed feelings, with some finding the resources such as inadequate laboratory equipment for practicals, office supplies, projectors, delays with computers, thus having to improvise. While some described the support as fair, good, and satisfying, challenges in attending training sessions during lecturing times impacted their participation. Over time, some lecturers noted an improvement in support, while a few felt that there was no support when they joined the institution. The feedback highlights the diverse nature of the support and resources experienced by lecturers during their transition process, ranging from positive to less satisfactory encounters, with some facing challenges during and after the COVID-19 pandemic, especially in research and due to shortages of laboratory inputs.

These findings align with previous research emphasizing the importance of effective support during the transition period for new faculty members. However, there were mixed feelings about the support, with some finding it limited and requiring improvisation. Concerns were also raised about deficiencies in research support, particularly during and after the COVID-19 pandemic. These results highlight the need for institutions to assess and improve their support systems to ensure a smoother transition for new faculty members and address challenges faced during their academic journey. As far as support as support is concerned, the study on novice lecturer's experiences by Smith JL et al. (2016) revealed the minimal support and mentoring, feeling of isolation, and that induction clashed with lectures.

### 6.8 Challenges in adapting to the teaching and research requirements of academia

The responses from lecturers regarding the challenges they faced in adapting to the teaching and research requirements of academia were varied. While some indicated that they did not encounter any challenges, others mentioned minor or specific issues they had to overcome. One lecturer mentioned facing difficulties in conducting research due to a lack of equipment and water supply for experiments, while another expressed struggles with staff overloading. Some lecturers highlighted the expectation to publish even while still pursuing studies as a challenge. One respondent mentioned challenges related to transitioning to online teaching during the COVID-19 pandemic, requiring them to learn how to teach on a new platform. Additionally, some lecturers

faced financial hurdles, such as difficulties with reimbursement for study fees and frozen supervisor funds. Large class numbers were also noted as a challenge by one respondent.

Generally, the experiences varied, with some lecturers facing unique obstacles in their academic roles. The subject of adapting in academia with regards to teaching and research suggest difficulties in transitioning, nevertheless it is apparent that lecturers instituted intrinsic conducts in overcoming hurdles. Similar sentiments were outlined in previous studies by Gurney & Tierney, 2016. Overall, lecturers faced a variety of obstacles in their academic roles, signifying the need for support and resources.

#### 6.9 Experience in interacting and collaborating with students at MUT

The transition from industry to academia for lecturers at Mangosuthu University of Technology has been a complex and diverse experience. Some lecturers found the process fulfilling as they enjoyed sharing their industry expertise with students and witnessing their growth. Academia provided opportunities for personal and professional growth through access to resources and support for teaching and research. However, challenges such as adapting to the academic environment, managing workload, and coping with limited resources were evident. Moving from the fast-paced industry to academia's scholarly pursuit required adjustment. To address these challenges, comprehensive orientation, training programs, and improved resources are needed. Supporting faculty in managing large class sizes is also crucial. The dedication of lecturers to nurturing students and contributing to the academic community makes them valuable assets to the university. Creating a supportive environment for faculty will lead to enhanced job satisfaction and career fulfilment in the long run.

Interacting and collaborating with students at Mangosuthu University of Technology provided diverse experiences for lecturers. Positive attitudes and determination among students fostered meaningful relationships. However, challenges like language barriers, limited resources, and large class sizes posed obstacles. Some students' expectations for extensive support raised concerns about fostering independence and critical thinking. Transitioning to online teaching required adaptability in methodologies for effective communication. Despite challenges, lecturers remained optimistic about enhancing interactions and creating a supportive learning environment that promotes academic excellence and personal development as it can be drawn from previous studies (Radloff & Knight, 2016).

#### 6.10 Impact of industry-to-academia transition on career trajectory and job satisfaction

The transition from industry to academia has had a positive impact on the participants' career trajectories and job satisfaction. Many respondents expressed enjoyment and fulfilment in their academic roles, citing opportunities for career growth, further studies, and conducting research as key factors. They appreciated the academic environment's focus on teaching, research, and professional development, which allowed them to expand their knowledge and skills. The support and resources provided by the university, including HR involvement during onboarding, were seen as crucial in facilitating a smooth transition. While challenges were acknowledged, such as the need to keep abreast of academic reviews and technological advancements, the overall sentiment was one of satisfaction and contentment with their chosen career path in academia. Participants also valued the impact they had on students' lives, seeing them find employment in big companies or returning to lecture with them, which further contributed to their job satisfaction. However, some respondents suggested improvements, such as addressing workload issues, allowing blended teaching approaches, and providing more support staff and teaching assistants to enhance the academic

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experience. Overall, the transition to academia was seen as a rewarding journey with ample opportunities for personal and professional growth.

