

Assessment of Factors Responsible for the Failure of Municipal Projects: A Case Study of a South African Municipality

Kedumetsi Lerato Piitso

Department of Quality and Operations Management

University of Johannesburg

Pretoria, South Africa

adopiitso@yahoo.com

Dr. Emmanuel Edoun

Research Supervisor

University of Johannesburg

Johannesburg, South Africa

eiedoun@uj.ac.za

Dr. Nelson Mandonsela

Research Co-Supervisor

University of Johannesburg

Johannesburg, South Africa

nmadonsela@uj.ac.za

Abstract

This paper analyses the factors responsible for the failure of municipal projects because municipal projects play an essential role in shaping basic service delivery needs and infrastructure requirements for communities that reside in those municipal areas. As much as municipal projects are crucial, many South African municipalities encounter failure, leading to compromised service delivery, resource wastage, and deteriorating or lack of infrastructure. This paper delves into several factors responsible for the failure of municipal projects, assimilating insights from academic literature and exploring responses from respondents' perceptions. Data was collected from 151 respondents using a questionnaire adapted from a similar study. The respondents who took part in the study were employees and service providers/ contractors working in the project management environment. The study identified the top 10 factors out of the 29 factors that are responsible for the failure of municipal projects, namely poor plans and planning process, inadequate monitoring, selection of inexperienced project managers, inadequate human resources, lack of communication, poor leadership at all levels; lack of supervision; political interference; high level of corruption; change in government and inadequate capacity building of project managers. Over and above project management theory, this study contributes to the broader management literature. This study also suggests possible tools for successfully improving municipal projects.

Keywords

Project Management, Project Failure, Projects, Municipality, and Service Delivery

1. Introduction

Ika and Saint-Macary (2014). Ilorah (2014) indicated that projects in Africa are often late, over budget, and often have a failure rate above 50%, which concerns the developing economy. Furthermore, in South Africa, the Auditor-General South Africa (AGSA) has been reporting on the performance of projects in local municipalities and found that 38% of the 518 audited projects were not meeting their targets, stating that challenges included delays in project completion, underspending on grants, managing finances, lack of contractor monitoring, lack of project management of critical milestones, taking accountability for project outcomes (AGSA, 2018). Also, during the 2020/2021 financial year audit period, the AGSA further examined the implementation of municipal projects using the project life cycle. A total of 517 critical municipal projects, including water and sanitation services, road construction, and recreational facilities, were sampled to ensure that the public funds are used accurately and reliably (AGSA, 2022). Damoah. et al., (2018) suggested that municipal project failures significantly impact communities, service delivery, development plans, unemployment reduction, and social cohesion.

Therefore, it is essential to research the factors responsible for municipal project failure because identifying and understanding these factors can help avoid failures and increase overall community satisfaction (Domah. et al., 2018). Furthermore, in many public and private organisations, some operating expenses are project-based, significantly contributing to global value creation (Abbasi & Jaafari, 2018). The South African metropolitan municipalities had to return R235,82 million in unspent infrastructure funds for urban settlement development and public transport networks. There is also a possibility of returning a further R 70,72 million if the National Treasury does not approve the rollover of these funds. Additionally, money was only sometimes spent according to the grant framework. Underspending and inappropriate spending of these grants leads to a lack of maintenance for valuable infrastructure assets, affecting service delivery and the failure to complete planned projects. Consequently, communities continue to experience frustration due to inadequate service delivery (AGSA, 2022).

Moreover, the AGSA (2022) has reported consistent project weaknesses and inadequate maintenance and management issues. These problems have been identified year after year, which is concerning as they are critical components of the South African Economic Reconstruction and Recovery Plan. In line with this plan, the national government provides infrastructure grants to municipalities to facilitate infrastructure development and maintenance. Although these grants are crucial for financing projects, they are often only partially utilised due to poor project management. Thus, this research aimed to assess the factors responsible for the failure of municipal projects. Literature was interrogated for the practices of project management applied by institutions and the roles of project managers. The study analysed the 29 factors responsible for the failure of municipal projects based on responses obtained from participants actively involved in project management working in one of the South African municipalities.

