



Evaluating Project Management through the lens of an Urban Manager: the case of Lehae

RESEARCH QUESTION: HOW EFFECTIVE IS PROJECT
MANAGEMENT WITHIN THE URBAN MANAGEMENT
PROCESS: THE CASE OF THE LEHAE MIXED-INCOME
DEVELOPMENT PROJECT?

MASTER OF URBAN STUDIES (URBAN MANAGEMENT)
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SUPERVISOR: MUHAMMED SULEMAN

Declaration

I, Nqobile Ding, hereby declare that this research report is my own unaided work. It is being submitted as part of the requirements to attain a Master of Urban Studies Degree in Urban Management with the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination to any other University.



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Abstract

In South Africa, over the past 10 years, newspaper articles and other publications about local government have commonly been reporting about unsatisfied citizens. The reports indicate that the high levels of dissatisfaction are a reaction to poor service delivery of housing, access to electricity, water and sanitation by local municipalities. This research report takes a qualitative case study approach and aims to evaluate the project management processes in the City of Johannesburg through the lens of an urban manager. The research report outlines that urban management is a broad and holistic approach to the development of a city. Thus, making an urban manager one that controls, balances and influences multiple dimensions that affect the development and growth of an urban area. Urban management is inclusive of all the elements that are essential to the functioning of a city, requiring the effective and efficient management of them all. This research focuses on only one of those elements, and that is the effective project management of municipal development projects. The literature review specifies that the one true test of good urban management is the provision of infrastructure. This research thus focuses on the project management task of an urban manager, as project management is a key contributing factor to the delivery of infrastructure. The research report uses the Lehae Mixed-Income Housing Development Project as the case study through which the evaluation of project management from the urban managers perspective will be done. This research report depicts the dynamics that make it complex for local government to follow a rational comprehensive and systematic method of completing a project within a contested and complex space. The complexity theory explicitly explains the constant complex system that the urban management concept exists in, with local government being one of three spheres of government and the closest sphere to the beneficiaries of government initiatives. Therefore, having to manage and influence the expectations and interests of multiple stakeholders. This research report found that urban management in the context of the City of Johannesburg proves difficult to implement. There are numerous factors that contribute to the difficulty of implementing urban management in the CoJ, the most prominent of them being the decentralised structure of the municipality with clear division of labour and city officials that practice within specialised areas. The lack of the holistic urban management practice at a lower level contributes to the limited project management implemented by the city on the Lehae Mixed Development Housing Development.

Keywords: urban management, project management, complexity theory, public-private partnership

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...To the world.

Chapter 1: Introduction

Introduction & Background

This research report is a pursuit to understand urban management through the lens of one of the primary tasks of an urban manager, that is project management. The research will be a curious quest to find out the current project management mechanisms as opposed to the various mechanisms available to urban technicians within a municipality. Project Management from the perspective of the government and that of the private sector is different. Benit-Gbaffou (2018) collaborates this by arguing that the state is understood as being complex as it is both decentralising and neoliberalism. According to schedule 4 and 5 of the Constitution of South Africa (1996), spheres of government have different powers and competencies making project management a very dynamic process.

In addition to the three spheres of government, the government has entities that provide some basic services such as water and electricity. This adds a dynamic and complexity to decision-making and implementation that the private sector is not frequently faced with; as the private sector does not have numerous stakeholders that it needs to interface with. The private sector has a sole intention of making the most profit they can (Nutt, 2005), whereas South African government has a developmental mandate (The Constitution of South Africa, 1996).

"Urban management is defined as a set of instruments, activities, tasks, and functions that assures that a city can function" (Sirry, 2003:1). Urban management, therefore, is about managing all aspects that contribute to the efficient running of a municipality, including project management, urban planning, strategic investment, etc. Urban management is a process of balancing functions of leading, planning, controlling and organising.

The research defines what project management is and how it contributes to the development of a city. It outlines the fundamentals and tools that promote effective and efficient project management and thus contribute to an improved urban space. The research will draw from literary articles such as Lackman's 'Controlling the Project Management Cycle, tools for successful project management' (1987); and journals by other scholars such as Posner (1987) who writes about what it takes to be a good project manager. The theoretical knowledge accumulated from the literature review will be correlated with the understanding of those that play project management roles within

spatial planning departments of a municipality. This is the department that conceptualises what is to be built by private companies that have been awarded the tender.

Once the understanding of the practitioners has been established, the research then reports on the practices of project management within the municipality. To contextualise the research and illustrate the process of project management within urban management, the research assesses the Lehae Mixed-Income Housing Development Project. The Lehae Phase 2 development was to yield 5 344 houses, including RDP units, bonded units and rental units (City of Johannesburg, 2018). This specific project was selected as it is inclusive of social housing, inclusionary housing and bonded housing. The project is also particularly interesting as 51 houses were invaded by residents of Lehae before their completion, thus showing some of the complexities that urban managers are faced with.

Problem Statement & Rationale

Van der Waldt (2010) who writes about project governance with regards to municipal leadership challenges, argues that provision should be made for adequate institutional arrangements for project governance. Project governance includes decision making about resource allocation, powers of project managers, performance monitoring and oversight, accountability issues and the establishment of structures to facilitate clear interfaces between municipal leadership and project teams. As such, Van der Waldt (2010) emphasises the importance of establishing mechanisms such as a steering committee and/or a project management unit to facilitate decision-making. These should enhance the strategic alignment of projects, decentralisation of decision-making powers and the participation of external stakeholders.

“Municipalities that are unable to deliver on their constitutional and developmental mandates, typically have the characteristics that their services are not delivered on target date, are over-budget, have low service standards, and have weak standardised processes and methodologies in place” (Van der Waldt, 2010:3). The 2006 State of the Cities Report, the Local Government Turnaround Strategy for Municipalities, the State of Local Government in South Africa released in 2009 and the General Report of the Auditor-General on the Audit Outcomes of Local Government for the financial year 2007-2008 all illustrate this limitation.

Project owners need to identify Critical Success Factors (CSFs) as criteria for construction projects. “Without a common understanding of the CSFs of a project, it is very difficult to monitor and control project performance effectively” (Jung-Ho Yu and Hae-Rim Kwon, 2010:1). The characteristics of city projects are complex in comparison to general construction projects. City projects have economic, physical, social and environmental goals to accomplish in the area of said city project. Due to the high degree of complexity and uncertainty, there is a high possibility of failure in city projects (Jung-Ho Yu and Hae-Rim Kwon, 2010).

However, when the CSFs are prioritised according to project management phases, Jung-Ho Yu and Hae-Rim Kwon (2010) argue that project owners and managers are better equipped to optimise the allocation of limited resources. Therefore, city projects can be successful through the success of project management through the life cycle of a project and by establishing a favourable context for the project. A favourable context considering the characteristics of the project involves proper application of key urban management functions such as planning, organising, leading, monitoring and controlling (Kerzner, 2006). These urban management functions are critical for the effective, efficient, and cooperative management of city projects.

Jung-Ho Yu and Hae-Rim Kwon (2010) in their research on factors that contribute to city project success in Korea list the following 10 Critical Success Factors from the perspective of the above-mentioned key urban management functions:

1. A reasonable project-plan
2. Appropriate organisational structure
3. Good communication and information sharing
4. Performance management at each phase
5. Suitability of project management system
6. Balanced adjustment between the public and the private interests
7. Cooperativeness of stakeholders on project
8. Standardisation of decision-making process
9. Optimisation of legal and administrative services
10. Minimisation of conflict between stakeholders

These CSFs summarise the key factors that contribute to city project success for many geographical contexts and not merely Korea, as the binding agent is the complexity issue faced by government when planning and implementing city projects in comparison to a general construction project planned and implemented by the private sector. Kogan (2014) also recommends 'knowledge sharing' to overcome complexity for public sector projects. In addition to the above listed city project success criteria, Kogan (2014) adds the significance of 'single-point entry' for communication from the citizens of the city to overcome social challenges in public sector projects. It is thus recommended that project owners and managers adapt and adopt a specified critical success factor index to guide city project success in a standardised manner. City Project Failure in the South African Context

The delivery of city projects in the past has rarely met the standards of the plan of the project (South African Cities Network, 2014). Either in terms of the quality of the product delivered or in terms of delivering a complete project with all intended phases (South African Cities Network, 2014). This statement will be further emphasised in this research report through the consolidation of south African newspaper articles. The research report highlights some key newspaper headlines that outline issues with completion and quality of city projects across the country over the last ten years. This will be done to emphasise the project management challenges that are faced by the government, specifically local government. This is an issue faced by many local governments across the country. This research thus aims to find out some of the urban management contributing factors to this reality.

Objectives

The urban management lens is a holistic city building perspective. About 40 years ago, urban management was an interface between the bureaucracy that held the resources for allocation and the community that needed those resources (McGill, 1998). Therefore, urban management had a focus on decision-making. The definition and practice of urban management has evolved. Urban management can now be defined as a set of activities that shape and guide development of urban areas and the provision of essential services. This can be done through social, physical and economic development interventions (McGill, 1998).

Urban management thus has two main responsibilities; a strategic responsibility of encouraging urban growth and development through policy and governance and a second responsibility of the operational consequences of said strategic responsibility by ensuring that the programmes and projects that will ensure city functionality are implemented effectively. Richardson (1993) concurs with the increasing complexity of urban management and he presents three tests of urban management success.

1. The ability of city managers to implement a spatial strategy
2. The ability of city management to deliver basic urban services and trunk infrastructure to a growing urban population
3. The ability to attend to the key managerial issue of maintenance

Urban management has thus developed in concept and in practice as a holistic approach. To add to the complexity of urban management, government is not the only player in managing urban development. Urban management involves all aspects of urban development and this concerns both public and private sectors. However, urban management is the responsibility of municipal government. Therefore, the social, physical and economic development interventions of urban management need to be of an integrated nature.

Mabogunje (1993) argues that the true test of efficient urban management is the state of infrastructure provision in that urban area. Infrastructure provision is dependent on two things, the nature of the planning process that ensures the provision of infrastructure, and the location of that process in the institutional framework of the organisation. The provision of infrastructure as the true test of urban management illustrates economic development and spatial distribution of urban growth. This research report will be using the provision of housing as the spectacle of project management from the lens of an urban manager who has a holistic view of city building, both strategically and operationally. The objectives of this research are thus as follows:

- to understand the functions of urban management,
- emphasise project management as a key role of urban management,
- assess knowledge of the fundamentals of project management and knowledge of tools available to project managers,

- investigate urban manager's understanding of the project management cycle and how it is to be applied in the municipal context

Research Question

How effective is project management within the urban management process: the case of the Lehae Mixed-Income Housing Development Project?

1. **What is project management?** (to be responded to by chapter 2- literature review)
 - 1.1. What is project management from a municipal planning perspective?
2. **What laws and policies govern the practices of project management in South Africa?** (to be responded to by chapter 3- law and policy review)
3. **How are city projects given a time frame?** (Given that CAPEX, human capital and political lobbying must be taken into consideration. Ensuring that the same political party is still in power the following political term is pivotal to the political powers that decide what projects are to be anchor projects).
4. **How can projects be better managed in the city?** (To be addressed in chapter 5- analysis and conclusion)

Research Method

This research report has taken a qualitative approach and is an assessment of the quality of municipal processes and practices. It explores how project management is undertaken by urban managers in local government. The research seeks to understand the underlying practices and trends in urban management and its take on project management of urban development projects. To more accurately assess project management practices within the scope of an urban manager, the case study method was used. The case of the Lehae Mixed-Income Housing Development Project in the City of Johannesburg is the case study of choice.

The qualitative research approach strives to answer numerous questions around the practice of project management through the lens of an urban manager. It analyses data from a desktop study, open-ended interviews and fieldwork done directly by the researcher (Patton, 2000). One of the two major parts of qualitative research is in-depth interviewing. This type of qualitative research inducts open-ended questions as a manner of getting as

much detail as possible from the interviewees (Bodgan and Biklen, 1997). In the case study used in this research, urban managers and other urban development professionals within the city were the basis of the fieldwork.

Urban managers and project managers were the main urban development professionals that were interviewed. However, other professionals within the built environment were interviewed. In addition to interviewing urban development professionals within the City of Johannesburg, the research also consulted academic literature and journals, legislation, policy and newspaper articles. The research then critically analysed the findings from the interviews that were conducted as a primary source of data and analysed the interview findings in comparison to the literature, policy, and legislation that was used.

Neville (2007:2) writes in his 'Introduction to Research and Research Methods' article that "research is a process of inquiry and investigation; it is systematic, methodical and ethical; research can help solve practical problems and increase knowledge". This research seeks to understand urban management. It seeks to do so by exploring how project management is practiced in the public sector. This research topic is quite broad to be fully understood within a single research report and as such a specific project is used to evaluate the practices of the public sector.

The Lehae Mixed-Income Housing Development project is a flagship project for the City of Johannesburg. Therefore, the housing project will be the vessel through which project management is evaluated and the City of Johannesburg is a public sector organisation in which urban manager's work. Thus, further understanding what urban managers do. The case study method is, therefore, the research method used in this report (Zainal, 2007). "Case study research, through reports of past studies, allows the exploration and understanding of complex issues" (Zainal, 2007:1).

The purpose of research can be one or a combination of multiple factors. Collis and Hussey (2003) outline that reviewing or synthesising existing knowledge and; exploring and analysing more general issues are two of the purposes that probe a researcher to research in their field of interest. There are many other purposes of research such as the following: investigating existing solutions or problems, providing solutions to problems, constructing or

creating new procedures or systems, explaining a new phenomenon, generate new knowledge. However, only the two aforementioned are relevant to this research report.

Rationale for Research

This research report was used as an opportunity to further understand the practice of urban management. Being part of the first-time degree offered at the University of the Witwatersrand, it seemed appropriate to probe deeper into the relationship between project management and urban management. The problem statement written above outlines that municipalities that are unable to deliver on their constitutional and developmental mandates typically deliver poor services. Therefore, emphasising that the success of city projects and other services that municipalities provide is dependent on successful project management and a favourable context for the project. The favourable context for the project is fostered through the proper application of key urban management functions. The research thus seeks to understand evaluate project management through the lens of an urban manager.

Research Approach

Neville (2007) argues that there are four types of research; exploratory, descriptive, analytical and predictive research. This research report is exploratory in that there are very few 'urban management theory and practice' research reports in the context of South Africa. This is since The University of the Witwatersrand is the only University in South Africa that offers a degree in Urban Management, and it only started offering the degree in 2019. The urban management literature that exists lacks relevance to the South African urban management enthusiast.

Exploratory research usually uses case studies, observation and/or reviews of previous related studies and data. This research report has used the case study method as a technique. Neville (2007) further argues that different types of research can be approached differently. This exploratory research used a qualitative approach.

The qualitative research approach examines and reflects on the less tangible components of a research subject, such as the values, attitudes, and perceptions (Neville, 2007). This

research report qualifies as a qualitative research report because it seeks to understand the processes of urban management by zooming into the processes of project management within the City of Johannesburg. Processes too are less tangible and are thus justified as a qualitative orientation of research. Like any other approach, the qualitative approach has disadvantages. It is said to be an easier approach to start; however, it can be difficult to interpret the findings. This exploratory qualitative research has also taken a deductive research approach. Meaning, the research moves from a general idea to a particular situation, the particular is reasoned from the general (Neville, 2007).

Deductive research usually starts from a theoretical position, with a compiled theory on the subject of the research. It then moves to test the theoretical framework on people using either questionnaires, structured interviews or group discussions. Once the data is collected, it can be organised, analysed and presented. The deductive research approach is straight forward and affords the researcher a systematic way of testing ideas. This research report is interested in the practices of urban management. It then zooms in to one of the responsibilities of an urban manager, and that is to manage City projects. The research then starts with a theoretical framework on complexity theory, urban management, and project management.

The literature component of the research reveals that urban management is a complex discipline with endless tasks; as it is about ensuring that a city works. The researcher then gathered data on the context of the research, the case study that is. The context chapter started by identifying a problem with the completion and quality of municipal development projects. It did this by compiling numerous newspaper articles about service delivery protests and complaints that are specific to infrastructure development projects. One of the projects that were in the newspaper headlines for illegal occupation of 52 houses before completion was the Lehae Mixed-Income Housing Development project, which is a City of Johannesburg flagship project. This was the chosen case study for the research.

The researcher then unpacked the case study as a CoJ flagship project and based on the newspaper articles on it. The context chapter also looked at a few legislature and policies that are relevant to the governance of projects in the CoJ. The researcher then began fieldwork in the form of semi-structured with open-ended questions interviews to understand the practices of urban management and project management from the

practitioners. The researcher had to interview city officials that were somehow part of the Lehae Mixed-Income Housing Development project. Therefore, the researcher used cluster sampling as a method of helping the researcher choose interviewees. The researcher also interviewed project managers, one of which was part of the Lehae Mixed-Income Development project and the rest of the project managers were those that had project management experience in development projects. The researcher then used purposive sampling. This allows the researcher to choose interviewees that are available that best suit the objectives of the research (Neville, 2007).

The researcher interviewed 3 urban managers in the CoJ Department of Housing that were at some point part of the Lehae Mixed-Income Housing Development project value chain. They were all asked the same set of questions and the questions asked all aimed to better understand how the Lehae Mixed-Income Housing Development project was completed, from start to finish, from the perspective of the urban practitioners. This also dealt with how urban practitioners worked with the agencies that do the physical developments for the City. The researcher also interviewed 3 external project managers. The set of questions that the project management practitioners were asked were different from those that the urban management practitioners were asked. As the purpose of interviewing the project managers was to find out whether they understand what urban management is and whether they understand the value chain that they are part of.

Research Technique: Case Study

The case study method assisted the researcher in exploring the issue at hand within a specific geographical context and real-life situation through detailed analysis. Yin (1984) further explains that the case study method is a manner of observing any natural phenomenon which exists in a set of data within a unique context. In this research, as much as the researcher investigated the Lehae Mixed-Income Housing Development project, this case is just one of many other cases that were referred to in the problem statement and contextual chapter. The research aims to investigate whether project management practices practiced by urban managers influence the failure of municipal development projects.

Phenomenological Philosophy

Neville (2007) continues to argue that the phenomenological approach, which is also sometimes referred to as qualitative, is a research approach that deals with understanding behaviour from the subject's point of view. The phenomenological perspective assumes that people do not often follow constructed rules or identifiable norms. It argues that numerous variables influence the actions of people, either than rules or regulations. Phenomenological research can be conducted in several ways, one of the techniques that can be used is the case study technique (Neville, 2007).

The phenomenological perspective allows the researcher to use a relatively small sample. The smaller samples allow the researcher to explore the subjects of the research deeper. It allows the researcher to collate data that is enriched with personal comments and personal insights. Phenomenological research also has disadvantages. The first disadvantage that Neville (2007) outline is the difficulty of generalising the findings to a wider context than just the subject of the research. This is argued to be a result of the difficulty of substantiating the results to be relevant to other contexts that are not the case study. The last disadvantage that Neville (2007) mentions concerning this perspective is that the findings of phenomenological research would not be the same if conducted by another researcher.