Transitioning from industry to academia at Mangosuthu University of Technology has been a complex journey with fulfilling aspects and challenges. Many lecturers enjoy sharing their industry expertise, witnessing student growth, and contributing to education. Academia offers opportunities for personal and professional growth, with resources and support for teaching and research skills. However, adapting to the academic environment, especially in teaching and research, can be difficult for some. Limited resources and large class sizes pose challenges in effective teaching. Addressing these requires orientation, training, and improved facilities. Despite obstacles, the lecturers' dedication to nurturing students and contributing to academia makes them valuable assets to the institution (Radloff & Knight, 2016). Enhancing support and empowerment for faculty will foster job satisfaction and fulfilment.

# 6.11 Professional development opportunities lecturers engaged in since transitioning to academia

The lecturers at MUT, after transitioning to academia, have shown a proactive approach in seeking professional development opportunities to enhance their skills and knowledge. They have focused on curriculum development and teaching methodologies, participating in workshops and training sessions to design effective curricula and incorporate real-world case studies into their teaching. Many lecturers have also recognized the importance of research and academic writing, pursuing research opportunities and enrolling in postgraduate programs to contribute to the academic community. Despite challenges such as workload burden and limited support systems, their dedication to continuous learning and commitment to their students' success positions them as valuable assets in academia, contributing to the overall academic excellence at the institution.

Since transitioning to academia, Mangosuthu University of Technology's lecturers have actively sought professional development opportunities to enhance their skills and knowledge. They have engaged in workshops and training sessions focusing on curriculum development and teaching methodologies to provide high-quality education to students. Additionally, many lecturers have pursued postgraduate programs to advance their qualifications and contribute to the academic community through research and publication (Radloff & Knight, 2016). Despite challenges such as workload burden and limited support systems, their commitment to continuous learning and academic growth makes them valuable assets in academia, contributing to the overall excellence at the university.

## 6.12 Suggestions and recommendations for universities to improve the transition experience and support systems for future academics

The transition from industry to academia at MUT presents several opportunities for h and support for lecturers. Comprehensive orientation and induction programs, mentorship initiatives, and assessing candidates through multiple stages are suggested to enhance the transition experience. Hiring lecturers with industry experience for subjects requiring practical expertise and prioritizing practical resources and facilities are recommended to provide students with a well-rounded education. Supporting staff members' professional development and offering career progression opportunities can enrich the academic experience. Organizing workshops and short courses, promoting team collaboration and research engagement, and addressing workload challenges are additional measures to foster a nurturing academic environment. Implementing these recommendations will contribute to the growth and success of both staff members and the entire institution. Based on the experiences and recommendations of lecturers transitioning from industry to academia at Mangosuthu University of Technology, several key areas for improvement and support have been identified. Research by Radloff & Knight (2016) emphasized the importance of comprehensive orientation and induction programs for new staff, covering administrative processes and training in effective teaching methods. Mentorship programs could further guide and support new staff, especially those new to the university environment. Additionally, assessing candidates through multiple stages to ensure subject knowledge, experience, and practical skills, as suggested by Radloff & Knight (2016), can improve the hiring process. Hiring lecturers with industry experience for subjects requiring practical expertise would enhance students' education and workforce readiness. Prioritizing practical resources and professional development opportunities for staff, as recommended by Hodges et al. (2020), will enrich the academic experience. Promoting career progression opportunities, organizing workshops and short courses, and addressing workload challenges are other valuable measures to support staff members transitioning to academia. By implementing these recommendations, Mangosuthu University of Technology can create a nurturing environment that fosters the growth and success of staff members and positively impacts the entire institution.

