**GRADUATE SCHOOL OF BUSINESS LEADERSHIP**

| **Research Focus Area** | Digital Transformation and Innovation | | |
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| **Short description** | The focus area in question is dedicated to advancing the understanding of the Fourth Industrial Revolution (4IR) and its associated digital technologies, namely Artificial Intelligence (AI), Internet of Things (IoT), Big Data Analytics, and others, through various academic pursuits. These include but are not limited to teaching and learning, research and publication, postgraduate supervision, and engaged scholarship (community engagement) projects. Specifically, this area explores how the digital technologies can be leveraged to enhance the economic fortunes of South Africa and other regions of the African continent in the global context. | | |
| **Supervision Team** | | | |
| **Name** | **Email** | **Academic Profile** | **Capacity** |
| Prof Masike Malatji | [malatm1@unisa.ac.za](mailto:malatm1@unisa.ac.za) | Masike is the present Area Head (Chair of Department) of the Digital Transformation and Innovation focus area at the Graduate School of Business Leadership (SBL). He possesses over two decades of management consulting experience in the field of information and communication technology (ICT) and has undertaken numerous projects in South Africa, other regions of the African continent, and overseas. Masike's research interests include enterprise information technology security, operational technology cybersecurity, technology entrepreneurship, socio-technical systems, and engineering/technology management - all of which encompass the digital transformation of enterprises and critical infrastructure. He holds a Doctor of Engineering degree along with other qualifications in science and engineering. In addition to his academic pursuits, Masike actively participates in several community and professional engagement activities and holds memberships in various organisations. | 5 DBLs |
| Prof Walter Matli | [matliw@unisa.ac.za](mailto:matliw@unisa.ac.za) | Walter Matli is an Associate Professor at UNISA, School of Business Leadership within the Digital Transformation and Innovation focus area. He earned his PhD focusing on ICT4Development in October 2019. His current research focuses on the digital futures with emphasis on societal challenges and cross-cutting capabilities, business value of information technology, artificial intelligence for business, big data, digital remote workers, technology inequalities, information system auditing, technology use, acceptance and impact.  Apart from teaching and research, he is involved in several UNISA SBL projects and committees. Digital Transformation area offers broad core programmes intended to train future decision-makers who have an international focus and are agile and responsive. | 5 DBLs |
| Prof Nhlanhla Mlitwa | [wiltonb@unisa.ac.za](mailto:wiltonb@unisa.ac.za) | Prof Nhlanhla Mlitwa (Mlita) entered the teaching, learning and research on pedagogy and change in higher education in 2003. Doubling up as an Adjunct professor in the Department of Information Systems at the University of Cape Town (UCT), he managed to push 7 books on IT; Telecommunications Networks, IS, Software engineering, and Mobile Applications - to support teaching, and PG research advancements in the Western Cape region in this highly productive period.  **RESEARCH ENGAGEMENTS:**   * Research Management, IP and Tech Transfer * Communication Networks, Mobile Applications * Software Engineering; Agile Methods * Computer assisted learning; e-Learning and m-Learning in Higher Education (ICT, pedagogy & change) – * ICT-4-D (including e-Health, e-Government, e-Commerce, e-Business   **SHORT BIOGRAPHY**  Prior experience (2005-2015) includes development of PG Programme in Information Technology (IT) for the Newly merged PENTECH and CAPETECH – becoming the Cape Peninsula University of Technology (CPUT) in 2005 in Cape Town. A senior researcher in ICT infrastructure and networks under the HictE project (held by the 5 HE institutions in the Western Cape) (operating from the KEWL project centre, Goldfields Building, UWC) from 2003 to 2005. Before then, Mlitwa was a senior researcher in the ICT space at HBDvc and Bridges.org., in 2001-2003, All of this however, started by doubling-up as a PG student and an instructor/senior technician at the Humarga Computer lab, 2nd Floor, BJ Vorster Building, Stellenbosch University from 1998 to July, 2001.  **Highlight:**  *Work of the D-Lab as a visiting scholar at the MIT, Boston in Massachusetts, Cambridge (USA) in 2017-18.*  **Focus:***University-Industry Tech-Transfer (TT) and Commercialisation Models of Technological Innovations and Inventions*  You may browse the 2 recent contributions:   1. <http://postgradenvironments.com/2017/11/06/deciding-masters-degree/>   <http://postgradenvironments.com/2017/11/06/understanding-pg-journey-process/> | 6 DBLs |