Single and Multiple – Case Design

Zainal (2007) argues that researchers may adopt either a single-case or multiple-case design depending on the issue in question. Zainal (2007) further argues that multiple-case design can be adopted when real-life events show sources of evidence through replication rather than sampling. The researcher found that the municipal interviewees that participated in the research all mentioned that the project management processes and procedures followed in the Lehae Mixed-Income Housing Development project were standard for every other municipal or housing department project that had been completed before. As Yin (1994) suggests, recognising patterns and matching techniques and procedures in general cases is strengthened by theoretical propositions. The researcher thus uses urban management theory, project management practice theory and theory on complexity as the

foundation of the research question. The key literary concepts expounded on in chapter 2 of this research report were then used to design the questions asked during the interviews. Towards the end of the research report, the literary theories were also used to compare it with actual practices observed in the municipality. The method of comparing and contrasting is necessary to build theory, or propose generalisations based on observable evidence.

Multiple newspaper articles on South African municipal development projects that were incomplete or not completed to the required standards were then reviewed. These specific service delivery newspaper articles were used by the researcher to prove that municipal development projects are found wanting in terms of quality standards and completed on time. Hence the focus on urban manager's project management responsibilities. The Lehae Mixed-Income Housing Development project was one of the projects that were referred to in the newspaper articles component of the research report. The project was not completed on time due to members of the Lehae informal settlement community that were not allocated the houses being built. 52 houses were invaded by the members of the community before the roofs were placed. It can thus be argued that this research report is mainly a single- case study design, however, it has elements of a multiple-case study design due to the reference to multiple newspaper articles and the likelihood of the interview findings to be quite generic.

Case Study Technique through Interview

Zainal (2007) argues that the case study method through interviews must be able to prove that the interviews that are to be conducted are the only viable manner of eliciting data from the interviewees. The second condition that Zainal (2007) argues for is that the case study method through interviews must prove that it is appropriate for the research question. The third condition is for the researcher to follow procedures to formally interview the needed participants. The researcher received ethical approval from the University of the Witwatersrand to conduct the research. The researcher also received formal consent from the City of Johannesburg, Department of Innovation & Knowledge Management, Group Strategy, Policy Coordination & Relations Department.

Another requirement stipulated by Zainal (2007) is for the data retrieved from the interviewees to be systematically recorded and archived, especially when interviews are the main source of data. The researcher recorded all interviews with participants after receiving formal consent to do so. The recorded interviews were password secured on the researcher's password secured cell phone. The interviews were also documented by hand in the researcher's notebook. The notebook was kept secure in the researcher's personal locked room in a locked drawer. The last condition that Zainal (2007) argues for and the researcher fulfils is for the case study to be linked to a theoretical framework.

Exploratory Case Study

"A case study offers an opportunity to study a particular subject, e.g. one organisation, in-depth, or a group of people, and usually involves gathering and analysing information; information that may be both qualitative and quantitative" (Neville, 2007:10). There are three categories of case study: exploratory, descriptive and explanatory case studies (Yin, 1984). Exploratory case studies are used by researchers to ask general questions about their area of interest (Zainal, 2007). The exploratory case study asks general questions to better understand the phenomenon observed. It usually builds on previous small-scale data that was collected before the proposal of the research question and hypothesis. This was the case for this research report. The title of this research report was formulated based on the researcher's interest in understanding the practice of urban management in a municipality. Neville (2007) argues that there is an additional type of case study, 'explanatory' case study. They argue that explanatory case studies are about unpacking theories by understanding and explaining practices or procedures.

Evaluating Project Management through the lens of an Urban Manager: The case of Lehae, is an exploratory case study research report. As it explores the practices of urban managers in their execution of development projects for the City of Johannesburg. This research is also an exploratory case study report due to its interest in the applicability of the described urban management theory in the South African local government context. As such, this research report has an exploratory case study research approach as well as an influence of a descriptive case study approach. Descriptive case studies describe the data as they occur

(Zainal, 2007). This was the goal of interviewing the urban managers within the City of Johannesburg/Department of Housing as well as the project managers in the private sector.

The expected and received results of the interviews were for the processes and procedures used to ensure the completion to be described. The research report also had elements of an explanatory case study, which examines the data at a surface and deep level to explain phenomena in the data. Therefore, this research explores urban management through the execution of project management within local government, it describes the practices of urban management in the specific case of the Lehae project; and it explains the complexity of urban management in practice.

The researcher set the interview questions for both the urban managers and the project managers in a semi-structured manner and with open-ended questions. The aim was for the researcher to get beyond the surface and to explore the perspective of the interviewee as intensely as possible. The open-ended questions also encouraged the interviewees to thoroughly think about their responses to most of the questions. The last advantage for open-ended questions, according to Neville (2007), is that they encourage interviewees to give their honest opinions. Open-ended questions also have disadvantages too. The responses to the open-ended questions can be difficult to organise and the overall findings can be open to further questions.

Stake (1995) defines case studies as either instrumental, collective or intrinsic. The definitions that apply to this research are instrumental and collective. Researchers in instrumental case studies find and examine a pattern of behaviour in a small group of subjects. Collective case studies coordinate data from different sources. Both these definitions of case studies allow for the generalisation of findings to a bigger pool. As much as the Lehae case is one case, the interview findings proved that project management processes and procedures followed to ensure the completion of the project were no different from any other development project executed by the City of Johannesburg together with the Department of Housing. In addition to this coordinated data from different sources, the researcher also found a pattern of a level of incompetence in the newspaper articles that were examined. Therefore, according to Stake (1995), the findings of this case study research can apply to cases broader than the Lehae Mixed-Income Housing Development project.

Data Collection

The information needed to carry out this research centres around the current practice of project management through the lens of an urban manager as seen in table 1 below. How project management is implemented from the perspective of a city official that has a holistic approach in contributing to the development of a city. As a starting point, a desktop review of newspaper articles and literature on the failure of service delivery in South Africa and how weak project management has contributed to this failure was conducted. This data was used to emphasise the problem statement of this research report and chapter 3, the contextual chapter. This research also required the organisational structure of the City of Johannesburg with regards to the delivery of housing projects. The research employs interviews with city officials and desktop reviews to determine the organisational structure and the decentralised governance model that the City of Johannesburg adopted. Legislation and policies were also used as grey literature in this research, such as the supreme law of the land, the Constitution, the Municipal Systems Act and a few other sources of data.

Table 1: Data collection

Data required	Source of data	Collection method
Service delivery protest newspaper articles	Various online newspaper platforms: • www.news24.com • www.ewn.com • www.dailymaverick.com • www.timeslive.com • www.engineeringnews.com • www.thecitizen.com	Desktop review
Urban management approach theory	• Global and local literature • Infrastructure and housing provision policy • City officials and private sector project managers	Desktop review Semi-structured interviews
Project management practice	• Global and local literature • Project managers	Desktop review Semi-structured interviews

City officials and project managers can be interviewed as individuals or focus groups. To maximise the depth of information obtained from the interviews, individual interviews would be most appropriate, however participants may prefer to respond in collegial groups.

The interviews have a categorised structure. Each category will have main questions; however, the participants will have the opportunity to expand on the questions as they please. City officials and project managers had different sets of questions as stated before. The interview questions set for the urban managers sought to evaluate the extent to which city officials are aware of the urban management approach and its implementation. The second category of questions sought to understand the management of projects within the city. The last urban management interview questions were set to find out the processes that are followed by the City to ensure the completion of a project. The project management interviews also sought to evaluate the knowledge of project managers of the urban management space that they work within, and the process followed to ensure the completion of projects from a private sector perspective.

This research report also does a review of legislation and housing policy to better understand infrastructure and housing delivery. The legislation, mainly the Constitution of South Africa is interrogated about the complex structure of governance and service delivery. While policies are interrogated based on their approach to city growth and development through housing delivery. Policy from different spheres of government is interrogated to assess whether the approach to housing delivery is vertically aligned. This is important to the research as it illustrated the complexity of service delivery in South Africa. It also established whether the holistic approach of urban management is adopted in policy in national and local government.

The interviews with city officials, the literature on the key concepts and the legislation and policy analysis were cross examined by interviews with city officials and private sector project managers and vice versa. This assists in avoiding the outcomes and findings of the interviews being swayed by any form of bias that the city officials or private sector practitioners may have (Guion et al., 2011). In addition, these multiple perspectives give insight into the processes and dynamics that take place. The researcher, therefore employed the triangulation method as seen in figure 1 below to establish the validity of the study as literature, legislation and policy was studied and reviewed, city officials were interviewed, and project managers were interviewed. The triangulation method assists in drawing similar conclusions from different sets of data, thus limiting distorted outcomes and findings.

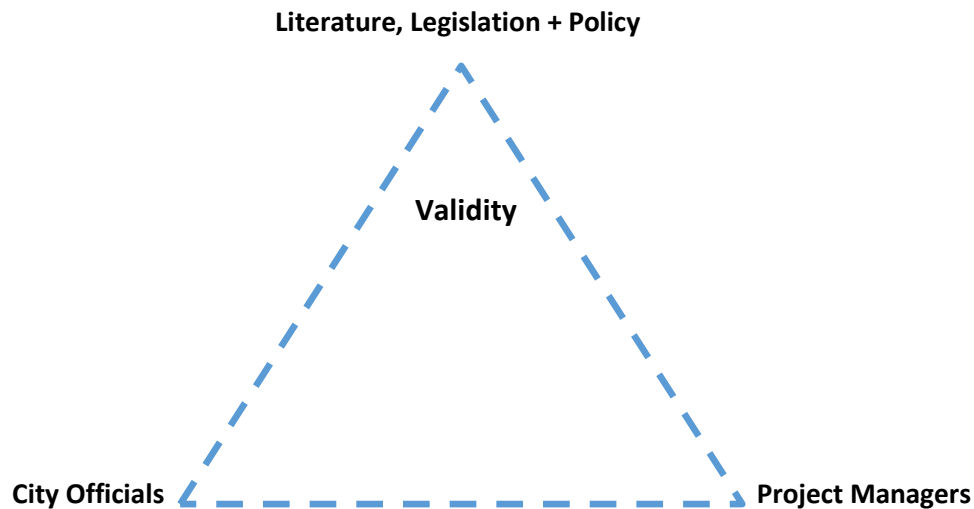


Figure 1: Triangulation method

Ethical Considerations

Ethical considerations are vital for this research as a fundamental part of the fieldwork is interviewing professionals who work in a governmental organisation. The required procedures have been followed to obtain ethical approval from the University of the Witwatersrand. To receive ethical clearance, the researcher had to prove in writing that the people that would be involved in assisting the researcher to complete their research would be protected. Neville (2007) argues that researchers need to be sensitive to the anxieties of possible research participants, especially when it comes to sensitive company information.

The subjects of the research have anxieties about the harm that could be caused to them as a result of participating in the research. They also have concerns about the information they disclose possibly harming others that were involved in the research subject. As a result, the researcher chose to use pseudonyms as a mechanism for protecting the interviewees. Also, sensitive information was not asked of the interviewees. Therefore, ensuring that no confidential information was divulged by any of the interviewees and needs any additional protection. Careful and objective consideration was given to how the City of Johannesburg

and private companies involved in the Lehae Mixed-Income Housing Development Project are reported on.

The researcher also had to prove that the data required to complete the research, would be collected ethically and legally. The interviewees were not be obligated to answer any of the questions that they were asked, despite the importance of the interviewees' role and position in the case study being reviewed. Interviewees were also requested to give written consent to be interviewed by signing a consent form. Interviewees signed the consent forms after reading a participation information form which was given to them as a summary of the aim of the research and how their assistance would be valuable to the research.

The consent form that the participants signed specified how the interview would be conducted. In other words, verbal interviews, with hand-written notes and audio-recording. Anonymity was granted to all participants as each interviewee has been referred to by the pseudonym, e.g. Interviewee 1. In that way, what participants disclosed during interviews will not put them at risk of prejudice or jeopardise their current position in their organisation. However, there is a possibility that the interviewees may be identified as a result of their specific position within their organisation.

Conclusion

This research report seeks to understand the practices of urban management through analysing one of the key factors that influence the success of a city, which is infrastructure development. The directorate that would be most relevant to the implementation of City infrastructure development projects would be the directorate that deals with project management within a City. This is also depicted clearly in Figure 1, which shows the slice of a city organogram that this research is interested in exploring. As a result, the Research Methods section of this chapter unpacked how this research report adheres to the **exploratory type of research** approach. This research report aims to investigate the practices of a literary phenomenon, urban management, which is not common within the South African context and has not yet been thoroughly researched.

The Research Method component of the chapter then continues to argue that this research has taken a **deductive research approach**. Moving from a general understanding of what

urban management is and therefore, what an urban manager would do, to narrowing down the focus of the research to one of the tasks of the urban manager, which is project management. The research narrows down the research even further to understanding urban management practices with the execution of the Lehae Mixed-Income Development Project. The researcher numerously outlines their interest in the urban manager's practices, which are based on much more than the rules and norms that they must follow. The researcher, therefore, argues that the research report has a **phenomenological perspective**, or what is mostly referred to as the **qualitative approach**.

The Lehae Mixed-Income Housing Development project is the single-case study that this research report is focused on. However, this research also refers to other infrastructure development project inadequacies through analysing newspaper articles on infrastructure service delivery protests across South Africa. Also, one of the findings of the research was that the practices of the urban managers in the case of the Lehae Mixed-Income Development project were generic to standard development projects conducted by the city. However, as much as the findings of this research report can apply to various standard cases, it can be argued that it is difficult for case study findings to be completely generalised.

Case studies are often critiqued for their lack of rigour and their biased findings. The researcher aimed not to be part of those criticised lack of rigour and a biased view. The researcher also ensured that the findings were not one-sided and that both the implementing agency practitioners as well as the municipal officials could convey their practices. Therefore, the researcher argued that the research technique used in this research was the **case study technique**. The case study was a **single-case study design** with attributes of the **multiple-case study design**.

The researcher saw it fit to use the case study method as a result of its assistance in capturing the complexities of the real-life environment of ensuring the completion of a municipal project. As opposed to an experiment or survey which examines the phenomena in isolation of its context. This is especially true for qualitative analyses of the data, which allows for case study research to rely on other qualitative data such as journal writings, other forms of literature, as well as legislation and policy. The Lehae Mixed-Income Housing Development project was a practical solution for an interest that the researcher could not

tackle at once. In other words, the researcher wanted to explore whether municipal project management practices contribute to the failure of municipal infrastructure development projects. Figure 2 below depicts the research method framework that was used for this research report.

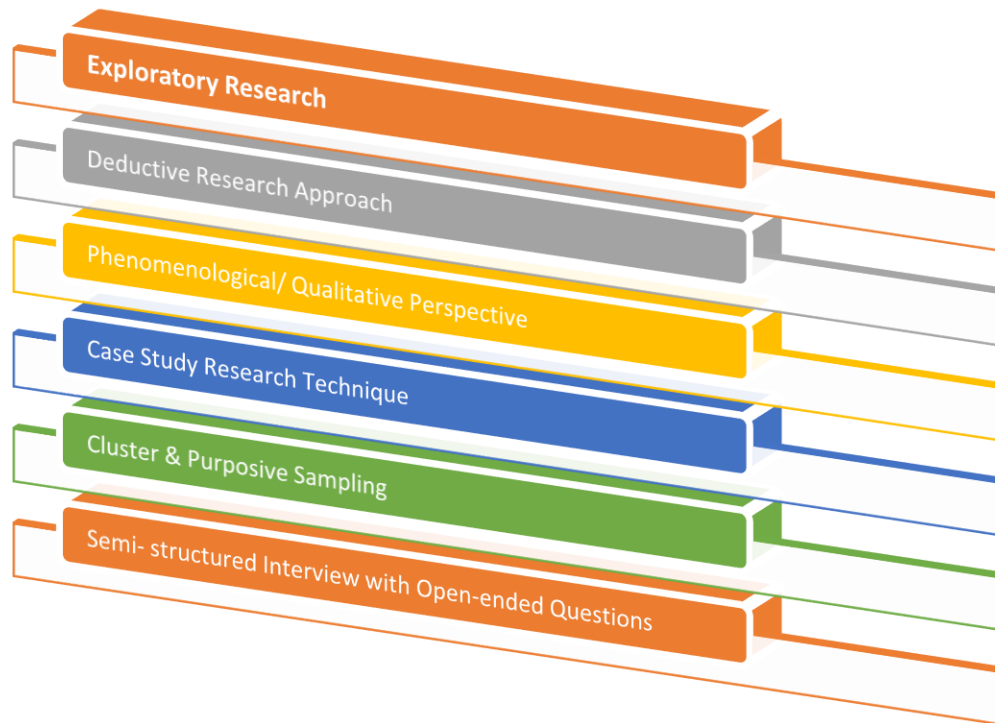


Figure 2: Research Method Framework

Chapters Outline

Chapter 1

This chapter introduces the purpose of this research report. It details the background and rationale behind evaluating project management through the lens of an urban manager. The chapter then continues to explain how the research will be conducted, in terms of the research methods that it follows and the structure of the report.

Chapter 2

Chapter 2 is the literary component of the research report. It highlights three key concepts that are relevant to the research topic. The literature review starts by describing the

Complexity Theory and its relevance to government structure and governance. This chapter then continues to unpack urban management and the responsibilities of an urban manager. The next concept that the chapter outlines is project management. These three key literary concepts highlight the normative of the efficient and effective running of a city despite the complexity of the city's constitutional responsibility.

Chapter 3

This chapter seeks to understand the case study. It starts by introducing the housing approach currently used in Johannesburg and its challenges by referring to the housing legislation and policy being used by the City of Johannesburg. It then speaks to the implementation of housing developments and other infrastructure development projects in South Africa. This chapter refers to a few South African writers who have identified that quality standard completion, completion within budget or on time when it comes to municipal projects is a major issue. The chapter then continues to highlight this as an issue that continues in South Africa by reviewing a few newspaper articles about service delivery protests concerning infrastructure development projects by municipalities. One of the newspaper articles that was reviewed was a News24 article on the illegal invasion of incomplete houses in Lehae. The researcher then further elaborated on the Lehae Mixed-Income Development project and the Lehae area.

Chapter 4

Chapter 4 is a feedback chapter on the research interviews that were conducted with urban managers within the City of Johannesburg and the private sector project managers. It gives detail about the reasoning behind the reasons that interviews were the best manner of attaining the required information. It also breaks down the topics that the participants were asked about and relays why these topics are relevant and required to better understand urban management practice. Chapter 4 then reports on the responses of all the interviewees. Lastly, chapter 4 highlights a few key findings that would be further elaborated on and/or critiqued in the following chapter.

Chapter 5

This chapter is the analysis and conclusion of the research report. The chapter begins by reminding the reader of the purpose of this research report, the research topic, research question, and sub-questions. It then highlights how most of the questions have been responded to and how this chapter will respond to the last two sub-questions and conclusively respond to the research question. The chapter then goes into the key findings that were highlighted in chapter 4 and how they are not in full adherence to the normative stance taken by the literature, legislation, and policy unpacked in chapters 2 and 3. Chapter 5 then concludes on this research report by illuminating the complexity of the structure of government and its endless task of always improving the city. Therefore, making it a very difficult task for an urban manager to execute the normative urban management duties.

Chapter 2: Literature Review

Introduction

Chapter 2 focuses on the literary component of the research. This chapter deals with the principles and normative approach of urban management. The **complexity theory** seeks to understand the government as a system, all the components of it and how they interrelate. The complexity theory reveals that there are two dimensions of behaviour, ordered and unordered behaviour (Hasan and Kazlauskas, 2014.) The difference between the two kinds of behaviour is that the ordered behaviour has a known cause and effect. Whereas cause and effect can only be reasoned in hindsight with the unordered behaviour, or at times not at all.