1.1 Objectives

The study was conducted at a South African Municipality. The study's overall objective was to assess factors responsible for the failure of municipal projects. To provide empirical data that could be used to inform service delivery implementation and policy development on the broader issues affecting the successful implementation of projects. The study had the following objectives: 1) to identify factors responsible for the failure of municipal projects and 2) to make feasible recommendations that are helpful for the effective implementation of projects.

2. Literature Review

Project management practices are applied to any project, which can be simple tasks or complex projects that entail the application of the art of science with the level of technology, tools, and techniques and the employees involved in the project (Ajmal et al., 2017; Besteiro et al., 2015). According to Abbasi and Jaafari (2018), project management has been about achieving some organisational goals and objectives, with more than 30% of global and emerging economic activities using projects. Project management practices are critical in institutions to ensure that they increase the management of resources within project timeframe, cost, quality, and alignment with strategic objectives (Ajmal et al., 2017; Kerzner, 2017). Amatey and Hayibor (2017) further argued that local government projects are considered public sector projects with unique challenges, including satisfying political interests while ensuring policies and procedures are followed. Project managers must ensure that procedures and functions are consistent and flexible depending on project stage development, which leads to decisions of support through organisational culture (Ajmal et al., 2017).

Besteiro et al. (2015) suggested that project managers as a front line contribute to the project's success if they have a good knowledge and understanding of the factors that contribute to municipal project failure and their control. According to (Damoah. et al., 2018), municipal projects are important because government policies are often translated into programmes and projects implemented for the communities. Therefore, the contribution of these projects cannot be overestimated because they contribute to a better economy and the lives of communities; after all, developed countries achieve their growth and development through the implementation of projects (Damoah. et al., 2018). Many of the factors that influence the failure of projects have negative variables that do not instil confidence, and there is a need to understand the factors responsible for municipal project failure. Policy-makers, project managers, and city planners must minimise risks and improve project performance (Akomah & Ramani, 2023).

Furthermore, Ika and Saint-Macary (2014), Ilorah (2014), and Redafi (2017) indicated the following common factors contributing to municipal project failure: poor planning, which includes failure to address the project achievement goals, followed by lack of stakeholder engagement, which is essential to involve all stakeholders in the critical project process. Cost overruns result from unrealistic inflation rates or underestimation of the complexity of the project, political interference, inadequate risk management, which requires the project process to be tested and validated for effective implementation, and lack of technical expertise. Poor communication, legal and regulatory challenges, environmental impact assessment, and sociocultural impacts (Ika & Saint-Macary, 2014; Ilorah, 2014; Redafi, 2017).

3. Methodology

The study used purely quantitative methods of data collection and analysis. The nature of the study was quantitative and exploratory. The design of the study was descriptive and cross-sectional. The research was conducted on a census population of 472 municipal employees and contractors/service providers within the project management environment. Stratified random sampling was used to select the population of municipal employees and service providers/contractors as part of the study. The survey strategy has three (3) data collection techniques: structured observations, structured interviews, and structured questionnaires (Saunders et al., 2012, p. 178). Saunders et al. (2012, p. 178) structured observations are concerned with the frequency of actions; structured interviews use a questionnaire based on a predetermined and standardised set of questions; structured questionnaires are general techniques of data collection in which each person is requested to respond to the same set of questions in a predetermined order. It includes structured interviews, telephone questionnaires, and those in which the questions are answered without the interviewer being present (Saunders et al., 2012, p. 178).