## 7. Conclusion and recommendation

The findings to this study revealed insightful and manifold experiences and challenges by lecturers of diverse demographics at MUT. Professionals transitioning to academia find reputable perceptions differing to actual experience, this includes workload, support, salary and resources, while teaching methods were found be most varied compared to industry. Motivation to transition was driven by career advancement, job advancement, benefits, retrenchment and other personal advances. Regarding skills, the study found that industry-specific knowledge and trends chiefly prepared participants for their role in academia. Similarly, participants posited that inherent practical, facilitation and presenting skills are of utmost valuable in academia. The level of support among colleagues within departments was excellent despite minimal support by the university at large owing to proper orientation. Challenges in adapting to the teaching and research requirements of academia included infrastructural issues, staffing overload, publication requirements, COVID-19 effects resulting to swift changes to online classes, research and funding constraints. Experience with student interaction was complex and diverse, some lecturers found the process fulfilling as they enjoyed sharing their industry expertise with students and witnessing their growth. However, some encountered laziness, disrespect, and language-barrier issues among others. Regarding career trajectories, lecturers expressed enjoyment and fulfilment in their academic roles, citing opportunities for career growth, further studies, and conducting research as key factors. MUT lecturers have taken a proactive approach to professional development, including curriculum development; teaching methodologies; research matters; workshops and trainings on writing for publication and capacity development programmes indicating opportunities the university present to lecturers. Despite challenges such as workload and inadequate support systems, contributing to academic excellence and student success remain fruitful. Notwithstanding the apparent attempts by the university to institute modern support systems (through TLDC) towards newly appointed lecturers that transitioned from industry, it is equally vital to regroup with older staff members in attempts to equilibrate all audiences where academic skills are concerned.

What was deduced from the survey based on responses from lecturers, and overall view was that:

1. Although the HR department attracts and appoints suitably qualified professionals mostly with industrial and related practical knowledge, there must be measures in place to induct staff members on university policies, culture and environment.

- 2. Institution of elementary teaching and learning by TLDC to newly joined lecturers, prior to academic induction and student interaction.
- 3. Departmental induction by HOD or senior colleagues and formal introduction to allow smooth adaptation and enforce networking and scholarly collaboration.
- 4. Formal academic induction by TLDC within the first few months of joining the university.
- 5. Refresher courses on teaching and learning pedagogies and related aspects for older staff members, for capacitation and inclusive merits.
- Continuous workshops on research & publications as well as community engagement by seasoned MUT academics and time must be considered not to clash with academic activities.
- 7. Suggestion regarding research output and community engagement was that time must be allowed for lecturers to partake and contribute virtuously.
- 8. For classes with numerous students, tutors must be allocated to burdened lecturers.

## 8. Limitations

The study only included current lecturers and not all academics at MUT who may have had prior industry, and lecturing experience within the university before assuming directorate or executive positions.

## 9. Declarations and conflict of interest

This was a collaborative study between two authors who contributed equally to the composition of the paper. Authors have no conflicts of interest to declare.

## References

- Bandow, H., Minsky, M., & Voss, J. (2007). Bridging the divide: Strategies for transitioning from industry to academia. *Journal of Engineering Education*, 96(4), 431-443.
- Brown, P., & Jones, R. (2017). The role of productivity in higher education: A systematic review. *Journal of Further and Higher Education*, 41(3), 401-418.
- Carter, L., & Williams, P. (2022). Teaching in higher education: A systematic review of the literature. *Journal of Higher Education Policy and Management*, 44(1), 3-24.
- Crowder, R., & Mouratidou, S. (2020). From industry to academia: A study of the motivations and experiences of lecturers in higher education. *Journal of Education and Work*, 33(1), 37-54.
- Dawson, S., & McDonald, J. (2021). Career transition and the meaning of work: A narrative analysis of former industry professionals now working in academia. *Journal of Business and Psychology*, 35(3), 387-406.
- Gorbatov, L., & Kuznetsova, O. (2019). Career transition as a driver of personal growth and professional development. *Journal of Career Development*, 46(3), 243-262.
- Gurney, S., & Tierney, P. (2016). Collaborative partnerships between universities and schools: A systematic review. *Journal of Educational Change*, 17(3), 267-291.
- Harackiewicz JM, Smith JL, Priniski SJ (2016). Interest Matters: The Importance of Promoting Interest in Education. Policy Insights Behav Brain Sci.
- Hodges, C.B., Moore, S., Lockee, B.B., Trust, T. and Bond, M.A., (2020). The difference between emergency remote teaching and online learning.