Meaning, issues that are faced within complex systems must be well analysed before they are responded to (Cynefin, 2009). However, in-depth analysis of problems can sometimes cause ‘analysis paralysis,’ where final decisions are difficult to reach as experts within the complex system cannot agree on any answers. There is often a compromise between making the right decision and just making a decision in a complex system. This is detailed in the ‘complexity theory’ concept of the literature review. The complexity theory thus contextualises urban management within a complex and dynamic environment of governance. It explains the structure of government as well as the dynamics of local governance.

The chapter then moves onto exploring the theory of **urban management**. What it is, what its purpose is, how it should be practiced; and the duties and responsibilities that an urban manager would have. Urban management is placed as a profession that practices within government, as government has a developmental mandate. This literature review will show that urban management is a broad term that is inclusive of various functions. The functions of urban management are all components of the urban fabric, which is inclusive of infrastructure development, the economy, the environment, civil society and civil servants. The core function of a South African municipality is to provide its residents with an environment that they can comfortably live, work and play in (Constitution of South Africa, 1996). Therefore, urban management is a combination of all streams to ensure the continuous growth and development of the city; and this all needs to be well managed so

that all the referred to components of urban management complement each other and play supportive roles towards each other.

“Under the new City structure, regions have to play a more active role in developing, managing and coordinating resources to achieve their development objectives” (City of Johannesburg Urban Management Coordination, 2013:1). The urban managers then focus specific projects and capital investment on areas of concern in their spatial region. The urban management concept in the literature review will reveal that urban management practitioners can be government officials in many positions that are not referred to as urban management positions as a result of the scope of work that they do. This section of the literature review will also allude to the fact that urban management practice is multi-disciplinary in that urban managers have to deal with all components that ensure that a city works well (Kogan, 2014).

The urban management concept then introduces project management of development projects as one of the responsibilities of an urban manager. **Project management** is defined according to various academic journals and writers from both the perspective of the public and private sector. The literature review will show that the shared view of the definition of project management is that it is the practice of initiating, planning, executing, controlling and closing work that was being done by a team in order to attain a specific goal within a set time, budget and any other constraints. Due to the complexity and dynamic role of urban management, project management is one of the roles that it should play. As cities plan for and implement development projects for a developmental reason. The scope of project management as a practice are related to the objectives of urban management, which is to ensure that a city works and is well developed. Project management, however, is not only practiced within the public sector. The literature review therefore addresses the possible differences of project management practice in the public sector and the private sector.

The literature review will be using both global and local literature for all three concepts. The complexity theory thus illustrates the importance of understanding all the dimensions of governance. This lays the foundation for better understanding the wide task that urban management has. The urban management concept further expands its purpose and how infrastructure development is one of the most effective ways of sustainably improving a city. Infrastructure development is best implemented using project management principles

and tools and thus practicing good project management as an urban management practitioner would be pivotal. All three of these concepts will form the foundation upon which the rest of the research will build upon. It will assist the reader understand the topic and context of the research.

Complexity Theory

The Complexity Theory emerged in the mid-late 20th century across a wide variety of disciplines including sciences and mathematics (Mitchell, 2009). The study of complex systems gained traction with the establishment of the Santa Fe Institute, which was the first research institution dedicated to the research of complex systems. The institute was established by 24 scientists and mathematicians. The complexity theory can be defined as the study of complex adaptive systems (CAS) in the field of strategic management and organisational studies. It allows a better understanding of systems as diverse as cells, human beings and organisations, that are only partially understood through scientific methods (Zimmerman et al., 2001). However, like any other theory it has been criticised. Some of the main critiques of the complexity theory are:

1. Rejection of individual agency - leaves no significant role for individual agents
2. Limited role of established tools and techniques – they are viewed as unhelpful means of taming complexity
3. Bottom-up innovation – the organisation should welcome disorder and use instability positively to continuously re-invent the organisation

The management approach advocated by the complexity theory represents a shift from rational comprehensive method of managing organisations to a contextual and organic hypothesis (Rosenhead et al., 2019). However, despite the promotion of creativity in managing complex adaptive systems, the critics of this theory bring up the importance of observing that rationality and organic growth do not have to be opposing strategies, rationality and creativity can work in parallel (Shallice et al., 1996).

The complexity theory can offer insights into how organisations can become more sustainable, adaptive and innovative. The study of CAS implies that systems have a variety of interdependent, yet autonomous parts that have the ability to change and learn from

past experiences. The complexity theory is an approach within management rather than a management tool. “While there are a great number of CAS existing at different scales, complexity theory reveals that there are common interrelated principles which can be observed across all CAS” (Zimmerman et al., 2001:2). These common interrelated principles are as follows:

1. CAS are embedded and nested within other CAS – CAS can self-organise in the form of groups and organisations
2. CAS benefit from diversity – essential in sourcing information and being innovative
3. CAS exhibit distributed, rather than centralised control – this allows the system to react and adapt faster
4. CAS exhibit emergent outcomes and behaviours – outcomes of CAS usually emerge from a process of self-organisation, rather than that of external design and control
5. CAS emphasize the quality of relationships of between parts rather than the properties of the parts themselves – CAS are highly dependent on the relationships between individual agents and their ability to self-organise
6. The behaviours and outputs of CAS can be non-linear, and highly dependent on its history, context, and initial conditions- the size of the outcome may not be related to the size or intended direction of the input
7. CAS thrive at the edge of chaos – enough stability to have repetitive and predictive elements in the system, and just enough instability to generate originality without creating anarchy and dispersal (Zimmerman et al., 2001).

The definition of complexity theory and the above-mentioned common principles of Complex Adaptive Systems are descriptive of how numerous governments across the world work. The government is not just a complicated, static organisation, but a complex set of self-organising components made up of employees, business units, resources, communities and stakeholders (McGee and Sammut-Bonnici, 2015).

In the 1970s, the global west shifted from a hierarchical form of government to a more cooperative form of government. This shift was due to the disappointment that western European countries were faced with when it was found that the state was no longer effective in politically steering society after the end of the 2nd World War and immediate post-war reconstruction period (Hill and Lynn, 2004).

One of the mechanisms that was used to shift the form of government was deregulation and privatisation, which is a turn from the state to the market. The policy and legislation change amendments that are required to shift the form of government would inform governance. As governance is what government does, it is the implementation of the government set rules and laws (Mayntz, 2017). The cooperative form of government would require collaboration of public authorities and private corporate actors in policy development. South Africa followed the cooperative governance form of government after apartheid period, with the enactment of the Constitution of South Africa (1996). South Africa is a constitutional democratic country governed by three spheres of government, national, provincial and local spheres of government. All spheres of government have executive and legislative authority. However, the judiciary arm of government is independent from the three spheres of government.

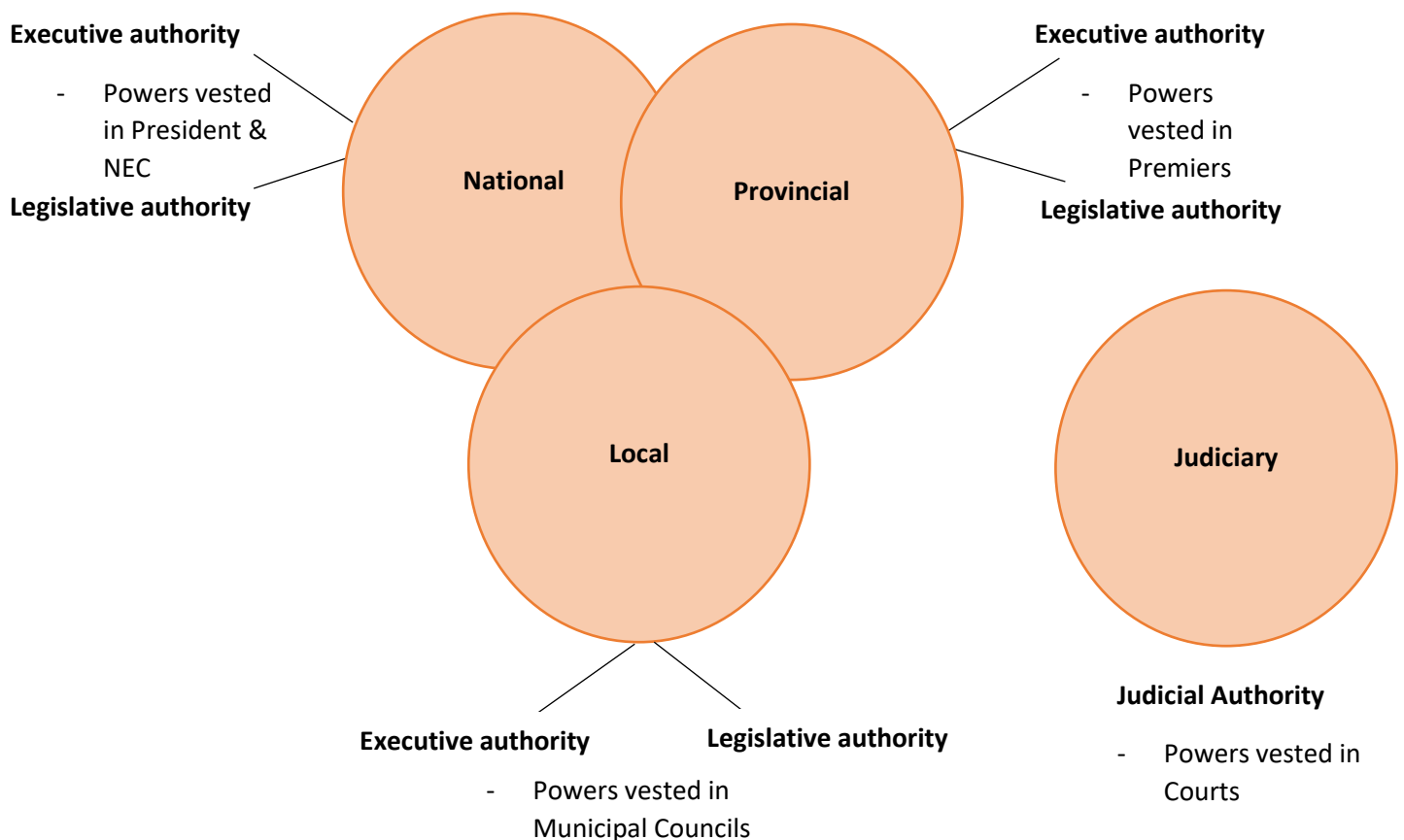


Figure 3: Structure of Government

Figure 3 above is a summative diagram of the structure of government according to the Constitution of South Africa (1996). The diagram illustrates that the national, provincial and local spheres of government are distinctive, however, they are interdependent and interrelated. Each sphere of government has executive and legislative authority. The executive arm of government has the purpose of running the country through the making of policy and directing the work of government departments and other functions. In the national sphere of the government, the executive authority is vested in the President of the Republic of South Africa and his Cabinet. In the provincial sphere of government, the executive authority is vested in Premiers. The executive authority of the local sphere of government is vested in Municipal Councils.

The legislative arm of government serves the purpose of formulating, debating and passing legislation. The legislative arm of government is autonomous in each sphere of government; however, all authorities work together. The Judiciary arm of government is an independent authority. Its powers lie in the courts; constitutional court, supreme court of appeals, high courts, magistrates' courts and other courts. All these courts are subject to the highest law of the land, the Constitution of South Africa. The government structure of South African government is thus complex, as it involves the managing of independent but interrelated and interdependent bodies for the country to be well run. The government structure illustrates that the South African government is complex and as a result, what governments do, which is governance is complex too. This complex government structure suggests that governance in such a structure is equally as complex.

The Global Local Government

Local government across the world is understood to be the closest sphere of government to the citizens of the state. However, the responsibilities of local government differ according to the national legislation of different countries (Batley and Stoker, 2016). As much as the responsibilities of local governments across the world differ slightly, the trend is that the core responsibility of local government is to provide services to its citizens. Batley and Stoker (2016) argue that local governments in the European Community will more and more become the only deliverers of services or be enablers of service delivery through outsourcing delivery to private or semi-private entities. This implies that local government

will be increasingly politically contested as citizens of cities will be seeking an improved quality of service delivery and increased customer participation. It is thus important for leaders in the legislative and policy environment to understand the various local government systems that exist; and to adopt and adapt the best suitable system (Batley and Stoker, 2016). Leaders in local government must also have a vast knowledge of operations management approaches in order to attract business and highly educated people as a result of the adopted approach.

Local governments globally provide various services that are pivotal to the wellbeing of the citizens of the local government. The services range from social and economic services, such as education, housing, transport and welfare services. This, however, is not the only responsibility of local government. Local government is also a representative of the key views and challenges of all groups of its society (Municipal Systems Act, 2000). Therefore, stakeholder engagement is central to the operational system of a local government. Effective stakeholder engagement provides a platform for citizens to not only voice out their views and plans in a more transparent and accountable manner but also keeps the municipality transparent and accountable to its citizens.

Influencers of Local Government Decision-Making

Local governments are a single component of government. For some countries, the local government is one of two parts of the government, the other being the national or central government. For other countries, local government is one of three parts of government, the others being national/central government, and provincial/regional government. It is therefore important to realise that in as much as local government is an authority in and of itself, it is related to and must coordinate with other government authorities. The measure of autonomy that local government has over its jurisdiction depends on the structure of government in each country. Clarke and Stewart (1989) outline three main models of local government autonomy:

The agency model is the first model of local government autonomy. Here the local government is seen as an agency of carrying out national government policies. Local government has minimal autonomy. Local government in this model is thus mainly financed by the national government through grants and other non-local avenues.

The second local government autonomy model is **the interaction model**. In this model, local and national government mutually influence each other. Both local and national government have the same mandate and thus issues are resolved by mutual discussion. Emphasis is on working together. Financing of local government is thus from both taxes and grants that are levels protected.

The last model is **the relative autonomy model**. In this model, the local level does have autonomy, however, it does not deny the authority of the national government. Local government in this model has stated powers and competencies and its authority is thus restricted to the specified competencies. The reverse is also true, the powers and authority of national government over local authorities is restricted by legislation. Local authorities, therefore, have executive powers to pursue policies that guide their jurisdiction. Within this model, local authorities raise most of its revenue via direct taxation.

Batley and Stoker (2016:7) argue that "no country can be simply described in terms of one model." The national-local relations will vary according to service areas and whether the supervision and representation of local government are seated within one department of the national government or across several departments. Clarke and Stewart's (1989) models serve as a basis against which governments can assess trends. The global trend over the past couple of decades has been leaning towards 'free local government', meaning the local government is becoming more and more autonomous. The decentralisation trend is true for many countries such as; Spain, Portugal, France, and Italy (Batley and Stoker, 2016).

The same is true for the South African local government. Which is a distinctive sphere of government, however, it is interrelated and interdependent to the national and provincial spheres of government as local government participates in national and provincial development programmes (The Constitution of South Africa, 1996). It can therefore be argued that South African local government has adopted the relative autonomy model where local government has stated powers and competencies. The South African local government autonomy model also has influences of the interaction model especially when it come to the financing of local government.

The Municipal Finance Management Act (2003) illustrates the monetary flow for municipalities. With its main revenue stream being from different types of direct taxation

which added up to 71,7% of municipal revenue for the 201, as seen in figure 4 below. Municipalities also receive an equitable share from national treasury. In addition, municipalities may also apply for conditional grants from national government to implement certain types of programmes and projects. Local government in South Africa is therefore self-governing as it has its own stated powers and competencies, however, it is still interrelated and dependant on the national government as national government only releases certain grants when local government adheres to certain criteria. Local government is also dependent on national and provincial spheres of government to carry out their own competencies so that local government works well.

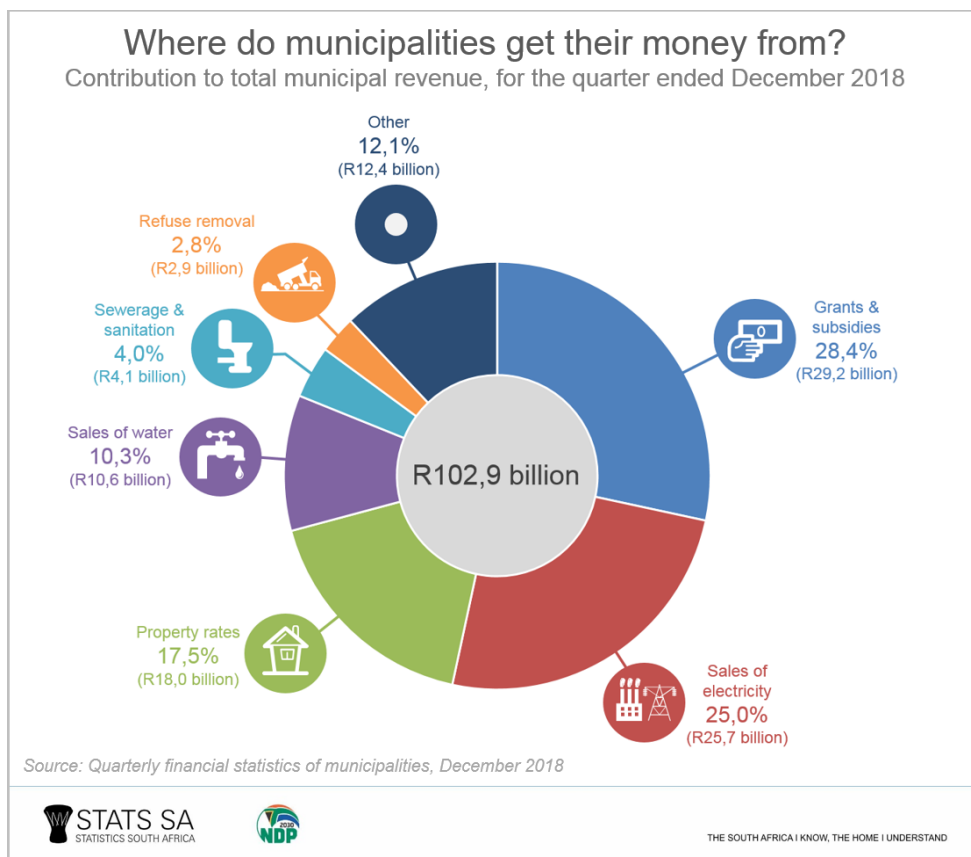


Figure 4: Municipal Revenue (Stats SA 2018)

Local Government Competencies

Local government in South Africa consists of municipalities which cover the whole of the Republic. South African municipalities are categorised. Category A municipalities have exclusive municipal executive and legislative authority, they are referred to as metropolitan

municipalities and there are 8 of them in the country. Category B municipalities share municipal executive and legislative authority with category C municipalities. Category B municipalities are thus referred to as local municipalities. Category C municipalities have executive and legislative authority over more than one local municipality, they are therefore referred to as district municipalities. South Africa currently has 8 metropolitan municipalities, 44 district municipalities and 205 local municipalities.

The primary objective of all these different categories of municipalities is to ensure the sustainable provision of services to its residents. Local government has a developmental duty. Meaning, municipalities must prioritise the basic needs of communities. Other objects of local government include the promotion of social and economic development within its jurisdictions. Local government is also to promote a safe and healthy environment. The last objective of local government according to the Constitution of South Africa (1996) is to encourage the involvement of communities.