| Prof JA Van der Poll | [vdpolja@unisa.ac.za](mailto:vdpolja@unisa.ac.za) | Professor JA van der Poll joined the then Department of Computer Science and Information Systems at Unisa in 1988. He holds a Doctorate in Computer Science, and his areas of expertise are in the formal specification of software systems, reasoning about specifications, and evaluating formal and semi-formal specification notations. He joined the Unisa SBL in July 2013 as a Professor in ICT Management. He is a Research Professor and NRF-rated researcher and has authored in the order of 110 journal articles and peer-reviewed conference papers. He delivered numerous M&D students during his time at Unisa. Lately, his research interests are in facilitating the specification and reasoning of ICT processes in the 4IR/5IR from a technology adoption and management perspective; digital entrepreneurship; new product development processes in the digital age; and technology commercialisation challenges, as well as 4IR/5IR technology enablers of entrepreneurial innovations in developing-economy SMMEs. | 3 DBLs |
| External supervisors | External supervisors | External supervisors are industry practitioners and/or academics with extensive experience the field of ICT. | 20 |
| **Reading: Subject Field** | | | |
| Accenture. 2018. Unlocking digital value for business and society in South Africa. Available at: [Unlocking digital value for business and society in South Africa (accenture.com)](https://www.accenture.com/_acnmedia/PDF-118/Accenture-Unlocking-Digital-Value-For-Business-And-Society-In-South-Africa.pdf) (Accessed on 08 March 2023).  Antonizzi, J. and Smuts, H. (2021). The characteristics of digital entrepreneurship and digital transformation: A systematic literature review. In: Hattingh, M, Matthee, M., Smuts, H., Pappas, I. Dwivedi, Y.K. & Mantymaki, M. (Eds.), *Responsible Design, Implementation and Use of Information and Communication Technology*, Springer, Cham, Switzerland. DOI: 10.1007/978-3-030-44999-5\_20.  Moloi, T. and Marwala, T. (2021). *Artificial Intelligence and the Changing Nature of Corporations: How Technologies Shape Strategy and Operations*. Springer, Cham, Switzerland. DOI: 10.1007/978-3-030-76313-8.  Marwala, T. (2020). *Closing the gap: The Fourth Industrial Revolution in Africa*. Macmillan, Johannesburg, South Africa.  Ramaphosa, C. (2020). A national strategy for harnessing the Fourth Industrial Revolution: The case of South Africa. Available at: [A national strategy for harnessing the Fourth Industrial Revolution: The case of South Africa (brookings.edu)](https://www.brookings.edu/blog/africa-in-focus/2020/01/10/a-national-strategy-for-harnessing-the-fourth-industrial-revolution-the-case-of-south-africa/) (Accessed on 08 March 2023).  South Africa. (2020). PC4IR strategic implementation plan. Available at: [PowerPoint Presentation (dpme.gov.za)](https://www.dpme.gov.za/keyfocusareas/Provincial%20Performance%20Publication/Documents/PC4IR%20SIP%20Presentation_National%20Departments%20Consultation%202021.pdf) Accessed on 08 March 2023).  Ellipsis. (2020). Report of the presidential commission on the Fourth Industrial Revolution. Available at: [South Africa and the Fourth Industrial Revolution (4IR) – Ellipsis (archive.org)](https://web.archive.org/web/20210630015038/https:/www.ellipsis.co.za/the-fourth-industrial-revolution-4ir/) (Accessed on 08 March 2023).  Schwab, K.M. 2017. *The Fourth Industrial Revolution*. Crown Business, New York, NY: USA.  Schilling, M.A. (2020). Digital transformation: What is new if anything? Emerging patterns and management research, *Academy of Management Discoveries*, 6(3), 341-350. DOI: 10.5465/amd.2020.0144. | | | |
| **Reading: Research Methodology** | | | |
| SAGE. 2023. SAGE Campus. Available at: <https://sagepub.libguides.com/campus/courses> (Accessed on 08 March 2023).  Trafford, V. & Lesham, S. 2012 *Stepping Stones to Achieving your Doctorate: Focusing on Your Viva from the Start,* Berkshire: Open University Press | | | |