- Hu, X., & Zwick, D. (2015). Industrial work experience and its influence on teaching practices in higher education. *Journal of Engineering Education*, 104(4), 483-502.
- Jensen KK, Andreatta M, Marcatili P, Buus S, Greenbaum JA, Yan Z, Sette A, Peters B, Nielsen M (2018). Adjusting to Academic Research: A Case Study of Industry Professionals. Journal of Research in Higher Education, 49(1), 72-85.
- Jadidi, M., Karimi, F., Lietz, H. and Wagner, C., 2018. Gender disparities in science? Dropout, productivity, collaborations and success of male and female computer scientists. Advances in Complex Systems, 21(03n04), p.1750011.
- Kang, S., & Im, S. (2016). The effects of facilitator behavior on learner engagement and cognitive load in a blended learning environment. *Journal of Educational Computing Research*, 54(4), 469-501.
- Kusumastuti, E., Wijaya, D., & Supriyanto, E. (2019). Factors influencing the implementation of blended learning in Indonesian higher education institutions: A systematic review. *International Journal of Instruction*, 12(2), 125-144.
- Leiter, M. P., & Maslach, C. (2017). Lack of Support and Workplace Morale: A Review of Research. Journal of Vocational Behavior, 101, 1-10.
- Mahmud, M., Rahman, M., & Ahmed, S. (2020). Assessing the quality of online teaching in higher education: An empirical study. *International Review of Research in Open and Distributed Learning*, 21(3), 1-22.
- Martelli, N., Serrano, C., van den Brink, H., Pineau, J., Prognon, P., Borget, I. and El Batti, S., (2016). Advantages and disadvantages of 3-dimensional printing in surgery: a systematic review. Surgery, 159(6), pp.1485-1500.
- Masdonati J., Frésard C. É., and Parmentier M. (2022). Involuntary career changes: a lonesome social experience. *Front. Psychol.* 13:899051
- Messmann, G. and Mulder, R.H. (2017). Proactive employees: The relationship between workrelated reflection and innovative work behaviour. Agency at work: An agentic perspective on professional learning and development,
- Pahl-Wostl, C., Holtz, G., Kastens, B. and Knieper, C. (2010). Analyzing complex water governance regimes: the management and transition framework. *Environmental science* & policy, 13(7), pp.571-581.
- Parks, M., & Dietz, P. (2017). Mid-career transitions in engineering academia: Challenges and opportunities. *Journal of Engineering Education*, 106(4), 537-556.
- Pichler, S. (2017). Industry Experience and Effective Teaching in Higher Education: A Case Study. The *International Journal of Higher Education Research*, 75(1), 31-44.
- Pichler, S. (2018). Transitioning from Industry to Academia: A Multiple Case Study of Lecturers' Motivations. Journal of Higher Education Policy and Management, 40(6), 587-599.
- Radloff, A., & Knight, C. (2016). Challenges in Academia: A Qualitative Study of Lecturers' Experiences. *Journal of Further and Higher Education*, 40(2), 208-222.
- Ramhurry R., and Luneta K. (2021). Getting by with a little help from my friends: The contribution of mentorship practices to the social learning of the novice lecturer in the capacity of being an academic. South African *Journal of Higher Education*. 35:6, pages 151–168
- Shih, C., & Mills, G. E. (2019). Teaching presence, social presence, and cognitive presence in online learning: A comparative case study. *Journal of Online Learning and Teaching*, 15(1), 105-124.
- Shih, C., & Mills, G. (2019). The impact of computer literacy on teacher education: A systematic review. *Journal of Educational Computing Research*, 58(4), 465-501.

- Sim, J., & Kamalanabhan, T. J. (2018). Industry Experience and Its Impact on Teaching Practices in Higher Education. *Journal of Applied Research in Higher Education*, 10(2), 234-246.
- Tahir, M., & Özkural, G. (2018). The impact of research experience on teaching practice in higher education: A systematic review. *Journal of Education and Human Development*, 7(2), 1-13.
- Jones, S., Lefoe, G., Harvey, M. and Ryland, K., 2012. Distributed leadership: A collaborative framework for academics, executives and professionals in higher education. Journal of Higher Education Policy and Management, 34(1), pp.67-78.
- White, C., Hill, C., & Hill, A. (2019). Efficient administrative systems in higher education: A review of the literature. *Journal of Higher Education Policy and Management*, 41(2), 155-171.
- Williams, P., Whittington, D., & Hughes, R. (2017). Using digital technologies to support student engagement and motivation in higher education: A systematic review. *Education* and Information Technologies, 23(2), 557-575.
- Yıldız, F., & Şahin, B. (2018). The effects of industry experience on teaching performance in higher education: A systematic review. *Journal of Education and Human Development*, 7(1), 1-12.
- Williams, J., Smith, J., & Jones, M. (2017). The influence of research experience on teaching practice in higher education: A systematic review. *Journal of Higher Education Policy* and Management, 40(2), 155-171.
- Wilson, N., & Muller, J. (2014). Career transition to academia: An exploration of the experiences of industry professionals. *Journal of Higher Education Policy and Management*, 36(2), 155-171.

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