The Constitution of South Africa (1996) continues to outline the local government competencies according to schedule 4B and 5B as seen in table 2 below. In addition, local government has the right to administer any other matters that are assigned to it by national or provincial government. The matters that local government are to administer according to Schedule 4B and 5B of the Constitution of South Africa (1996) are as follows:

Table 2: Local government competencies (Constitution of SA 1996)

Schedule 4B local competencies	Schedule 5B local competencies
Air pollution	Beaches & amusement facilities
Building regulations	Billboards & display of adverts in public
Child-care facilities	Cemeteries, funeral parlours & crematoria
Electricity & gas reticulation	Cleansing
Firefighting services	Control of public nuisances
Local tourism	Control of undertakings that sell liquor to public
Municipal airports	Facilities for accommodation, care and burial of animals
Municipal planning	Fencing & fences

Municipal health services	Licensing of dogs
Municipal public transport	Licensing & control of undertakings that sell food to public
Municipal public works	Local amenities
Pontoons, ferries, jetties, piers & harbours	Local sport facilities
Stormwater management systems	Markets
Trading regulations	Municipal abattoirs
Water & sanitation services	Municipal parks & recreation
	Municipal roads
	Noise pollution
	Pounds
	Public places
	Refuse removal, refuse dumps and solid waste disposal
	Street trading
	Street lighting
	Traffic and parking

The municipal council holds the executive and legislative authority of local government. However, the head of administration and accounting officer of a municipality is the municipal manager (SALGA, 2017). According to the Municipal Systems Act (2000) a municipal manager is responsible for the formation and development of an economical, effective, efficient and accountable administration. The municipal manager is accountable for the implementation of municipality's Integrated Development Plan and monitoring of the progress of the plan (MSA, 2000). The provision of services to local community in a sustainable and equitable manner is also one of the responsibilities of a municipal manager. In addition to these responsibilities, municipal managers have human resources, advisory, monitoring & evaluation, stakeholder relations, public relations, financial management and many other responsibilities.

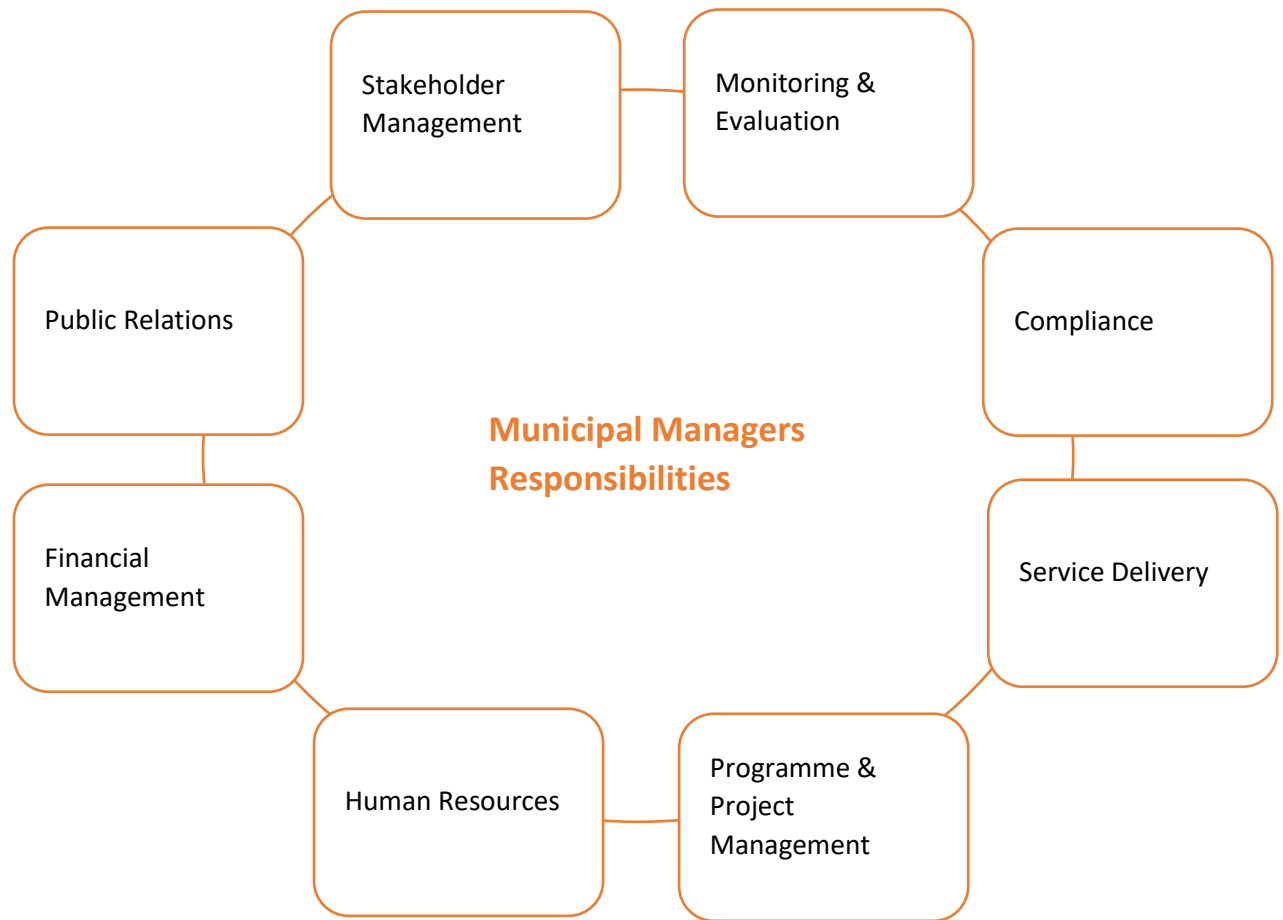


Figure 5: Municipal manager responsibility (Municipal Systems Act 2000)

Figure 5 above illustrates that a municipal manager must be competent in various areas. A municipal manager must, therefore, be knowledgeable and understand the practices of multiple disciplines for them to be able to make sound administrative decisions. A municipal manager is therefore an urban manager, meaning an individual that oversees, balances, organises, leads and controls several directorates, other governmental organisations such as the Project Management Unit, private sector interests, civil society and political interests (Sirry, 2003). It is therefore important to remember that from an urban management perspective, departments are not looked at as silos but in relation and balance with one another. The coordination and facilitation are thus central to the responsibility of a municipal manager. In addition, the moral mandate of local government, which is to strive to improve the quality of life of the citizens of the municipality, is supposed to be of primary importance to municipal accounting officers (White Paper on Local Government).

Overseeing, balancing, organising, leading and controlling multiple factors is the complexity faced by urban managers daily. Lichtenstein (et.al 2006) argues that the complexity theory is interdisciplinary and depicts that decision making for urban managers is non-linear.

“Complexity systems...comprised of populations of interacting entities where the overall system behaviour is not predefined but rather emerges through the interactions of its entities” (Hasan and Kazlauskas 2014:3). This means that local government as a system is an environment that urban managers must work in is unpredictable and bureaucratically constrained system. However, it is still expected of urban managers to not only navigate the system but improve it. Anderson (1999) emphasises this by exclaiming that urban managers need to facilitate the creation of systems that can cope in conditions of uncertainty and promote resilient systems that can easily adapt even though they are rooted in developmental principles and values.

Defining Urban Management

Urban management as a concept was introduced in the 1970s and championed as an institutionalised concept by several key international donor agencies for the developing world, including the World Bank in the mid-1980s (Jenkins, 2000). The World Bank took an interest in the urban management concept as a result of its wider systematic approach in housing, urban land and infrastructure provision. This was influenced by the World Banks realisation that the success of the urban projects that the World Bank invested in was being affected by the system and environment that the projects were implemented in.

This then led to the recognised need for institutional changes that would allow for improved management of urban investments because of the lack of ongoing maintenance (Jenkins 2000). An additional interest in the urban management concept was as a result of its intention to raise awareness of the implications of rapid urbanisation and the increasing influence that urban development has on economic growth. Lastly, the urban management programme that was the World Bank initiated, influenced multilateral aid in urban development especially in sub-Saharan Africa.

Urban management has been an international interest for the past two decades. However, management as a profession was only established in the early 1900s by Frederick W. Taylor (Turan, 2015). Management, in general, is a process of leading, organising, controlling,

balancing and planning according to Mullins (2007). International discourse through the New Urban Agenda (NUA) and the Sustainable Development Goals have been promoting sustainable development and effective and efficient public management. The importance of these goals has been especially emphasised for African countries (Satterthwaite, 2016). The NUA is a global policy that promotes transformation, looking at how to move from strategy and policy to implementation.

“For a country like Egypt- where the population is concentrated in only 5% of its territory resulting into very compact cities surrounded by desert and/or essential arable land that provides food to its population...The management of urban growth and the actual planning of cities in such a condition require a pro-active local government, well-trained staff, policy instruments and the availability of funds among other things that in fact will determine the chances of a sound urban environment for future generations of Egyptians” (Sirry, 2003: 1). Urban management is thus the set of tools, activities, functions, and tasks that assure that a city can function. It is about facilitating the functions of different actors within the municipality. This is inclusive of all departments within a municipality, politics and political actors, private organisations as well as civil society. The urban manager, who is not limited to, but is usually titled as the Municipal Manager, in the context of South African local government is, therefore required to have conflict resolution skills. This is a required skill to ensure that the urban manager can effectively facilitate and incorporate multiple voices in decision making. Especially in a democratic system.

The urban management approach has stressed a few local government reforms and they include the following factors:

- strengthening local government by supporting decentralisation with the objective of moving decision-making with regards to resource allocation closer to beneficiaries
- shifting from socially oriented concerns to market-oriented concerns
- stressing role of markets but accepting the role of the state as regulator by promoting partnerships
- coordination by a key strategic management team

Urban management is also fundamentally about efficiency, efficacy, and equity in the distribution of limited resources within the city (Chakrabarty, 2001). To achieve efficiency,

local governments need to have instruments that will allow it to mediate when there is conflict. Instruments that will effectively use the recourses available to the local government and instruments that are open to innovative, sustainable and equitable local development processes (Sirry, 2003). Without such instruments, local government will struggle to assume a leading and enabling position in planning and management of urban growth. Local government would even struggle to form meaningful strategic partnerships that will assist the municipality to perform tasks that it cannot do alone. This approach is very different from how the government was run in the late 90th century, where leaders and administrators held absolute power and control over the people (Vigoda, 2002). However, then urban management was more about maintaining public order and safety as that was the main function of more local government. Whereas the mandate of local government in today's South Africa is developmental; meaning the public good is of highest interest. One can argue that the public good is upholding the Constitution and encouraging public participation as a form of collaborative action.

Davey (1993:1) continues to define urban management as a set of, "...policies, plans, programs and practices that ensure that population growth is matched by access to infrastructure, housing, and employment". He argues that the organisational culture of a municipality directly affects the quality and efficiency of urban management in that municipality. The structure of the municipality, the role of the municipality, the tasks and functions of the municipality which are all specified by Law in South Africa; as well as the way the municipality delegates its duties directly affects the efficiency and thus the sustainability of the municipality. At the same time, municipalities only have a certain amount of resources available to them and this also limits the level of governance a municipality can have over its jurisdiction.

Therefore, urban management is about how local government as an organisation functions to improve the economic, environmental and social development of a city. Urban Management is concerned with how local government works with organisations outside of government such as private corporations as well as civil society organisations. Lastly, urban management is concerned with how local government works with other spheres of government such as provincial and national government in the case of South Africa. All

three of these points impact the quality of urban management practices in local government.

Jenkins (2000) further emphasises this point by mentioning the difficulty of managing different institutional aims. He refers to the urban management programme and how its three main participating agencies have different institutional structure, aims and independent operations in parallel with the urban management programme that they are all main partners in. This then influenced the variations in the different institutional approaches they all had to the shared programme. Structural changes within the three main programme participants were a shift in the 1960s and 1970s from centralised governance to more decentralised governance. In the 1980s followed another change towards a neoliberal agenda to governance which emphasised markets and a less state facilitating and managing (Jenkins 2000).

Many of the factors that contribute to the understanding of the urban management concept are sensitive to the political environment of the local sphere of government and country that they are practiced in. However, Jenkins (2000) argues that there is a lack of political analysis to identify different vested interests and to assess who is excluded from decision-making processes. The breakdown in communication and conceptualising of programmes and projects often undermines many of the technical aims of projects. Jenkins (2000:3) further argues that, “the various elements of the urban management approach can be conflicting: such as stressing participation yet shifting from socially oriented reforms. Thus, elements of the approach are more directly tied to ideology than to practice”.

The urban management approach increasingly paid more attention to urban poverty alleviation which was linked with structural adjustments. The ‘human face’ that was added in the development of the urban management concept added another layer to what urban management is all about, however, whether it extended to practice is in question. Urban poverty alleviation entails revising municipal regulations to be more responsive to municipal residents, especially the poor. It also entails improving basic service delivery for the poor, creating employment opportunities, and lastly, providing safety nets to assist the most vulnerable (Jenkins 2000). The neo-Keynesian trend in development policy over the last few years promotes close public-private sector joint management which broadly continues the urban management concept and adapts the concept as needed. The urban management

concept therefore needs the actual interests and/or capacity of both the public and the private sector to respond to new opportunities. Jenkins (2000) argues that in practice, the urban manager may not be concerned with the broad sectoral objective, but it will constrain their field of operation.

Practical Approaches to Urban Management

Co-ordinating collaborative action is essential to urban management. According to Mitzberg (1979), the root of most organisations challenges is as a result of a lack of effective coordination of divided tasks. Urban management is only an important aspect of the municipality's sustainability because of government reform. Decentralisation has given more autonomy to the local sphere of government, but it also means that the municipality must co-ordinate how all entities of the municipality, other government spheres, the private sector, the citizens and Citizen-Based-Organisations work together. This all needs to be effectively done without dismissing the fact that the 'public good' is the focus of all municipal related initiatives. This is closely related to the New Public Management approach which has four key principles: autonomy, accountability, customer orientation and market orientation (Van Dijk, 2008). The NPM approach also requires coordination for it to be successful. Figure 4 is a diagram depicting the two main manners of executing effective coordination of work.

Municipalities adopt policies, programmes, and strategies as a way of formalising coordination amongst different stakeholders in the City. The written work then forms the ground for the type of coordination. Whether it be by feedback or program. Implementation of co-ordination can be fostered through Co-ordination by Feedback through direct supervision as seen in Figure 6 below, which is the most common form of operation in local government. Where there is a formal hierarchical structure that guides how one is to provide feedback on projects that they have been working on. However, it is not always this straight-forward. Some organisations use a mixture of these approaches. For example, it can be argued that some municipalities use both the standardisation of work and direct supervision approach. Municipal officials have specific tasks that are their responsibility and as a result, they follow explicit routines to complete their tasks. However, they still must report on their progress to their superiors. According to the figure below, this combination

would then form a regulating model as the main form co-ordination for municipalities in South African.

Taxonomy of Coordinating Mechanisms: *Level 4*

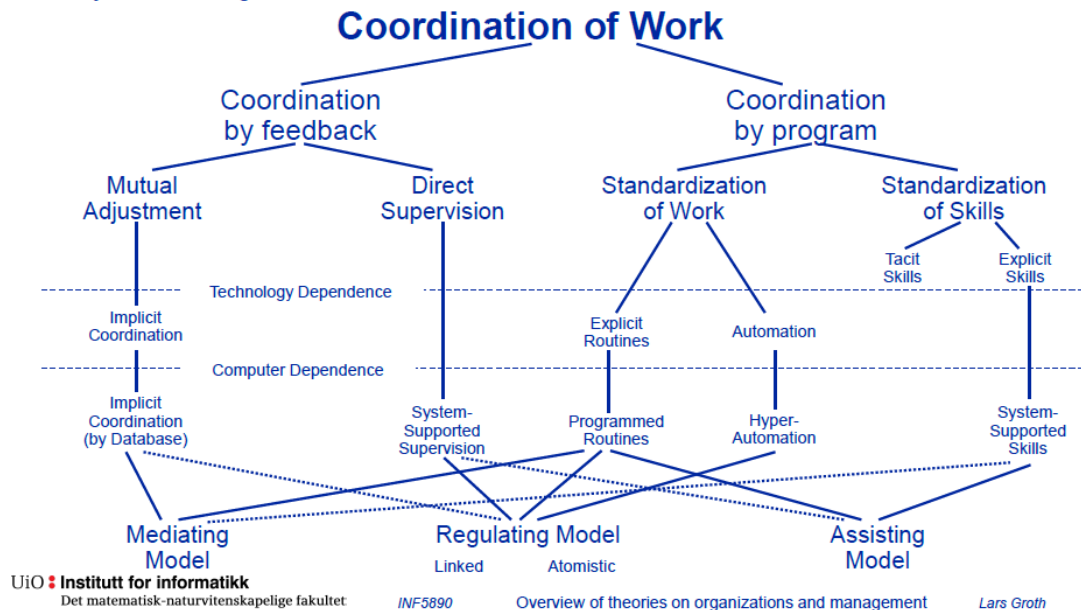


Figure 6: Models of Co-ordination

Lawrence and Lorsch's (1967) contingency theory argue that people make organisations. People decide to build organisations to find solutions to problems. Therefore, people are the ones who have purpose, not organisations. Hence, an organisation is deemed successful when the member's needs are satisfied through planned transactions with the environment co-ordination. People-centered management is not managing people but bringing people together to co-ordinate actions (Lawrence and Lorsch, 1967). There is no one best way to solving problems. It is only through working together, whether it be through formal structures or less formal avenues, that the decision that is good enough is found (Simon, 1947).

At times, working together seems chaotic especially when it is outside of a formal structure or when it is working within rigid systems. However, navigating these difficulties and system constraints is nobler than not acting at all. Weick (1969) argues that organisations should be ever evolving. Meaning, regardless of the formal structures that exist in an organisation, there is always room for improvement. The formal structures of an organisation are necessary to emphasise legitimacy and the ideals, but the uncoordinated and invited forms of working are there to get things done.

Urban managers thus must be aware of all available avenues of collaboration, formal and informal to effectively take advantage of decentralisation and promote sustainable cities. The formal structures can allow for policy reform that improves service delivery and promote a competitive economy. In addition to this, the informal avenues can promote collaborative action to try and enforce the policy reform. Showing potential stakeholders their stake in investing in some way to urban reform is a way of influencing other stakeholders. Urban managers are not just in the City but can be found outside of the City as well. For example, co-ordinators or manager of City Departments, City Improvement Districts and CBOs can also be referred to as urban managers. They too develop and implement programs and projects that turn spaces into places. Other non-Municipal urban managers also must manage stakeholders that are members of their organisation; whether they be government stakeholders or outsourced service companies. Thus, urban managers, in general, need to take an integrated approach to planning, project management, budgeting, and stakeholder management skills (Chakrabarty 2001). But most importantly, a passion for transforming the urban environment.

Theories of Urban Management Applied in African Cities

International interest in urban management began in the late 1980s as a result of the growing awareness of the role of cities in national development (Sirry, 2003). African cities will grow nearly three times faster than the global average over the next three-and-a-half decades, and this highlights the need for efficient, effective and environmentally sustainable urban infrastructure development in African cities (Cohen, 2006). This also highlights that more and more of the African population is seeking a better standard of living in cities. Since the 1990's it has been acknowledged that cities are engines of development and play a vital role in macro-economic development if properly governed, managed and planned (Polèse, 2005). The urban management approach tends to adequately confront the reality of weak institutions, changing socio-economic context, changing political scene and the implications that the approach would have on institutional capacity-building in African cities (Jenkins 2000). Therefore, the urban poverty and fragility of urban governance context in which the urban management concept is to be applied heavily influences the success of the approach. Such a context is unfortunately the reality of many African cities, including Johannesburg.

However, when urban management at the city level is performed well, it improves the sustainability of the country. As a result, the United Nations has been promoting the principle of decentralisation, participation, and partnerships as well as emphasising the importance of regulation of tenure and right to housing as seen in the New Urban Agenda (2017).