In this study, data collection was conducted by using a structured questionnaire. The study survey questionnaire was pre-tested, validated, and standardised before it was used for data collection. The study targeted the entire population of 472 employees and contract/service providers whose roles and responsibilities were in project management in one of the South African municipalities. According to descriptive research, a sample size of 10% to 50% is suitable (Oeri et al., 2020); thus, in this study, 151 respondents participated, 30% of the entire population. Data was therefore collected from each of the 151 respondents who took part in the study using the questionnaire adapted from a similar study (Damoah. et al., 2015, pp. 314-320). The questionnaire has one dependent variable of the study (factors responsible for municipal project failure) with 29 independent variables. The variables are all relevant to the theme of the study, and the potential causes of municipal project failure are assessed.

4. Results and Discussion

4.1 Respondents Profile

The percentage distribution of the respondents in Table 1 shows that about 13.25% are in the chief director representative, 27.81% are in the director representative, 25.17% are in the deputy director representative while 18.54% are in the assistant director representative, and 15.23% were service providers or contractors.

Table 1. Level of position distribution of respondents

Position	Frequency	Per cent
Chief Director	20	13.25
Director	42	27.81
Deputy Director	38	25.17
Assistant Director	28	18.54
Service provider/contractor	23	15.23
Total	151	100.0

Responses on years of experience working at one of the municipalities planning or implementing municipal projects showed that 11.92% had two or fewer years of experience, and 29.80% had 3 to 5 years of experience. In comparison, 38.41% had 6 to 10 years of experience, and 19.87% had 11 years or more of experience. This distribution indicates the level of the respondents' experience and familiarity with the implementation of municipal projects.

4.2 Factors responsible for municipal project failure

The research identified 29 factors responsible for the failure of municipal projects, ranked between 1 and 24. The top 10 ranked factors were agreed upon by over 72% or more of the 151 respondents as influential in the failure of municipal projects. The research found that 122 out of 151 respondents (80.79%) agreed or strongly agreed that poor planning processes contribute to the failure of municipal projects. Additionally, 121 out of 151 respondents (80.13%) agreed or strongly agreed that inadequate project monitoring contributes to project failure. In comparison, 113 out of 151 respondents (74.83%) agreed or strongly agreed that selecting inexperienced project managers also contributes to project failure. Table 2 below depicts the frequency table of factors responsible for municipal project failure.

Table 2. Frequency table of factors responsible for municipal project failure

#	Factors responsible for municipal project failure	Linkert Scale	Frequency	Percentage	Rank
1	Poor plans and planning process	Agree	76	50.33	4 th
		Strongly agree	46	30.46	
		Disagree	16	10.60	
		Strongly disagree	10	6.62	
		Not sure	3	1.99	
Total			151	100.0	
2	Inadequate monitoring	Agree	74	49.01	5 th
		Strongly agree	47	31.13	
		Disagree	16	10.60	
		Strongly disagree	6	3.97	
		Not sure	8	5.30	
Total			151	100.0	
3	Change in project leadership	Agree	54	35.76	17 th
		Strongly agree	44	29.14	
		Disagree	35	23.18	
		Strongly disagree	4	2.65	
		Not sure	14	9.27	
Total			151	100.0	
4	Selection of inexperienced project managers	Agree	71	47.02	9 th
		Strongly agree	42	27.81	
		Disagree	19	12.58	
		Strongly disagree	5	3.31	
		Not sure	14	9.27	