The referred to definitions of the urban management concept have illustrated that the ideology lacks a clear definition, Jenkins (2000) argues that the broadness of the term was to some extent deliberate so that a wider consensus around how to manage urban areas under different structural period can be left to the interpretation of those that the know the context best. The urban management term is as vague as that of urban governance, however good governance requires strong relationships between the governed and those that govern. Therefore, requiring institutional capacity within government and civil society in order to encourage wide demand management (Jenkins, 2000). For there to be urban management improvements, the focus needs to be distributed between social and economic improvements. The private sector as well as civil society can be of assistance by building institutional capacity and thus enhance governance (Jenkins, 2000). One of the ways that the private sector can assist local government is by providing project management skills for city initiatives.

Defining Project Management

The definition of project management is often confused with that of a project, and thus their roles too are often confused (Radujkovic and Sjekavica, 2017). Munns and Bjeirmi (1996) explain that a project is an achievement of a specific objective that involves several activities. Whereas project management is regarded as the process of controlling the achievement of the project objectives (Munns and Bjeirmi, 1996). Project management is about using tools and techniques to manage the project. A construction project has a definitive date in terms of the start and end dates of the project. However, it could span over 50 – 100 years in terms of its overall benefit. In contrast to this, project management is short term, in that it focuses on on-time delivery, within budget expenditure and performance standards. "The objectives of both project management and the project are different and the control of time, cost and progress, which are often the project

management objectives, should not be confused with measuring project success" (Munns and Bjeirmi, 1996:81). There have been numerous cases of successful projects, even when management has failed, and vice-versa (Munns and Bjeirmi, 1996).

Dissatisfaction with results of development projects is not a new dilemma. It dates to the 1950s, especially with World Bank projects. Eneh (2009) in his critique of the failed development vision of Africa, argues that project management in Africa has had a negative influence on the progress of infrastructure development. He argues that one of the main reasons that underdevelopment in Africa has worsened is due to project management failures. Ika (2012) in his journal article on project management further emphasises that project management for development projects in Africa is failing. He argues that projects fail due to one or more of four main traps: the one-size-fits-all technical trap, the accountability-for-results trap, the lack-of-project-management-capacity trap, and the cultural-trap. Even though Ika (2012) relates these four main traps to International Development Projects, he argues that these traps are not specific to international development projects but relate to most development projects in Africa.

Project Implementation

Section 38 of the Municipal Systems Act states that a municipality must establish a performance management system (PMS) that is compatible with its resources and the IDP (MSA, 2000). The PMS serves to promote a culture of performance management in the municipal administration and further ensure that the municipality administers its affairs in an economical, effective and accountable manner.

Municipalities as the project owners and sponsors of city projects appoint service providers through a service level agreement contract for construction and project management (Van der Waldt, 2010). The municipal project manager has the responsibility of overseeing the whole city project while the consultant ensures that the construction work is executed according to the performance standards and specifications outlined in the contract. The municipal project management team and the contracted project team should then regularly schedule progress review meetings to determine whether projects are on schedule and discuss any foreseen risks. Van der Waldt (2010) argues that any community concerns

should be dealt with by a municipal appointed community liaison officer and steering committee. "Upon completion of the project, the municipal project manager must issue a certificate of compliance and completion to the contractor" (Van der Waldt, 2010:11).

Project Management Ills

Sachs et al. (2004:121) writes that, "...our explanation is that Africa, even the well-governed parts, is stuck in a poverty trap, too poor to achieve robust, high levels of economic growth and, in many places, simply too poor to grow at all". This ongoing development trap discourse has two polar views. The leftists argue that global capitalism will always keep African countries back from progressing. The rightists deny the existence of the development trap and argue that any country that wants to escape poverty can do so, if they adopt the correct policies. Ika (2012) argues that projects must break free of these development traps for them to increase their chances of reaching full potential.

The **one-size-fits-all trap** mainly relates to fields such as architecture, economics, and engineering that assume that all projects share basic characteristics (Ika & Hodgson, 2010). The one-size-fits-all approach is rational as its actions are limited by the set objectives of the project. This approach is also said to be a trap as it only works with professionals who too also work in a rational way which suppresses subjective considerations that could have been of assistance to the success of the project (Hulme, 1995). "The World Bank, for example, has standard procedures that all its projects must follow no matter their size and content" (Ika, 2012:7). Such requirements are so focused on financial and technical feasibility, on what should be done, that they neglect what happens, the social, environmental, cultural and political feasibility. The best way to ensure that projects do not get trapped by the one-size-fits-all approach is by using better procedures, tools, and techniques (Ika and Hodgson, 2010).

The **accountability-for-results trap** puts much emphasis on strong procedures and guidelines. This approach to development projects focuses on following rules and leads to a culture of 'accountability for results' rather than 'managing for results' (Ika et al., 2010). Meaning, this approach is bureaucracy and procedure-oriented and not project-goal-oriented. The accountability-for-results trap is usually promoted by government-wide legislation or executive order. Results-Based Management tends to focus on reporting to

stakeholders and not using the information in a manner that will benefit the success of the project. Ika and Lytvynov (2011) further explain that RBM places too little focus on using performance information in internal management decision-making processes to achieve better results. They then suggest that this approach would be best when adapted to become a 'managing for results' approach, to ensure that performance information is used to improve performance and ensure successful project outcomes.

The **lack-of-project- management-capacity trap** is the third trap that Ika (2012) identifies. More than four decades ago, Rondinelli (1976) found that most developing nations do not have enough institutional capacity or trained personnel to plan and execute projects successfully. He found that what constrained most developing countries from infrastructure development was not financial resources, but administrative capacity. "Departments act as separate, independent entities ("silo mentality") with very low levels of coordination, integration, and cooperation. There is generally a lack of understanding of the operational issues associated with project implementation" (Van der Waltd, 2010:12). Ika (2012) argues that nothing has changed since. Ika (2012:34) argues that "national governments and organisations in Africa lack project management capacity and thus experience lack of skilled personnel in project execution, procurement, or monitoring and evaluation; shortages of project management-trained civil servants, delays in appointing personnel, or ineffective use of those appointed".

The **cultural trap** is a traditional top-down approach that so many projects adopt. This approach neglects to take into consideration the decision-makers and local commitment of the community benefiting from the project. Ika et al. (2010) argues that project management tools and approaches need to be tailored to the cultural context of the recipients of the project. "Morality, interdependence, spirit of man and totality...have proven to be critical for project management in Africa" (Ika, 2012: 35). Ika found that project management processes in Africa need to have a moral basis and follow fair practices. Project management success in Africa is also said to be closely linked to ensuring that all stakeholders are part of the project and that they all contribute to the success of the project. Lastly, Ika (2012) argues that projects are to always be implemented in a manner that will serve man. Therefore, as much as construction project management is very much a technical skill and is concerned with ensuring that infrastructure is well built, social and

political matters affect the success of a project and should thus be of major concern to project managers.

Project Success

It has been argued that project success is not a direct reflection of good project management practices (Munns and Bjeirmi, 1996). Figure 7 below illustrates that projects are short-term and have specific deliverables. Whereas project management is a long-term approach of how to ensure different kinds of projects reach completion. Munns and Bjeirmi (1996) argue that various factors affect the ability of a project to achieve its goals. These factors include objectives, project administration, third parties, relations with the client, human parties, contracting, legal agreements, politics, efficiency, conflicts, and profit.

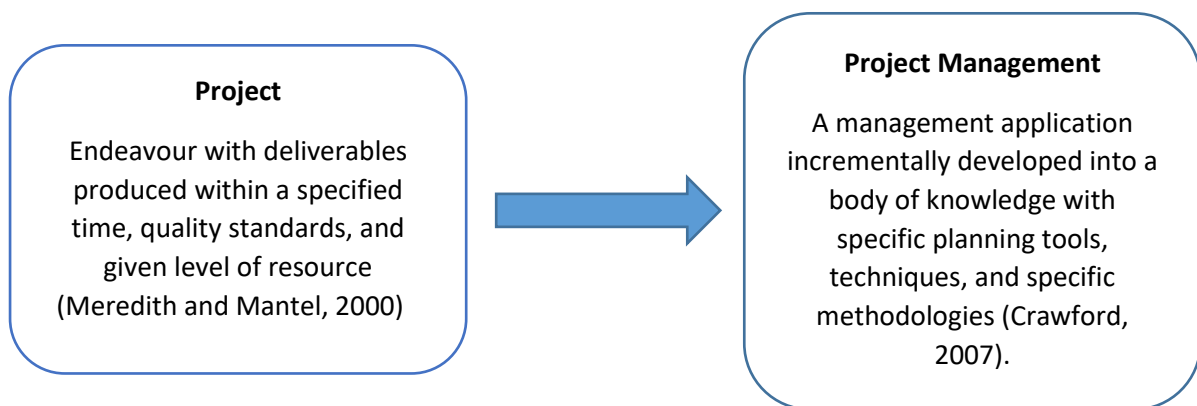


Figure 7: Projects, the subjects of project management

Morris and Hugh (1986) add that project success is dependent on the following: a realistic goal, competition, client satisfaction, a definite goal, profitability, third parties, market availability, implementation process and the perceived value of the project. Only two out of the items listed in both lists are within the responsibility of project management; defining goals and the implementation process. Therefore, project management plays a significant role in the overall success of a development project, but the success of a project is not the sole responsibility of project management. The success of development projects is affected by many other factors that are beyond the control of project management capacity (Munns and Bjeirmi, 1996).

Project management success, however, depends on various factors too. They include; completion to budget, satisfying the project schedule, adequate quality standards, meeting the project goal (Munns and Bjeirmi, 1996). The literature emphasises that project

management techniques used are pivotal for the success of a project. Thus, early development of strategies, methods, and philosophies of project implementation are important for project management success. There have also been factors that have been identified that contribute to project management failure. Avot (1969) suggests that they include; "...inadequate basis for project, wrong person as project manager, top management unsupportive, inadequately defined tasks, lack of project management techniques, management techniques misused, project closedown not planned, lack of commitment to project" (Munns and Bjeirmi, 1996:82).

In addition to these factors, Duncan and Gorsha (1983) have identified three factors that affect project management failure; under-costing, overspending, and late delivery. Even though project management has points of failure too, even good project management does not guarantee project success. Good project management can contribute towards project success, but it is unlikely to be able to prevent failure" (Munns and Bjeirmi, 1996:83). As much as project management is within the broad and holistic approach that urban management should be concerned with, factors that affect project success but are outside of the control of project management should be even more central to the task of an urban manager. Such as maintaining momentum and interest in the city project, stakeholder management and a clear vision the city project.

Conclusion

Management, in general, is tasked with the process of leading, organising, controlling, balancing and planning as discussed earlier. Urban management thus has the responsibility of ensuring that a city works and as thus city project success should be of great concern to the urban manager. Project management, as one of the important factors that influence the success of a project, is therefore also one of the responsibilities of urban management. However, due to there being other influencing factors, an urban manager is tasked with ensuring that those additional factors are positively contributing to the project. The complexity theory effectively illustrates that the task of urban management in the context of South African local government is huge and very difficult task.

Chapter 3: Understanding Infrastructure and Housing Delivery

Introduction

Mixed-income housing models are an international trend for promoting inclusion and social restructuring (Huang, 2015). South Africa also joined the trend in 2004, with the introduction of the Breaking New Ground policy that highlights the importance of mixed developments in restructuring cities. The implementation of this policy, however, has proven difficult as it requires good public-private partnership practice. A housing development is driven by profit as developers tend to construct in areas where profit can be achieved and maximised (Mangwagape, 2017). Whereas the focus of government concerning BNG is that of social reconstruction.

Therefore, achieving the social-mix objective of mixed-income housing would require the efforts of both the public and the private sector. According to NASHO (2013), public-private partnerships play a significant role and in the delivery model for social housing, especially in the delivery of mixed housing. "Public sector will provide the land, subsidies/incentives, and fast track development processes which tend to deter developers; and the private sector will provide the innovation, knowledge and technology" (Dube 2013:15). Dube (2013) further explains that the private entity is contracted to produce a public asset or service and the public sector has minimal responsibility when it comes to implementation.

The Lehae Mixed-Income Housing Development is an example of such a project. The development is located in Region G of the City of Johannesburg, in the South of Lenasia, as seen in figures 9 and 10. The Lehae Mixed-Income Housing Development project is on a well-located site, as it is bordered by the Golden Highway and near the Trade Route Mall. This project was identified by the City of Johannesburg as a flagship project.

The Lehae Mixed-Income Housing Development project provides a total of 5 344 housing opportunities, consisting of BNG units, bonded units, and rental units but also boosts the whole neighbourhood with the introduction of two primary schools, two secondary schools, four crèches, eight religious institution sites, two taxi ranks, and four business sites. Urban Dynamics is involved in the Lehae Mixed-Income Housing Development Project in a project management capacity. Other stakeholders in the project include the City of Johannesburg, as this is a Mayoral Project; NuWay/ Maluleke Luthuli Development Planners appointed as turnkey implementation agent.



Figure 8: Location of the CoJ within the Gauteng Province, Source: Gauteng Tourism Authority, 2020



Figure 9: CoJ Regions A - G, Source: CoJ IDP, 2020

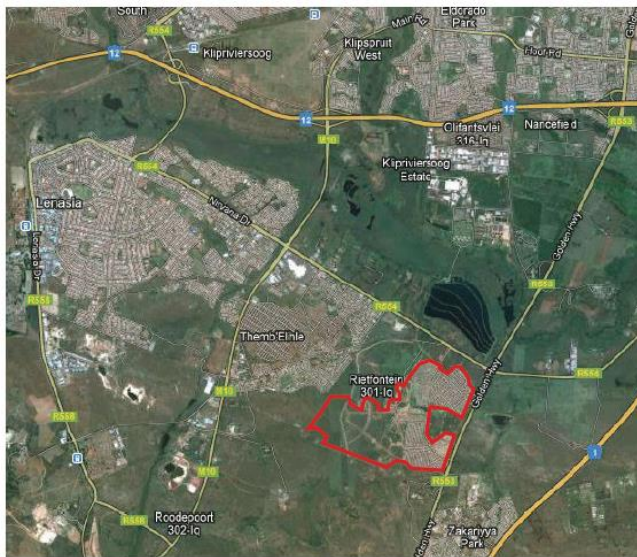


Figure 10: Lehae Before and After Development (Ahmed Kathrada Foundation 2013:5)

The City of Johannesburg Growth and Development Strategy 2040 has areas that it is focusing on. The spatial depiction of the GDS 2040 as seen in figure 11 below has highlighted Lehae and many other areas within Region G of the City of Johannesburg as a deprivation area. The City of Johannesburg defines deprivation areas as, “high priority investment areas with clear envisaged outcomes and spatial opportunities as expressed in the SDF” (CoJ GDS 2040, 2011:165). Because these areas are deprived and far from the

urban core, they require remedial action so that the areas can have the qualities of sustainable and liveable neighbourhoods.

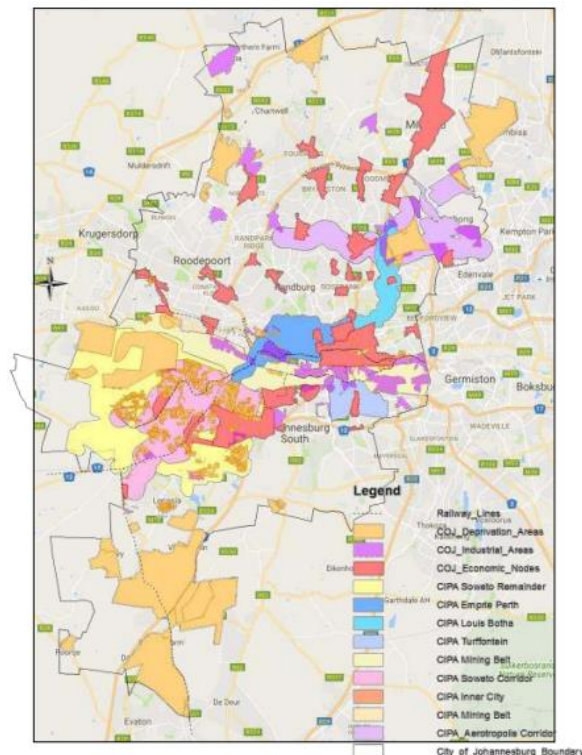


Figure 11: CoJ Region G identified as a Deprivation Area, Source: CoJ GDS 2040 (2011)

Lehae is a peripheral area and as such has been categorised as category 3 deprivation area. Peripheral areas have a poor economic base, they have highly fragmented suburban areas and have no access to the primary or secondary city centres within the surrounding regions. As a result, region G contributes the least to the GDP of the City of Johannesburg as seen in figure 12 below. About 40% of the population of region G is under the age of 18 and as such, the income levels are very low. With 50% of the population having no income at all, and 62% of those with an income earning below R1 500/month.

Region	Share of JHB's 2013 economic output
Region A	12%
Region B	13%
Region C	12%
Region D	8%
Region E	27%
Region F	23%
Region G	4%

Figure 12: Region G Economic Output (CoJ GDS 2040, 2011)

Due to the disadvantages faced by region G and specifically, the deprivation areas within region G, which include Lehae; the city aims to address the spatial disparities. Lehae, Orange Farm, Poortjie and many other areas of the city that have been identified as deprived, as seen in figure 13 below, are currently targeted for major spatial investments. So that by 2040, the City of Johannesburg reaches its spatial goal. The city aims to meet infrastructure backlogs, improve public transit links to the urban core, establish safe and walkable environments around public transport and community facilities, provide affordable and safe public transport, develop local economic opportunities, as well as social and community facilities. Such developments intend to create liveable neighbourhoods with high-quality public amenities that are connected to economic opportunities in the urban centre and sub-centre.

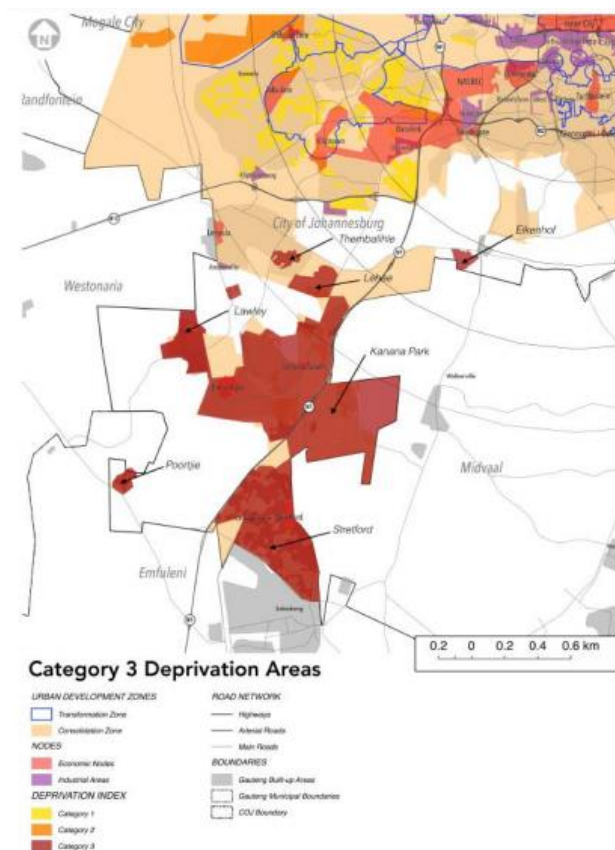


Figure 13: Peripheral deprivation areas (CoJ GDS 2040, 2011)

Housing Policy Approaches

Housing policy is a pivotal element to the understanding of urban management practice as housing policy influences the kinds of housing development projects that a municipality would have and how they are to be delivered. The housing policy that guides South Africa, and the City of Johannesburg will be of a great influence on how projects are executed and thus how urban management is practiced. The housing policies that guide and influence what kind of housing projects are done by cities across the world will serve an important purpose to the research. As it will assist the researcher in comprehending the multiple perspectives and dynamics that urban managers have to deal with when they have to make decisions and implement housing development projects.

The attempt to promote the achievement of an integrated society, both racially and economically, through the development of sustainable quality human settlements is the primary aim of the Breaking New Ground policy (Department of Housing, 2004). Over the last few years, two housing policy approaches have been developed. The Ahmed Kathrada Foundation (2013) has found that ‘integration’ was used by policymakers to refer to the integration of different income groups and the development of city spaces, so that the residents of the city can live, work, play and access other amenities within close proximity.

Racial integration was referred to as a result of programmes that promote income group integration. “The advisor to the MMC for housing in Joburg City, Mickey Padiachee, stresses that the City of Joburg allocates RDP houses on a race-blind basis – prioritising those who have been on the waiting list the longest” (Ahmed Kathrada Foundation, 2013: 8). The advisor to the MMC also emphasised the importance of prioritising black African citizens when allocating housing, due to the historical backlog that dates back to the housing crisis in the 1970s.

The housing allocation process in the city of Johannesburg is case dependent. In and between different municipalities in the country, different strategies are used to allocate housing. Housing allocation lists may be compiled from national, provincial or local spheres of government, and they may be used with project-based lists that are compiled to prioritise those that already live around the project area (Nkuna 2010 cited in Rubin, 2011). The

process of applying for state housing involves registering their names various times (Ahmed Kathrada Foundation, 2013).

At times the applicants would be required to register at the city council offices, other times applicants would be required to register at the ABSA building in Joburg, and other times they would be required to register at local community meetings. The applicants were unsure of whether this was a re-registration or a confirmation of the initial application. Thereafter, applicants are not formally communicated to about the progress of their application until they get called into the new housing development to collect their keys (Ahmed Kathrada Foundation, 2013).

One of the approaches is inclusionary housing, and it provides incentives to private developers to include affordable housing and social housing into their market-driven developments (Ahmed Kathrada Foundation, 2013). In 2019, the City of Johannesburg has been the only municipality to introduce an Inclusionary Housing Policy, however, there have been fruitless attempts to legislating this approach. The second housing policy approach is the mixed-income housing approach. The Lehae Mixed-Income Housing Development Project adheres to the characteristics of this approach.

“These are housing developments that are usually undertaken in partnership with private sector housing developers and financial institutions and which comprise a mix of housing typologies” (Ahmed Kathrada Foundation, 2013:8). The mix of housing typologies could include social housing, government subsidised affordable housing, government subsidised rental stock and bonded houses. This approach is usually not just housing but includes other amenities such as schools, libraries, and clinics, etc.

The current housing policy in SA is clearly focused on changing the apartheid spatial economy, so that black South Africans can gain better access to work opportunities and social amenities (Ahmed Kathrada Foundation, 2013). In other words, housing policy seeks to bring African, Indian and Coloured residents into formerly ‘white’ areas. The Lehae Mixed-Income Housing Development Project is peculiar in this regard, as it promoted the movement of white and Indian families into the settlements that would be expected to be ‘black’ settlements.

The portion of the Lehae Mixed-Income Housing Development that would be designated for RDP/BNG houses would be expected to be the 'black' settlement, however, the society of Lenasia, which is where most of the residents of Lehae lived before, was welcoming of the white and Indian families that have been part of their community for years. This is not the custom of housing practice in South Africa (Ahmed Kathrada Foundation, 2013). It is said that the African National Congress has played an important role in mediating the state-society negotiations about the allocation of houses for the Lehae project. The ANC also played an important role in the mediation of domestic disputes between members of society about housing allocation (Ahmed Kathrada Foundation, 2013).

Service Delivery Protests

Protest in South Africa has become one of the most used form of communication of citizens to a government authority (Allan and Heese, 2011). The Municipal IQ Hotspot Monitor has found that there have been more service delivery protests this year than any other year since the protests first started in 2004. "...The term 'service delivery protest' if not always absolutely accurate is wholly adequate - it describes a protest which is galvanised by inadequate local services or tardy service delivery, the responsibility for which lies with a municipality" (Allan and Heese, 2011: 1). Larger metropolitan municipalities seem to have more service delivery protests than smaller cities, towns and rural areas.

This is attributed to the fact that large cities have the highest population growth rates and there is a proven link between population growth and service delivery protests (Allan and Heese, 2011). People who need jobs migrate to successful cities, where there are perceived economic opportunities. When the representatives of local authorities, councillors and city officials, communicate poorly with the residents of the city that are most disadvantaged protests are sparked. This is since poor communication leads to a rapid spread of rumours such as mismanagement of funds, corruption, and favouritism; these rumours are sometimes true, however, at times they are untrue.

Therefore, local councils need to develop an inclusive communication strategy, so that residents of informal settlements are involved in the processes of the local council. However, the local council also has the responsibility of inclusive communication and collaboration with the Department of Cooperative Governance and Traditional Affairs as

well as Human Settlements; as housing is a functional area of provincial and national spheres of government (The Constitution, 1996).



Figure 14: Headlines Collage

The government of South Africa acknowledges the infrastructure backlogs that it is faced with and as such has infrastructure grants that municipalities can apply for to supplement their equitable share. However, despite the backlogs and thus clear need for infrastructure, infrastructure budgets are not fully spent. Most of the infrastructure grants across the country are spent, however, less than half of the infrastructure goals have been met. Meaning the goals are either unattainable, or the implementation of the plans takes longer than the projected time.

Other influencing factors according to the articles referred to in the above figure 14 include the country rethinking plans mid the implementation phase of those plans. At times residents protest about the lack of maintenance of the infrastructure provided. One of the articles mentioned above refers to residents having to plan to empty their own full pit latrines as they were not being maintained by the municipality. Another reason that can contribute to not reaching city goals is that at times unqualified personnel is recruited. This is even more harmful to the city at a director and city manager level as the rest of the municipality takes instruction from unqualified management. The quality of work done by contractors of built infrastructure is at times appalling. Julius Malema, president of the Economic Freedom Fighters, mentioned that RDP houses are collapsing and being flooded yet houses that were built by the apartheid government are still standing and are in good condition.

The last, but not least possible contributing factor is a lack of communication. Developments have been stopped by residents and contractors alike due to a lack of communication. It has been reported that residents have halted housing developments because they are unclear about how the houses will be allocated and what the allocation is based on. This was one of the key issues that faced the Lehae Mixed-Income Housing Development. Where residents of multiple surrounding areas protested because the houses were built but no one was allocated houses yet. The community then invaded the houses until the houses were formally handed over. The residents of the Lehae Mixed-Income Development also laid a complaint because there was no access to basic services on the development. No matter how the service delivery protests are analysed, the issues lie within the scope of both urban management and project management. A City not achieving its goals is a concern from an

urban management perspective, and not setting achievable goals is a concern from a project management perspective.

Conclusion

This chapter has shown that mixed-income housing models are an international trend for promoting inclusion and social restructuring. This is also reiterated by (Huang, 2015). The implementation of this policy in South Africa, however, has proven difficult. There are numerous reasons that have contributed to the poor implementation of mixed-income housing and one of the main reasons it attributed to the lack of good public-private partnership practice. Dube (2013) further explains that the private entity is contracted to produce a public asset or service and the public sector has minimal responsibility when it comes to implementation. The Lehae Mixed-Income Housing Development Project is an example of such a development, with multiple stakeholders.

Chapter 4: Fieldwork Findings

Introduction

This chapter will be focusing on the results of the interviews that were conducted with city officials within the City of Johannesburg in their capacity as urban managers and interviews with built environment experts, mainly project managers. The interview questions set for the six participants of this research was based on other data analysed for the purposes of mainly understanding the theory of the key concepts and a view of their practice at a less localised context. The research report examined secondary sources of data in the form of literature, legislation, policy, and newspaper articles.

What was found from these sources of data is that poor service delivery is as a result of multiple factors and central to these factors is the lack of effective project management. Whether city projects fail due to the projects being incomplete according to the original scope of the projects, whether they fail due to their inability to be complete within the specified project time or budget all these factors somehow go back to the fundamentals of project management. However, the failure of city projects cannot be purely attributed to the failure of project managing as the complexity theory illustrated that local government as an organisation is dynamic and complex.

Unlike project management for private sector projects, city projects have both an economic development and social mandate to consider in the conceptualisation and implementation of development projects. In addition to the multiple objectives for the city, the municipality itself is part of a government that is complex and has various stakeholders to consider, align with and manage. Urban management thus offers a holistic approach towards ensuring that a city functions well within such a complex organisational environment. Where functions of leading, planning, controlling and organising are pivotal in ensuring city development.

The urban management literature emphasised the true efficacy test of this approach as the state of infrastructure provision in that urban area, which was depicted as a major struggle for South African municipalities. The research then sought to understand the difficulties of successful project management within the case of the Lehae Mixed-Income Development Project from the perspective of urban managers in the CoJ and built environment practitioners that currently work within the private sector through semi-structured

interviews. The conducted interviews contributed to the research report as primary sources of data collection.

Two different sets of questionnaires were set, one for urban managers and the other for project managers. The questionnaire for urban managers had thirteen questions split between three categories; definitions of terminology, understanding management, and processes. The aim was to interview between three and five urban managers within the CoJ and between three and five project managers. Three urban managers and project managers ended up being interviewed. The questionnaires were directed at both practitioners who were involved in the Lehae Mixed-Income Housing Development Project as well as practitioners who have had substantial experience in either urban management or project management.

The researcher complied to all ethical considerations and received ethical approval from the University of the Witwatersrand before any formal fieldwork was conducted. Before research interviews could take place within the City of Johannesburg, their own protocol had to be followed. Consent from the CoJ was received from the 'Innovation & Knowledge Management Group Strategy, Policy Coordination & Relations Department'. All those who participated in this research were informed of the aim of this research and how the knowledge and experience they have would be of assistance to this research. They were then asked to sign a consent form and grant permission to record the interview. As stipulated under the Research Methods heading in chapter 1 of this research report, participants will remain protected. Interviewees will be referred to with pseudonyms.

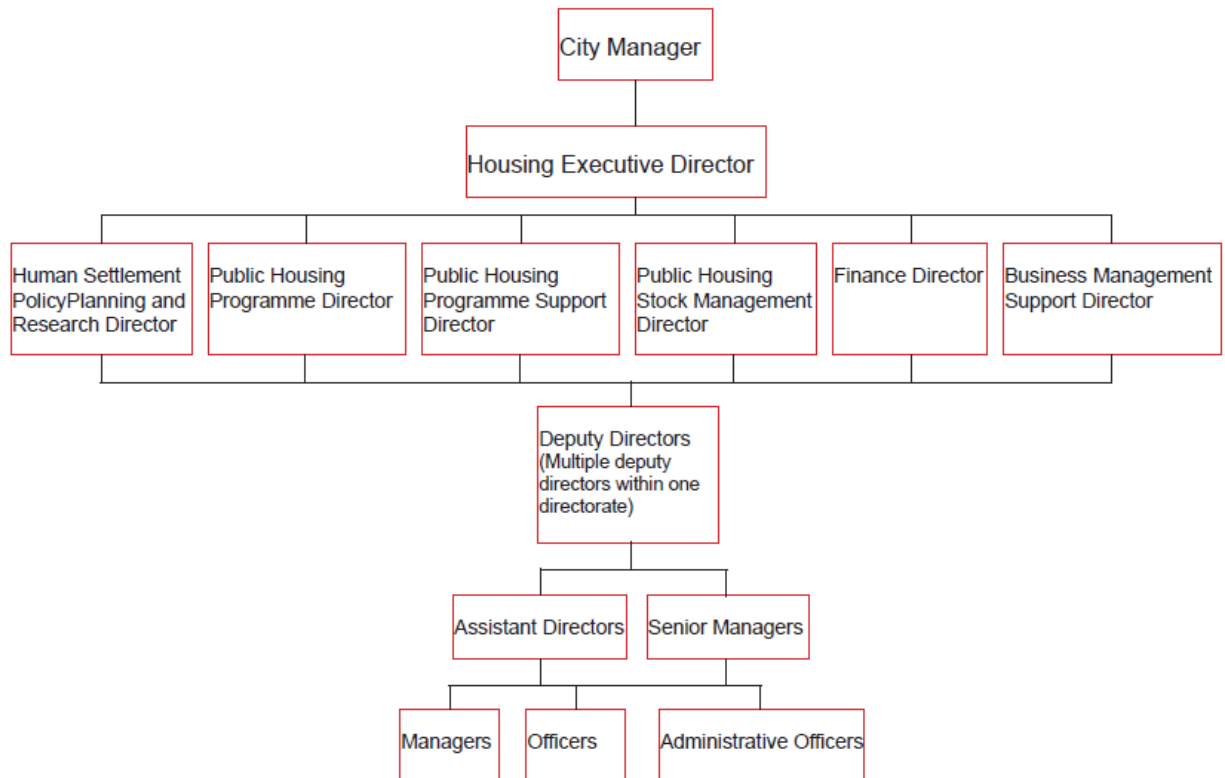


Figure 15: simplified organogram of the City of Johannesburg (CoJ City Management Organogram, 2013)

Figure 15 above is a simplified draft of the organogram of the City of Johannesburg. This diagram assists in understanding the position of the interviewee and understand how different disciplines interact and influence each other.

Definitions of Terminology

The first few questions that the urban managers at the City of Johannesburg- Department of Housing were asked were based on the terminology that is used in this report. The first section was seeking to clarify the understanding of the urban managers on the disciplines of urban management and project management. The questions that the urban managers were asked were as follows:

1. *What do you understand urban management to be?*
2. *What does an urban manager do?*
3. *What is project management?*

4. *Would you say that project management is one of the responsibilities of an urban manager?*
5. *What defines a development project from a municipal perspective, with regards to:*
 - *When does a project start?*
 - *When does a project end from a municipal perspective?*
 - *Is there a point when a municipal project is not handled by the municipality at all?*

The first term that the three urban managers were requested to define was urban management and the city officials that were interviewed all agreed that urban management is a broad term. City official 1 further explained that urban management is integrative as it includes social, economic and political components of the city. He elaborated that urban management is holistic and is the management of disciplines. City official 2 also described urban management as the management of all urban space. This led to the officials describing the role of an urban manager as being vast. As a result, “there is no such thing in the city”, exclaims city official 1. There is diversity within the city and thus practitioners that work for the city have specific positions that deal with specific issues. An urban manager would have to ensure that the development of everything that encompasses urban space is well managed.

The next term that the urban managers were requested to define was project management. City official 1 described project management as something that has a life span. Meaning, it has a beginning and an end. The official emphasised that project management is a special skill that is used to address a particular issue that either needs immediate attention or an issue that has been planned to be resolved. The official confirms that project management is one of the responsibilities of an urban manager. It is important that an urban manager understands the project management life cycle as it should influence the decisions that are made about development in a city. Project management and urban management are therefore interrelated and if these disciplines were to work in isolation, “it would be a recipe for disaster” says city official 1.

Project management is managing the implementation of projects from start to finish. City official 3 thus argues that project management is not one of the responsibilities of an urban manager. He continues to explain that urban managers manage the entire space and other

related activities, not necessarily the implementation of projects in the space. Urban management goes way beyond project management. A development project in the housing sector implicates all relevant projects and amenities that need to be implemented in order to implement human settlements. The purpose of such projects from the perspective of the city, is to improve the lives of the beneficiaries of the project. All projects start with a need, and a need is then defined. What exactly is it that people need in the area? Or they may be an opportunity or crisis that requires for a project to be implemented in order to address the problem.

City official 3, like the other 2 city officials defined a development project according to size, mega projects. As mega projects are the type of projects that the department of housing city official works with. Mega projects that the department deals with are developments where residents of the city can live, work and play. As much as the projects are built development projects, the municipal perspective of a development project is always developmental, meaning it aims to make a social and economic impact. A human settlement development project is highly dependent of the resources available. The amount of fiscal and human resources determines the lifespan of the project as well as the project scope.

Understanding Management

The second section of the interview was a set of questions that sought to understand the management of projects within the City. The following were the questions that were asked to the urban managers:

6. *Are there standard processes or procedures that one needs to follow in order to ensure completion of a project?*
 - *In the case of Lehae*
7. *Who decided who is to run the Lehae project?*
8. *What is the nature of the manager of a project in a municipality?*
 - *Are projects run in groups or by individuals; if in groups, how are the members chosen?*

The government has standard processes and procedures in place to ensure the implementation and completion of a project. City Official 1 explains that the processes that

are in place are necessary for understanding the path and dynamics of the development implementation journey. The processes that are in place assist in knowing the needed resources prior to the implementation of the project. The standard operating procedures are also in place to show that the city adheres to Key Performance Indicators.

City official 2 declares that there are standard processes that are followed in order to complete a project and they are found in policy. There are a number of policies and standard processes that the City follows. The housing code, for example, defines procedures to be followed in a housing project. The Project Management Book of Knowledge is also used by the department of housing, and it defines what is in a project and how it is managed from beginning to end. There are also treasury regulations that the city must comply with, and these regulations stipulate how money is used in a project.

City official 1 explains that the city official in charge of running a development project is automatic. In that the geographic location of the project will indicate who the project will be run by. The CoJ has regions A to G and each region is well staffed in terms of project management personnel. There is a dedicated project manager for each project. The project manager then appoints a project management team. City Official 3 elaborates further that the project management team may overlap. Members of the project management team for the Lehae Mixed-Income Housing Development Project were part of several other project management teams. However, the main project manager is the consistent and responsible party within the city. Any outsourced implementing agent such as developers, report to the project management team on a monthly basis. Developers need to receive consent from the city project manager before proceeding with each phase of the project. This ensures that the city, through its project manager, monitors the progress and quality of its projects.

City official 2 explains that that like any other organisation, the City of Johannesburg has an organisational structure, and the department is part of that structure. This structure has a project management unit. The head of that unit, which is referred to as a director, is tasked with delegating who will manage what project. The person who is allocated the project by the head of the project management unit is a project manager. The appointed project manager then chooses people to join them in managing the project.

Processes

The last section of the interview was to help the researcher understand the urban processes that the City uses. The set questions in this section were aimed at unpacking the processes that are followed by the City to ensure the completion of a project. The questions that were asked in this section were as follows:

9. *Who decided the time frame of the Lehae project and how did they decide?*
10. *How was the project collaboratively managed with the private developers?*
 - *Was the handed over to the developers and any other communication prior to completion of the project initiated by the developers?*
 - *Reports done by developers in order to remunerate for completed phase/ next phase*
 - *Communication channels remain open*
 - *Who facilitates the collaboration?*
 - *How was the issue with the invaders of the phase 2 houses resolved as the houses were not yet complete? (News 24 25 Oct 2018 jmpd removed the doors and furniture, invaders want to be reallocated to other houses)*
11. *Are there city officials constantly assigned to the site in order to assess the progress and quality standards?*
12. *What measures are taken if progress of private developers is unsatisfactory?*
 - *Accountability*
13. *In your opinion, are projects better managed internally or with the assistance of the private sector?*

When asked who decided and how the time frame of the Lehae Mixed-Income Housing Development Project was decided, city official 1 enlightened the researcher that project constraints usually determine the time frame of a project. Project constraints include financial capacity of the funders of the project, the time in which the development is needed by and the scope of the project. The scope of the work, and the resources available will determine the time frame of the project. Another aspect that needs to be taken into consideration when deciding on a time frame of a project is the necessary processes such as impact assessments and quality related processes.