	Total		151	100.0	
5	Misalignment between the project team and organisational goals	Agree	73	48.34	13 th
		Strongly agree	31	20.53	
		Disagree	26	17.22	
		Strongly disagree	3	1.99	
		Not sure	18	11.92	
	Total		151	100.0	
6	Lack of task definition	Agree	72	47.68	19 th
		Strongly agree	17	11.26	
		Disagree	35	23.18	
		Strongly disagree	13	8.61	
		Not sure	14	9.27	
	Total		151	100.0	
7	Lack of project sponsor involvement	Agree	45	29.80	23 rd
		Strongly agree	26	17.22	
		Disagree	41	27.15	
		Strongly disagree	11	7.28	
		Not sure	28	18.54	
	Total		151	100.0	
8	Lack of project management techniques	Agree	80	52.98	11 th
		Strongly agree	29	19.21	
		Disagree	22	14.57	
		Strongly disagree	7	4.64	
		Not sure	13	8.61	
	Total		151	100.0	
9	Lack of commitment to project	Agree	69	45.70	17 th
		Strongly agree	29	19.21	
		Disagree	33	21.85	
		Strongly disagree	7	4.64	
		Not sure	13	8.61	
	Total		151	100.0	
10	Incorrect definition of specifications	Agree	72	47.68	16 th
		Strongly agree	28	18.54	
		Disagree	28	18.54	
		Strongly disagree	8	5.30	
		Not sure	15	9.93	
	Total		151	100.0	
11	Not following procurement processes	Agree	71	47.02	15 th
		Strongly agree	30	19.89	
		Disagree	30	19.89	
		Strongly disagree	9	5.96	
		Not sure	11	7.28	
	Total		151	100.0	
12	Lack of feasibility studies	Agree	60	39.74	21 st
		Strongly agree	27	17.88	
		Disagree	35	23.18	
		Strongly disagree	10	6.62	
		Not sure	19	12.58	
	Total		151	100.0	
13	Delays in releasing of funds	Agree	56	37.09	13 th
		Strongly agree	48	31.79	
		Disagree	31	20.53	
		Strongly disagree	11	7.28	

		Not sure	5	3.31	
	Total		151	100.0	
14	Inadequate project funding	Agree	67	44.37	14 th
		Strongly agree	35	23.18	
		Disagree	28	18.54	
		Strongly disagree	6	3.97	
		Not sure	15	9.93	
	Total		151	100.0	
15	Inadequate human resources	Agree	70	46.36	8 th
		Strongly agree	45	29.80	
		Disagree	20	13.25	
		Strongly disagree	3	1.99	
		Not sure	13	8.61	
	Total		151	100.0	
16	Lack of communication	Agree	65	43.05	7 th
		Strongly agree	52	34.44	
		Disagree	24	15.89	
		Strongly disagree	3	1.99	
		Not sure	7	4.64	
	Total		151	100.0	
17	Poor leadership at any or all levels	Agree	59	39.07	6 th
		Strongly agree	59	39.07	
		Disagree	20	13.25	
		Strongly disagree	3	1.99	
		Not sure	10	6.62	
	Total		151	100.0	
18	Lack of supervision	Agree	78	51.66	10 th
		Strongly agree	32	21.19	
		Disagree	25	16.56	
		Strongly disagree	3	1.99	
		Not sure	13	8.61	
	Total		151	100.0	
19	Political interference	Agree	43	28.48	1 st
		Strongly agree	90	59.60	
		Disagree	8	5.30	
		Strongly disagree	2	1.32	
		Not sure	8	5.30	
	Total		151	100.0	
20	High level of corruption	Agree	46	30.46	3 rd
		Strongly agree	77	50.99	
		Disagree	11	7.28	
		Strongly disagree	2	1.32	
		Not sure	15	9.93	
	Total		151	100.0	
21	Not following regulations	Agree	53	35.10	12 th
		Strongly agree	53	35.10	
		Disagree	21	13.91	
		Strongly disagree	4	2.65	
		Not sure	20	13.25	
	Total		151	100.0	
22	Project scope not clear	Agree	53	35.10	18 th
		Strongly agree	39	25.83	
		Disagree	38	25.17	

		Strongly disagree	8	5.30	
		Not sure	13	8.61	
	Total		151	100.0	
23	Scope change	Agree	67	44.37	12 th
		Strongly agree	39	25.83	
		Disagree	30	19.87	
		Strongly disagree	39	25.83	
		Not sure	11	7.28	
	Total		151	100.0	
24	No formal change of scope control system	Agree	67	44.37	11 th
		Strongly agree	42	27.81	
		Disagree	27	17.88	
		Strongly disagree	2	1.32	
		Not sure	13	8.61	
	Total		151	100.0	
25	Change in government	Agree	57	37.75	10 th
		Strongly agree	53	35.10	
		Disagree	23	15.23	
		Strongly disagree	7	4.64	
		Not sure	11	7.28	
	Total		151	100.0	
26	Natural disaster	Agree	18	11.92	24 th
		Strongly agree	11	7.28	
		Disagree	51	33.77	
		Strongly disagree	37	24.50	
		Not sure	34	22.52	
	Total		151	100.0	
27	Misalignment between organisational culture and belief systems	Agree	64	42.38	20 th
		Strongly agree	24	15.89	
		Disagree	33	21.85	
		Strongly disagree	6	3.97	
		Not sure	24	15.89	
	Total		151	100.0	
28	Fluctuation of prices	Agree	57	37.75	22 nd
		Strongly agree	20	13.25	
		Disagree	42	27.81	
		Strongly disagree	11	7.28	
		Not sure	21	13.91	
	Total		151	100.0	
29	Inadequate capacity building of project managers	Agree	74	49.01	2 nd
		Strongly agree	51	33.77	
		Disagree	15	9.93	
		Strongly disagree	1	0.66	
		Not sure	10	6.62	
	Total		151	100.0	

Source: Author's Compilation

Furthermore, of 151 respondents, 104 (68.87%) agree or strongly agree that misalignment between the project team and organisational goals influences failure to complete municipal projects successfully. Additionally, 109 out of 151 (72.19%) respondents agree or strongly agree that a lack of project management techniques influences project failure. In comparison, 100 out of 151 (66.23%) respondents agree or strongly agree that incorrect definitions of specifications influence project failure. Not following procurement processes significantly contributed to the failure of municipal projects, with 101 out of 151 respondents (66.89%) agreeing or strongly agreeing. Furthermore, 104 out of 151 respondents (68.87%) identified delays in releasing funds as a factor influencing project failure. Additionally, inadequate project funding was recognised by 102 out of 151 respondents (67.55%) as a critical factor contributing to project failure.

Inadequate human resources were also identified as an influencer for failure in the successful completion of municipal projects, with 115 out of 151 (76.16%) respondents agreeing or strongly agreeing; lack of communication with 117 out of 151 (77.48%) respondents agreeing or strongly agree, also poor leadership at any or all levels with 118 out of 151 (78.15%) respondents who agree or strongly agree that same influences failure in the successful completion of projects.

Eleven (11) 51 (72.85%) respondents agree or strongly agree that lack of supervision influences failure in completing municipal projects. In comparison, 133 out of 151 (88.08%) respondents agree or strongly agree that political interference influences failure in the successful completion of projects, 123 out of 151 (81.46%) respondents agree or strongly agree that a high level of corruption influences failure in the successful completion of projects; additionally, 106 out of 151 (70.20%) respondents agree or strongly agree that the factor of not following regulations influences failure in the successful completion of projects.

Scope change was identified as an influencer for failure in the successful completion of municipal projects, with 106 out of 151 (70.20%) respondents agreeing or strongly agreeing. Not having a formal change of scope control system indicated that 109 out of 151 (72.19%) respondents agree or strongly agree that it influences failure in the successful completion of projects. In contrast, change in government has been identified by 110 out of 151 (72.85%) respondents who agree or strongly agree that it influences failure in the successful completion of projects and 125 out of 151 (82.78%) respondents who agree or strongly agree that inadequate capacity building of project managers failure in the successful completion of projects.

On the other hand, 53.64% of respondents either agree or strongly agree that the project performance and selection of inexperienced project managers is inadequate, whereas 54.97% of respondents agree or strongly agree that project performance and inadequate human resources are ineffective. It can also be seen that 56.29% of the respondents agree or strongly agree that project performance and infrastructure development are inefficient.