City official 1 continues to explain that city projects always have multiple stakeholders. Projects have regulatory stakeholders, residential stakeholders, internal stakeholders, and various interest groups. Developers or external implementing agencies are also regarded as stakeholders, and they have scheduled meetings with the city project management team. Where developers present their progress reports and also have the opportunity to mention the challenges that they are faced with.

City official 3 enlightens that the city as well as the department of housing also have to constantly engage provincial and national government as there are various criteria to housing. The implementing agent is also required to employ unemployed people within the area of development for the project. Prior to any development implementation, the city is required by the Municipal Systems Act as well as SPLUMA to conduct consultations with all interest parties.

The distribution of the houses built by the city is based on the Demand Database which is at the Gauteng Province or the 1996/1997 List which is also at province. No matter which list is used, the elderly, disabled, and military veterans are prioritised. Thereafter, whoever was registered first on the lists is served next. The housing department with the CoJ then engage the chosen beneficiaries of the project and educates them about property ownership and the specific development project that will be providing them with houses.

In the event that the progress of the implementing agent is unsatisfactory, the legal avenue is taken. Private sector project managers are bound by the contract they signed. When such an incident occurs, it is very unfortunate as the development is stopped in the meantime. Remedial action is taken by the city as the contractor has breached its service level agreement. The contract is then terminated, and a new contractor is appointed according to the statutes of the Municipal Finance Management Act.

City official 1 explains that the timeframe of a project is dependent on the activities that are to be executed. A project starts with a need, but there are a number of other activities that need to take place. One of the processes is to confirm that land, i.e., find out who owns the land. The next step would be to acquire the land if it is not owned by the City. Thereafter, town planning processes need to take place, township layout and other general plans. The following step that is taken is to install services, then the houses are built, and then

ultimately handed over to the beneficiaries. The timeframe would then depend on how long each of those activities take, but it must be known upfront so that proper planning and budgeting can take place. Because of the experience of those that usually handle this part of the project, “I know how many months it takes to complete each of these activities, and I punch it into the project management software then I would know how long the whole project will take” (City official 2, 2019). The most important task is to understand each and every activity and its own timeline.

A formal procurement process also has to be followed in order to appoint a private developer or any form of implementing agent. A development contract is then entered into. This contract defines the terms of the contract and what is to be done if the contract is breached. The management of the private developer is therefore through the contract which specifies what activities they are supposed to do, what they are responsible for, the budget that they must work with and what the timelines are. That contract is then managed by the City’s project manager. Meaning, the city project manager manages the private developer. The city project manager will request to attend site meetings and progress meetings, and these meetings will be set up front, either quarterly or monthly, depending on the frequency of reports required by the project manager. According to official 2, meetings were set to be attended on a monthly basis for the Lehae Mixed-Use Housing Development project.

The legal section also attends monthly meetings, so that they can be of assistance in instances of any breach of contract. The issue of invaders is also included in the contract and security is the responsibility of the private developers until they complete the project and hand it over to the city. The city then takes a complete product and allocates the houses. However, if the people do occupy the incomplete houses for some time then the City has to go to court as it is illegal to remove people without alternative accommodation, according to the PIE Act. The illegal occupants of the houses can only be evicted with a court order that grants eviction without alternate accommodation, and that was the case for the invasion of 52 houses in Lehae. The court granted the City of Johannesburg and eviction without alternate accommodation for the Lehae project, as the court recognises that these houses are built as part of a plan to assist people of the community who themselves do not formal housing.

Development projects are better managed with the expertise and presence of the private sector exclaims city official 2. Municipalities sometimes do not have the capacity to deal with the scale of projects that need to be implemented. To have fully fledged project managers is not cheap, and so a combination of external and internal works much better. In Lehae, Urban Dynamics was appointed as external project managers. They then have to put together their own team, but report to the internal project manager on a monthly basis. The internal project manager will deal with issues of delivery and claims. They will analyse the claim. Working together with external project managers does help, especially in terms of capacity. City official 1 also argues that it is best that the city outsources the implementation of its development projects. This is not only for job creation but to also outsource the risks that are attached to implementing projects as a city.

Project Management - Understanding Management

Understanding management was also a theme in the questionnaires that were set for project managers outside of the City of Johannesburg. This questionnaire was set to understand the urban management perspective of those that play project management roles in the private sector. Three project managers were interviewed. The three interviewees were a mixture of those that worked on the Lehae Mixed Income Housing Development project and others were project managers in other development projects. The following are the questions that were asked under the urban management section:

- 1. What was your role in the project?*
- 2. Can you specify what phase of the project you were pivotal in?*
- 3. What is your understanding of the role of an urban manager?*
- 4. What do you think the link between urban management and project management is?*

Project manager 1 has a project management as well as an engineering qualification. The interviewee has more than 15 years of experience in both engineering and project management. Project manager 1 acted in the capacity of a project manager in his own engineering consultancy. The interviewee was a project manager for a project of electrifying 2 000 households per year for the Greater Tlhatse Local Municipality in the year 2013. The electrification project was different from other projects that are taken on by municipalities.

The norm is for municipalities to send out a service quotation request. And award the tender to the best bidder.

The case of the electrification project developed by the project manager 1 was vice versa. The interviewee identified an electrification backlog problem and proposed a project model to the Greater Tubatse Local Municipality, National Treasury and the Department of Energy that was not advertised, i.e. an unsolicited bid. The interviewee introduced a pilot project in terms of the acceleration of electrification. However, all the involved parties could not lose the opportunity of electrifying more than double the households that were predicted to be electrified over the next 3 years. The interviewee introduced an electrification model that would light up many villages in the Greater Tubatse Local Municipality cutting down the backlog catch-up time by more than double. The interviewee was as thus very much part of the conceptual phase of the project. The interviewee then continued to be hands-on on the implementation of the electrification project.

Project manager 2 has also been working as a project manager for his own construction company. However, the project manager's qualifications are in software project management, and not construction or development project management. Despite not having a qualification in construction or the built environment, the interviewee fully understood the project management life cycle and was involved in the majority of it. The Project manager's Construction Company mainly implemented storm water and road projects in the Tshwane area. The project manager chose to tell me about a storm water and road project that his company completed in Soshanguve. His construction company was a subcontractor to the main development company that won the tender. He had to oversee the project execution component of the project management life cycle. In other words, project manager 2 needed to produce the final product. The project manager then hired labour to place the storm water pipes and complete the roads as well as ensured that the workers on site are on schedule, within budget and are using the supplied material as required. The subcontractor's parameters were quality, time, cost and resources.

Project manager 3 was the project manager for the Lehae Mixed Income Housing Development project. He is hired as a project manager by the development consultancy which was used as the turnkey contractor by the City of Johannesburg for the Lehae Mixed Income Housing Development project and many other projects. The role of project manager

3 in the Lehae case was to ensure that the project is on schedule and within budget.

Because the Lehae project is a Community Based Project, the majority of the labour has to be recruited from within the community that is being delivered to. Project manager 3 then had to start engaging the community through the councillor and the Chief Liaison Officer in order to introduce the project as well as announce the type of skills that will be required. Whatever materials and skills cannot be sourced from the community and within budget will then be ordered from external material agents.

The budget of Reconstruction Development Project houses is based on a fixed budget and is thus very strict. This at times causes issues with the communities as they get upset by the contractors using outsourced materials that they can provide from within the community. Project manager 3 made an example of one of the how a small brick company from Lehae was charging R2 a brick, but the project manager knew of an external company that sold bricks for R1.80. Another issue that they had with hiring small companies is their capacity, where the larger companies that they have worked with before can deliver 50 truckloads of bricks a day, the smaller company can only manufacture 10 000 bricks in a day. However, due to the city contractual requirements, the contractors have to accommodate such short comings. As much as the private sector is profit-driven, they are forced to abide by the standards of their public sector clients. Even though they could make more money by implementing the project in their own way. Project manager 3 said, “Where we would maybe say we’ll do smaller batches and make use of these local guys as part of this community building project and the whole aim of upliftment, assisting and all those political words that I really don’t understand sometimes.”

The town planning division of the company does the township layout plans and all other town planning related process, thereafter, the project manager goes to site and implements the project. Thereafter, the company hands over the project and the title deed. Throughout the project, the project manager has to report to the client, in this case, the City of Johannesburg, as regularly as required by the client. The department of human settlement development in the company has a standard report template that it has used with the City of Johannesburg for numerous projects. The template will require the project manager to input when the site was established, the financials, the number of people that have been employed and the demographics of the employees. The template is inclusive of the

subcontractors that are hired for the project and a spreadsheet of their employees. The fully filled in report then goes out to the client on a weekly basis as a summary of the progress of the project.

Project manager 1 defined urban management as hidden, a term that is new and rarely used. And thus, an urban manager would be a person that decides how a city functions, i.e. a mayor of a city or an urban planner. The interviewee further highlighted that municipal implementation agencies can also act as urban managers. The Johannesburg Development Agency is an example of such an agency, as they manage and facilitate the city's infrastructure developments. Therefore, no one person, i.e. the mayor manages the city by themselves. There are numerous urban managers who should be communicating and working together, otherwise it becomes a shortcoming. Project manager 1 continues to say another way of looking at the role of an urban manager is to recognise urban managers as managers of politics. The role of an urban manager is therefore very vast.

When asked about the link between urban management and project management, the interviewee responded that urban management is a component of project management. Project manager 1 continued to say that project management is also part of urban management. He said, "urban management is the initial stage of project implementation". The urban manager should be part of formulating the scope of the project as well as the project charter, and that is all part of the conceptual phase of project management. The interviewee made an example about a housing development, where the city will do the preparatory work by acquiring the land, zoning it for the housing development, communicating with the affected communities and defining the project.

Once all of the groundwork has been done, the project manager then comes in as an implementing agent. Urban managers have an ongoing task of communicating with the affected parties, therefore, as much as the bulk of their job is done at the conceptual phase of a project it is not limited to it. "For there to be successful project management, the urban manager needed to be involved". If the project is done within the city, then urban management can also be project management. Project manager 1 made an example of the Johannesburg M2 motorway reconstruction project. It was a mayoral project and implemented by the Johannesburg Roads Agency, which is an extension of the city. In such a case, the city is both the urban manager as well as the project manager. Therefore, the term

urban management is very broad. Other disciplines such as urban planning is more precise and clearer, with a specific role.

The interview then proceeded to the third question of the interview, which required interviewee 2 to elaborate on their understanding of the role of an urban manager. The interviewee responded that they do not know what an urban manager is and thus cannot elaborate on their understanding of their role. The interviewee could not expand on the relationship between urban management and project management. Project manager 2 only had working relation with the main contractor who then dealt with the municipality and any other stakeholders of the project. The subcontractor responds that he had good working relations with the main contractor and made weekly progress reports.

Project manager 3 was also unaware of what the role of an urban manager is, but he was sure that the municipality has the important responsibility of managing the urban environment. The municipality is the one that knows the needs of its residents and the number of residents that need to be catered to. Without the municipality, built environment professionals in the private sector would not have jobs. But at the same time, the beneficiaries of the infrastructure that is built by the private sector would struggle without the existence and efficiency of the private sector. "It is all a chain and we all need each other, but the city manages us all in urban environment" says project manager 3.

Project Management – Processes

The second and last section of the questionnaire for the project managers is based on understanding the processes that the private sector have to follow. The following questions were asked:

5. *How was your working relationship with the City project manager/urban manager?*
6. *Do you think the city project manager / urban manager should be involved in how the private sector implements a project?*
 - *Should the city work together with the private sector or should you work separately?*
7. *Were they involved enough in the project?*
8. *Where do you think the city project manager/urban manager could have improved?*

The project that project manager 1 was offering to the municipality had never been done before, and as such at the initial phase of the project, the working relationship with the municipality was good. The municipal council had to make a resolution that they want the project that is being offered. The National Treasury was also highly involved because they were the guarantors of the project, meaning they were providing assurance of the commitment of the Department of Energy. The Department of Energy were the sponsors or funders of the project. Eskom would approve the designs and take over the installation on completion of the project by the interviewee. The Greater Tubatse Local Municipality is the client as the project within their jurisdiction. The province of Limpopo was also involved as spectators and supporters of the local municipality.

The interviewee, as a service provider, understood how the money flow of the project that he initiated would work, he attracted all these needed interest parties and sold them an electrification project that was much needed. Once one understands project financing and how to organise money, project management becomes easier, as a whole. National Treasury then encouraged for a project steering committee to be formed and chaired by the Department of Energy. The steering committee consisted of all the interest parties and it met on a monthly basis.

Things started going wrong when the municipality disbanded the project steering project. This was as a result of a change in municipal management. The municipal manager was unaware that the committee was chaired by the funders of the project. That is how working with the local municipality ended up becoming a nightmare and how the project eventually came to a halt in 2017. After 18 months of working with the steering committee and organising the funds for the project, as soon as National Treasury approved the project funds, the municipal manager was suspended. The interviewee explained that he is now liaising with the 11th accounting officer, the 10th CFO and the 10th director of technical since he started working with the municipality and within a 5-year period. The halt of the project is now a legal case matter.

If you are a project manager or an urban planner, you cannot ignore politics. The project manager said that, "if you are not interested in politics, politics will be interested in you". He cautions that project management is not just about managing the schedule and payments, but it is also about managing the politics. However, it is equally important to conduct

oneself within legal and ethical boundaries. As a result, when matters get as bad as this project has gone, you will have nothing to hide.

The project manager was asked to respond to question 6 about the involvement of the municipality and whether it was satisfactory. He replies that the municipality was involved in that he made monthly progress reports to the project steering committee which the municipality was very involved in. However, how the project was run was directed by him. Especially because this electrification was a pilot project. Meaning it had never been done before, and the model of delivery was introduced by the interviewee. However, the interviewee acknowledges that the municipality always needs to be involved in all development that occurs within its administrative borders because the residents of the municipality will always go to the municipality when they are unsatisfied with service delivery.

For example, when people do not have electricity they go and protest at their municipality, not at Eskom. Another reason is because the municipality is the one that collects revenue for the services provided, as the development projects are handed over to the municipality. It is therefore, in the interest of the municipality, the residents of the municipality as well as the private sector implementers to involve the municipality in the processes of managing development in their municipality. Otherwise, the municipality does not receive much proceeds from development in their jurisdiction, addressing service provision for all would not be a priority and the private developers would have to deal with complaints from the residents themselves. It truly is in the interest of all for the municipality to be involved. It is pivotal to the management of a whole city.

In the case of the electrification project by the interviewee, he explains that the municipality was not involved enough. However, this was due to a number of reasons. Project manager 1 ended up having to conduct public participation himself as the municipality was no longer fully behind the project and as such were not doing their part in hopes of the service provider failing to implement. The project continued and 16 villages within the municipality were electrified but the municipality was not attending the switch-on ceremonies. Instead, the traditional authorities were attending. The mayor of the Greater Tubatse Local Municipality only attended one ceremony and it was because the speaker of parliament, the minister of energy and the minister of local government attended as well. In theory the

municipality needs to remain relevant throughout the project. However, cases of a municipality only being involved in the conceptual phase as well as the handing-over ceremony is sadly common.

The last question that was asked to the project manager was about his opinion on areas that could be improved in how urban managers work with external project managers. “It would have helped if there was stability in the leadership of the municipality”, responded the project manager. When new leadership comes in, they immediately want to change what was being done previously, despite the benefit of the projects to the residents of the municipality. He made an example of a project he had executed in Kwa-Zulu Natal. He explains that he was invited by the mayor of a municipality he was going to work with. The mayor invited him to present his project to the council, which includes all the councillors within that municipality. Because he was afforded that opportunity, the councillors ended up knowing his plan and understanding his vision. Therefore, they were less vulnerable to any propaganda against him. With the continuous change in leadership with his project in the Grater Tubatse Local Municipality having an understanding with the leadership became very difficult. And as such, the propaganda of those that were interested in taking over his project or demanding underhanded deals from him got to the leadership.

The communication plan and stakeholder management is an aspect that is very important and can definitely be improved. “It is the unwritten things that were a problem”. Local people were employed, the residents were happy with the speedy delivery of electricity, but the municipality itself was the one sabotaging its own project by delaying projects and not even granting assurance that it will pay. In such cases, the Special Investigating Unit gets involved and development is stopped. Incidents as bad as this are not very common, but it is part of things that can go very wrong in terms of how the municipality works with external service providers. The crucial aspect for the private sector implementers is to remain ethical at all times.

Project manager 3 explains that his involvement in the Lehae Mixed Income Housing Development project only started in phase 17 of the project. The company that project manager 3 works for was hired around the year 2000 to establish Lehae Extension 1, which the contractor then broke up into phases according to the appointments that came in one at a time from the city. The phases were phase 1 till the current phase which is phase 17.

Phase 17 of the project, the latest appointment, was for the building of 603 houses. The interviewee believes that thus far, their company has built around 3 000 houses in Lehae Extension1.

The project manager is then asked about his working relationship with the city, he responds that he is of the opinion that the working relationship with the City of Johannesburg on the Lehae project was challenging. He elaborates that the city did not avail itself to assisting the company on several issues that they faced in the duration of the project. The city has completed many projects and is fully aware of the kinds of challenges that project managers face on site, especially with regards to adhering to the regulations and standards of public projects. “I believe there is a lack on their side to assist the contractors” says project manager 3. The project manager further explains that the lack of interest to engage contractors on their issues is a highly influencing factor to the housing backlog that the city is faced with.

There are people who are on the Human Settlements System, which is a database at the Department of Human Settlements of all the people that need social housing, for the past 20 years and still do not have houses. The interviewee explains that at times as contractors they hand over houses to people with 1994/1995 Identity Documents when there are residents who signed up for housing in the year 1994/1995 and still do not have housing. The criteria that the city uses is not standard and depends on each case. In the case of the Lehae project, phase 17 was specifically for 603 houses because the city had already identified 603 beneficiaries, prior to the involvement of the contractors. However, the contractors have to deal with disturbances to the project due to residents of the city wanting to be assured that the houses that are being built are for them, even though they are not on the list of the predetermined beneficiaries. Beneficiary administration is a huge problem that is faced by contractors, and the city does not intervene.

The project manager makes an example about how people will be brought to occupy houses by city officials, even though they were not on the original Human Settlements System list. Those who move into the social housing built by the contractors has very little to do with the contractors. The interviewee explained that they work with Happy Letters, which is a formal document that is signed by the beneficiary of the house, the city and the contractor once the house is completed and approved. The Happy Letter is handed over to the

beneficiary of the house with the keys on the official handing over day. The document has all the required information, such as the water meter number, the beneficiary's details, and the engineers' signatures for proof of quality assurance, and a statement about real estate trade. The contractors may only claim their final retention once Happy Letters have been signed and given to beneficiaries of the houses built. When there are issues with who is to be the beneficiary of a house, it means that a Happy Letter cannot yet be signed even though the contractor has completed the house. "We then sometimes need to employ someone to assist us with this process because we are chasing that money", says project manager 3.