This study's results align with the findings of Adebisi, Ojo, and Alao (2018, p. 221); Aranyosy et al. (2018, pp. 21-22); Damoah. et al. (2018, pp. 570-574) and Redafi (2017) suggested that the factors influencing project failure include poor plans and planning processes, inadequate monitoring, selection of inexperienced project managers, misalignment between the project team and organisational, lack of project management techniques, incorrect definition of specification, not following procurement processes, delays in releasing funds; inadequate project funding; inadequate human resources; lack of communication; poor leadership at any or all levels; lack of supervision; high level of corruption; scope change; not having formal change of scope control system; change in government and inadequate capacity building of project managers.

6. Conclusion

According to Ika and Saint-Macary (2014), project management in South Africa is moving in the right direction, meaning that project performance is improving regarding project management processes and organisational outcomes. However, project failure can happen for various reasons, and this study has identified the top 10 factors out of the 29. The municipality can start addressing these ten factors to improve or achieve a project success rate. The top 10 factors contributing to municipal project failure include political interference, ranked ^{first}, inadequate capacity building of project managers, ranked ^{second}, and high corruption, ranked ^{third}. Poor plans, planning processes, and inadequate monitoring were ranked ^{fourth and fifth}, respectively; poor leadership at any or all levels was ^{6th}, and lack of communication was ranked ^{seventh}. Inadequate human resources was ranked ^{8th}, inexperienced project managers' selection was ranked ^{ninth}, and lack of supervision and change in government were ranked ^{10th}.

South African municipalities should explore the use of social capital to assist in achieving project success and collaborate towards improving the lives of the communities they serve. According to (Ilorah, 2014), social capital is a multi-disciplinary process that improves collaboration, access to financial capital, sustainable human resources, and political influence and can be crucial in influencing significant changes and attitudes, reducing inequality, accelerating economic growth, and improving project performance. As alluded to by Redafi (2017) and Abrantes and Figueiredo (2015), organisations that fail to manage projects equally fail to manage employees, and having employees who are demotivated can muddle even the best project plan. Project managers and organisations can use social capital to harness the project implementation throughout the life cycle.

References

- Abbasi, A., & Jaafari, A. Project management research and industry-focused innovations. *Journal of Modern Project Management*, 60-69, 2018.
- Abrantes, R., & Figueiredo, J. Resource management process framework for dynamic NPD portfolios. *International Journal of Project Management*, 33(6), 1274-1288, 2015. doi:10.1016/j.ijproman.2015.03.012
- Adebisi, E. O., Ojo, S. O., & Alao, O. O. Assessment of factors influencing the failure and abandonment of multi-storey building projects in Nigeria. *International Journal of Building Pathology and Adaptation*(2), 210, 2018. doi:10.1108/IJBPA-10-2017-0048
- AGSA. *Consolidated general report on the local government audit outcomes MFMA 2016-17 SOUTH AFRICAN AUDITOR-GENERAL*, 2018. Retrieved from <http://www.agsa.co.za/>
- AGSA. *Consolidated general report on local government audit outcomes: MFMA 2020-21*, 2022, Pretoria.
- Ajmal, M., Malik, M., & Saber, H. Factor analysing project management practices in the United Arab Emirates. *International Journal of Managing Projects in Business*, 10, 749-769, 2017. doi:10.1108/IJMPB-03-2017-0027
- Akomah, B. B., & Ramani, P. V. Confirmatory factor analysis of the positive factors influencing the performance of Ghanaian construction projects. *Emerald Insight*, 2023.
- Amoatey, C., & Hayibor, M. V. K. Critical success factors for local government project stakeholder management. *Built Environment Project and Asset Management*(2). p. 143, 2017. doi:10.1108/BEPAM-07-2016-0030
- Aranyossy, M., Blaskovics, B., & Horváth, Á. A. How universal are IT project success and failure factors? Evidence from Hungary. *Information Systems Management*, 35(1), 15-28, 2017. doi:10.1080/10580530.2017.1416943
- Besteiro, É. N. C., Pinto, J., D., & Novaski, O. Success factors in project management. *Business Management Dynamics*, 4(9), 19-34, 2015
- Damoah, I., Akwei, C., & Mouzoghi, Y. *Causes of government project failure in developing countries—focus on Ghana*—paper presented at the 2015 Conference Proceedings. British Academy of Management, 2015.
- Damoah, I. S., & Kumi, D. K. Causes of government construction projects failure in an emerging economy: Evidence from Ghana. *International Journal of Managing Projects in Business*., 11(3), 558-582, 2018.
- Ika, L. A., & Saint-Macary, J. Why do projects fail in Africa? *Journal of African Business*, 15(3), 151-155, 2014.
- Ilorah, R. Recurring challenges are the main constraints to AU/NEPAD projects. *Journal of African Business*. 15(3), 156-168, 2018.
- Kerzner, H. *Project management - a systems approach to planning, scheduling, and controlling*., 2017 Retrieved from <http://0-search.ebscohost.com/tkplib01.tut.ac.za/login.aspx?direct=true&AuthType=ip.url.cookie.uid&db=edsknv&AN=edsknv.kt011BG0Q1&site=eds-live>
- Redafi. Why projects fail case study of Airbus - A380. *Research and Development Africa Initiative*, 2017.
- Saunders, M., Lewis, P., & Thornhill, A. *Research methods for business students* (5th ed.). London: Prentice Hall, 2012.

Biographies

Kedumetsi Lerato Piitso has over 15 years of private and public sector working experience. Her experience includes management of performance, executive wellness, dashboard management, organisational development, organisational work-study, organisational design, project management, change management, human resource management, and leadership and mental fitness coaching. She is also a seasonal conference presenter/speaker and facilitator. She is credentialed as an Associate Certified Coach (ACC) issued by the International Coaching Federation (ICF). She is also a member of Positive Intelligence (PQ). Currently, she is a PhD in Operations Management candidate with the University of Johannesburg (UJ). Her formal education includes a Master of Business Administration (MBA) from the Tshwane University of Technology (TUT), a Post-Graduate Diploma in Coaching from the South African College

of Applied Psychology (SACAP), a B-Tech Degree in Project Management, a B-Tech Degree in Management Services, and a National Diploma in Management Services from Tshwane University of Technology.

Dr. Emmanuel Edoun Dr I Edoun holds a PhD from the University of the Witwatersrand in Johannesburg, South Africa. His areas of expertise include Public Sector Economics, Public and Development Management, Operations Management, and Local Economic Development. He has supervised nearly 45 total Masters students, 75 MBA students, and 30 PhD Students. All from the University of the Witwatersrand, University of Johannesburg, Tshwane University of Technology, Regent Business School, and Mancosa, all from South Africa. Dr Edoun has played pivotal roles in consulting and has led projects in institutions such as the African Union, NEPAD, the Pan-African Parliament, and AFRODAD.

Dr Nelson Sizwe Madonsela (ND: IT, BTech, MTech, Ph.D.)

Business Intelligence Analyst, Senior Lecturer, and Head: Department of Quality and Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg (UJ). He holds a doctoral degree (Ph.D. in Engineering Management) from UJ and obtained his Master of Technology degree in Operations Management from UJ. He received a Bachelor of Technology degree in Quality from the University of South Africa (UNISA) and a National Diploma in Information Technology (Software Development) from Tshwane University of Technology (TUT). His research focuses on Business Artificial Intelligence and operation management, focusing on operational excellence. He also focuses on quality management systems, digital transformation, and project management. He has presented at local and international conferences and authored book chapters. Dr. Madonsela has helped provide high-level strategic and technical guidance in quality management and advanced project management to upskill the workforce among industries within South Africa. Additionally, he serves as a National Advisor on curriculum development, teaching and learning methods, and best practices in quality and operations management in several South African universities.