The most pertinent issue that has been faced by the project manager with regards to working with the municipality is the Human Settlements System. "I do not know of any project that I have finished in time because the municipality or the department is slow, or a contract is not yet in place. Then when they are under pressure, they send contracts over-night and want you to start tomorrow. I have been in the project management industry since 2005 and nothing has changed. Same old systems, it is slow, and no one understands HSS." The project manager continues to elaborate on another issue that has put a toll on the working relationship between them as the contractors and the municipality. He explains that the turn-around time of projects is not aligned to the contracts of city officials. Project managers within the municipality or the department get moved around from project to project or department to department and the private sector project managers have to help the next person catch up with the project. This factor is also highly influenced by the political party in charge at the time.

The next question that project manager 3 was asked was whether the municipal project managers should be working more closely with the private sector project managers or if the private sector should have more directive powers. The interviewee responded that the municipality should definitely be working closer with the private sector. "If they actually do their work, I know this may sound harsh, but I believe that the unhappiness and all the riots would obviously become less." The residents of the city are frustrated because public sector processes are too slow. The project manager explains that the municipality only works well when under pressure, such as riots, then they attend to the people and make promises. However, 6 months down the line, they return to their old ways of non-delivery. The

interviewee argues that the municipality should be working with the private sector in a much more collaborative manner so that services are delivered speedily, and residents can see where their rates and taxes are going.

The project manager further argues that the municipality also needs to have a better working relationship with the residents of the city, especially when it comes to informing the public about the processes that they have to follow and the challenges that they too face. He elaborates that when people are misinformed, they start guessing and making up their own ideas and that is how rumours start and spread fast. At that point it is too late to start informing people because the purpose would be damage control and not knowledge control. The project manager explains that the issue of the information flow from the municipality to its residents is not just an issue in the predominantly black townships, but even in the predominantly white suburban areas.

The last question that project manager 3 was asked was how he thinks the city project manager or urban manager could have improved. He replied that he thinks that the city project manager should have assisted more with the community issues. The city must assist the contractor in terms of informing the residents of the area around the development about the norms and standards that it has about recruiting demographics and hiring indigenous skills and knowledge via the Councillor and the Chief Liaison Officer. When people are unhappy with the regulations that the contractor is forced to oblige to, they rebel against the contractor and disrupt the project. The socio-economic issues are the kinds of issues that the city urban managers need to be more directly involved in. This means that the project managers/urban managers within the city need to be well informed about the regulations of the city and conduct public participation thoroughly. "The project managers or whatever they want to be called from the city and the department of housing need to have all the knowledge and be fully equipped to execute the task of addressing issues well through communication. Otherwise they just say to us that you are the contractor, so you go sort out the mess, which was the case for the 51 units that were invaded in Lehae."

The security company recruited by the contractors was the one that had to try to remove the people that invaded the incomplete houses, but they went back. The contractor for the Lehae project had their main security company, which guards all their projects sites, hire security service providers within Lehae as stipulated in the main contractual agreement with

the City of Johannesburg and the Department of Housing. This means that security personnel that lives in Lehae will have to evict people that have invaded the Lehae project houses. This is a very risky task for the security guards as that puts their lives and that of their families in danger because it will be interpreted as them working against the community. “I firmly believe that evicting people is the metro’s job”, says project manager 3. “Nowhere in our contract does it give us a mandate to remove people and those sorts of things. The Red Ants do these things and the Red Ants work for the city.”

The only security obligation that the contractor has according to their contract is for the security of the site camp, specifically building material and containers prior to the building of the houses. Once the building starts and the project is approaching completion, additional security is hired to move between the houses to protect the infrastructure that is visible such as plumbing and electrical fittings. The security is to ensure that vandalism and theft are minimised as much as possible so that the contractor does not work at a loss because of stolen material.

The project manager says that they did try to sit down and talk to the people that invaded the houses through the councillor and the CLO but their pleas fell on deaf ears. The interviewee is also aware of the fact that the councillor is not going to anger the people that he needs to vote for him again, and so the councillor will not push too hard. He explained that most of this community participation work needs to be done before the start of the implementation of the project, so that people are aware of the plans of the city and its execution plan.

The people that live around the area that is about to be developed and the surrounding areas need to be informed of the list of beneficiaries before the project starts. Not just the beneficiaries of the housing project, but the whole community. So that by the time the contractors get to site, they are expected and welcomed, which would make their job much easier, explains project manager 3. Otherwise people of the community and surrounding areas come to explain their struggle for housing for the past 20 years and complain about other people being relocated to their area even though they do not have formal housing. People believe that the contractors have a say on who gets to move into the houses that they are building.

Contractors are also faced with challenges of exploitation by the communities they are working in, such as being demanded 'protection fees' or else they will be vulnerable to 'attacks'. Communities also have factions within them and sabotage each other so that someone else can be awarded the job. Project manager 3 explains that as contractors they try to avoid being involved in such politics and as far as possible try to only deal with the councillors and Chief Liaison Officers. The councillor and the CLO will be told by the contractor that certain skills and material are needed, and the councillor and CLO will be the required to shortlist the candidates. The contractor will then check the qualifications and work experience or verify the abilities of the job candidates.

The interviewee mainly attributes the socio-economic issues that they have to deal with to the fact that residents of the city are not well informed at all about processes and who the custodians of the project are. City officials need to do much better in that aspect. When communication is done well from the beginning, the socio-economic issues that the contractor has to deal with are reduced. The interviewee argues that they as the private contractors end up being the face of the project because they are there constantly, and so any grievances that the people have become their issues to face even if it has nothing to do with them.

The city project managers only have technical meetings on site once in 4 or 5 months because they do not have to be on site regularly due to the weekly reports that they receive from the contractor. "I believe that it is important for the city project managers to come to site constantly, so that the people can see them and speak to them directly about any problems that they are encountering and what their dynamics are" says project manager 3. Actually, going to site is much better than reading a summary about the progress of the project. "The client must be represented at site level".

The issue of the 51 houses that were invaded is now with the City of Johannesburg and the Metropolitan Police. "To be very honest, I have not even asked for an update in the last month," says project manager 3. That means that the 51 houses that are incomplete and invaded are now illegal structures. Every single phase of the building of a house needs to be approved. The last phase that was approved for those 51 houses was the brick work and the roofs. Therefore, if anyone gets hurt or if anything goes wrong before the people that are living in those houses are removed, then the contractor's name is in disrepute. Meaning it is

in the interest of the contractors too, to ensure that those houses are completed and handed over to the correct beneficiaries.

“We can go to court and bring out huge documents, but if someone has died or been badly hurt then we too are at fault.” The project manager continues to say that the possible way forward is for the houses to be demolished because the quality of them can no longer be approved by the engineers as most of the structures have now been tempered with. That will bring in an element of reimbursing the people that have moved into the incomplete houses for their contribution to the structure. With a fixed RDP housing budget, the contractor is unable to make such payments, and as such the issue of the 51 houses is still with the city.

Conclusion

Conducting the fieldwork for this research report was very interesting. It was not a surprise that many of the professionals that I interviewed had a very limited understanding of what urban management is and what the role of an urban manager is. As mentioned in the introduction of this chapter, interviews were conducted as a means to understand the practices of urban management and project management and how these two disciplines interact. The interviews that were conducted at the Department of Human Settlements were with individuals that were directly linked to the Lehae project, however, not the assigned project manager of the project as she was difficult to contact. The other urban managers interviewed vowed to help me get in contact with the assigned project manager, but their efforts were without effect.

Despite the absence of the city project manager, all other city officials that were interviewed answered the interview questions with similar responses. They all argued that urban management is a broad term that encompasses a number of factors in the running of a municipality and ensuring that the city works well. As a result, the urban managers claim that there is no one person within the city that can attend to all the challenges of a city. Thus, the non-existence of an urban manager title in the municipality and the department of human settlements. As much as the urban managers argued that there are no urban

manager positions within the city, they are clear that the city has a duty to develop the infrastructure of the city and without project management that would be impossible.

The urban managers explained that the Lehae Mixed Income Housing Development project was no different to any of the other cases that the city has had before. There were standard procedures that were followed and the project manager within the city was chosen the same way any other project manager is chosen, and that is by the region head. The project manager then uses other personnel within the department to assist them in the project. The city then works with the private sector implementers based on the development contract. By working together, the urban managers mean that external project managers submit progress reports and submit claims for payment.

The urban managers and the project managers agree that every project starts with identifying a need. Even though two of the three project managers did not have a clear understanding of what urban management is and what urban managers do, they all agree that municipalities play a pivotal role in the physical development of a city. Project managers faced various issues with working with the public sector, but they all believed that they could be solved by opening up and improving communication channels. The Lehae Mixed Income Housing Development project is a true testament to this issue, as one of the city officials claim that the 51 houses that were invaded, as seen in the newspaper article in chapter 3, have been cleared and the houses are now complete and handed over to the city. However, the private sector project manager of the project claims that the 51 houses remain an issue and a hindrance to the closure of the project. This depicts a clear breakdown in communication between the stakeholders of city development.

Chapters 1 to 3 of this research report, which focused on literature, legislation, policy and newspaper articles as secondary sources of data outlined key factors that influence successful urban management. In the introduction of this research, the report outlined 10 Critical Success Factors (CSFs) that contribute to city project success in Korea from the perspective of urban management function. The list compiled by Yu and Kwon (2010) included factors such as good communication and information sharing, cooperativeness of stakeholders on project, optimisation of legal and administrative services and minimisation of conflict between stakeholders. The above-mentioned CSFs have been illustrated by South African literature on project failures, newspaper articles, as well as the conclusions of the

conducted interviews. The interviewed projects managers explained that there are many government processes and platforms that they are unclear to them yet influence their task of project implementation on a regular basis. In the context of the Lehae project, the beneficiaries of the houses that were being built were drawn from various lists which caused confusion and chaos and eventually resulted in the project being halted by residents of Lehae via the invasion of 51 houses. With systems in place that promote information sharing good communication practices such expensive incidents could be avoided.

In addition to the lack of good communication and information sharing between the City and the contractors as well as the community affected by the development project, the interviews illustrated a lack of well used legal services. The CoJ was of the view that the security of the project site is one of the tasks of the project management contractors, Urban Dynamics. While Urban Dynamics is clear on their responsibility of securing the site for the safety of the building materials. The project manager argued that the invasion of incomplete houses as a result of lacking communication practices and information sharing between the municipality and the community of Lehae is outside of the control of the private contractors.

The lack of well optimised legal services critical factor then influenced the cooperativeness of stakeholder's critical success factor and tricked down to the minimisation of conflict between stakeholder's critical success factor. Due to the lack of clarity on the obligations of the two parties in the contractual agreement further cooperation is hindered and as such creates conflict between the stakeholders. This depicts that the failure of certain parts within the system of urban management can have the same dire impact on the next critical success factor for infrastructure provision. And as such, the bad state of infrastructure provision in the city is a direct depiction of a lack of efficiency in urban management. The conducted interviews thus revealed that the planning process that ensures the provision of infrastructure within the CoJ needs to be improved, and that the institutional framework of the city is not conducive to effective urban management practice at a practical implementation level.

The complexity theory which in short is the study of Complex Adaptive Systems (CAS) in the field of strategic management and organisational studies also concurs that complex organisations such as government benefit from diversity which is essential in sourcing

information and being innovative. Thereby emphasising the importance of a transparent and information sharing city with good communication practices. Complex systems also emphasise the quality of relationships between parts of the system rather than the properties of the parts themselves. When the quality of these relations depreciates, the complex system can be chaotic. While CAS thrive at the edge of chaos to create originality, too much instability can cause chaos that even a CAS cannot handle. In such cases, intervention is required for municipalities and they are put under administration.

This research report is a reminder that project success is not a direct reflection of good project management practice as mentioned in chapter 2. Project management planning tools, techniques and specific methodologies have close to no effect on some of the failures of some projects. Project administration, third parties, relations with clients, contracting, legal agreements and conflicts are some of the other factors that affect the ability of a project to achieve its goals. Therefore, project management plays a significant role in the overall success of a development project, but the success of a project is not the sole responsibility of project management. The success of development projects is affected by many other factors that are beyond the control of project management capacity. Project management success, however, depends on various factors too. They include; completion to budget, satisfying the project schedule, adequate quality standards, meeting the project goal. As much as project management is within the broad and holistic approach that urban management should be concerned with, factors that affect project success but are outside of the control of project management should be even more central to the task of an urban manager.

Chapter 5: Analysis and Conclusion

Introduction

This research proposes to evaluate urban management by dissecting one of the tasks that urban managers would normatively have to undertake, and that is project managing city projects. It pursues understanding project management practices through the lens of the urban manager. This research also sought to understand the practices of city officials from the perspective of the project managers that work with city officials from the private sector. Due to the wide and complex interest of the researcher, the researcher chose to narrow down the exploratory research to urban management within the City of Johannesburg, and specifically the Lehae Mixed Income Housing Development project. However, the researcher refers to multiple other cases of incomplete or unsatisfactory city projects from across the country.

The researcher had hypothesised to find that project management practices within the city have an influence on the failure of municipal projects to be completed on time, within budget or at the expected quality standard. This chapter will be analysing how all the sub-questions and thus how the main research question has been responded to. This chapter will also be reflecting on the key points from the literature review, context of housing development project approach as well the key findings from the fieldwork. Chapter 5 will then conclude the research by suggesting areas of improvement for urban management practice for the City of Johannesburg.

The research question that this research report aimed to respond to is: **‘How effective is project management within the urban management process: the case of the Lehae Mixed-Income Housing Development Project?’**. Chapter 2 of this research report is a literature review. The literature review responded to sub-question 1, which asks what project management is from a municipal planning perspective. This chapter explained in detail how complex government is, and thus how complex the responsibility of a municipality is. The literature review went on to define what urban management is.

The literature review in this report defined urban management as a broad concept that deals with the process of ensuring the holistic development of a city. That is inclusive of managing all directorates of the municipality: Human Resources, Public Relations, City Planning, Public Housing Stock, Procurement, all other possible departments within a

municipality. The literature review also emphasises that in addition to the immediate municipal departments, urban management as a concept is also concerned with civil society as municipal clients and thus beneficiaries of municipal services; as well as the private sector in their capacity of assisting the city with institutional capacity and as urban investors.

The responses of most of the research participants was aligned to the understanding of urban management as a broad concept. The understanding of those that were knowledgeable about the approach were able to define it as a holistic way of managing a city. However, urban management in its fullest meaning is not practiced in the City of Johannesburg. This is mainly due to the decentralised governance system in South Africa.

The fieldwork findings chapter illustrated a draft of the organogram of the City of Johannesburg and how it works with the Department of Housing. The draft organogram of the City illustrated that Departments have separate purposes that then feed into the development of a city. Meaning the City itself needs to work well at collaborative governance in order to successfully manage the balanced and holistic development of the city. In addition to that, the city is faced with a dynamic of working within the laws and policies of national government.

The literature review also referred to local government autonomy model and suggested that South African government adheres to the relative autonomy model as local government in SA has stated powers and competencies. However, South African local government has traits of the interactive autonomy model, especially when it comes to the financing of local government. Therefore, as much as local government is self-governing it still interrelated and dependant on the national government as national government only releases certain grants to local government when municipalities adhere to certain criteria. Local government by-laws are also to be aligned to national law. This proves the execution of the urban management concept as one that is almost impossible in the current system.

The responsibility of ensuring that a city works like a well-oiled machine is no task of one organ of the state, never mind it being the responsibility of a specific person, an urban manager. In the normative sense of the concept, urban management in South African local government is still far from being fully and successfully practiced. As mentioned in the first chapter of this research report, the true test of urban management success is the state of

infrastructure provision. South African literature and frequent service delivery protests have illustrated that municipalities have fallen short of successful infrastructure provision.

Victim to Project Management Traps

The literature review then goes onto defining project management, its principles and the tools used to execute project management successfully. Project management is defined as the process of controlling the achievement of the project objectives. Project management controls the achievement of project objectives by using tools and techniques. The literature review outlines that there have been numerous cases of successful projects even when project management has failed, and vice-versa. However, other writers argued that the main reasons that underdevelopment in Africa has worsened is due to project management failures. The project management literature on the failures of project management further articulated 4 traps that projects fall into that stunt their success.

The first project failure trap that was referred in the literature review was the one-size fits all approach which relates to professions that assume that all project shares basic characteristics. Thus, limiting the approach's guided actions to set objectives of the project and standard procedures that all its projects must follow regardless of their size and content. This approach focuses on financial and technical feasibility and neglects the social, environmental, cultural and political feasibility. One could argue that traits of the one-size-fits-all approach can be traced in the Lehae Mixed-Income Housing Development project and quite a few of the other projects referred to in this research report as the Lehae project was halted due to social, cultural and political issues that were not well incorporated into the stakeholder engagement process of the conceptual phase of the project.

Residents of Lehae and other interest parties were not well communicated with in terms of the housing allocation as emphasised in the fieldwork findings in chapter 4. The lack of enough effort put into addressing social cultural and political issues and contingencies caused by delay in the completion in the project and thus affected the set budget of the project. The Lehae project halt caused hiccups for both the City of Johannesburg as well as the implementing agency which was hired as the on-site project manager for the City flagship project. Chapter 3 of this research report refers to the Municipal Systems Act which

highlights conducting and facilitating public participation as one of the key responsibilities of a municipality in order to ensure that the development of a municipality is effective and transparent.

The lack of effective and transparent communication between the City of Johannesburg and Civil society interest parties inflicted a financial and time cost to the project management process and thus to the objectives of the Lehae project. The illegal occupation of the 52 incomplete houses required the implementing agency to hire equipment and labour for an extended time which has monetary implications for the City of Johannesburg. In addition to that financial implication for the City of Johannesburg, the City was still required to take the illegal occupation matter to court so that the City may serve the unlawful occupiers an eviction notice, as per the Prevention of Illegal Eviction act.

The literature review also refers to the accountability-for-results trap where project management is executed in a manner that is mainly about following set guidelines and the main purpose of reporting is for accountability and unlocking stage payments, and not necessarily reporting on the progress of the project and what management issues are faced so that project management practice in the institution can improve and project outcomes are met. The Results-Based-Management tends to focus on reporting to stakeholders and not putting the information to good use.

Chapter 4 of this research report also identified this as one of the challenges that the implementing agency had with the City of Johannesburg on the Lehae case. Where interaction with the City project manager was mainly about reading progress reports or listening to progress report presentations so that the implementing agency can be paid for the completed stage of the project. The implementing agency is the on-site project manager for the project; however, the City is the main project manager as they are the custodians of the project.

The Lehae project implementing agency emphasised that they hardly saw the City project manager and that they hardly go to site to actually check on the progress and address issues that civil society may have as and when they arise so that they do not turn into larger issues that can lead to project delays. Chapter 4 also revealed a breakdown in understanding of the contract that binds the two main participating agents. The officials at the City of

Johannesburg argue that the implementing agency is contractually obligated to secure the development location and should thus ensure that the development is not illegally occupied.

The implementing agency on the other hand claims that their only contractual obligation in terms of safety is to ensure the safety of the materials that they use to build, which are safely locked away in temporary site facilities. In addition, the security company that the implementing agency uses recruited personnel from the Lehae community to guard the material. Being privy of the plans of the community to invade the incomplete houses due to their dissatisfaction with the City and putting the lives of a few security guards in danger is not part of the deal, claims the implementing agency participant. This proves that there is no clear directive and division of responsibilities between the main participating agents, which could have been made clear by meaningful and continuous stakeholder engagement. The lack of effective and useful engagement leaves blurred areas that allow for infiltration of scope creeping.

The accountability-for-results trap is usually promoted by executive order or government-wide legislation. This feeds into the lack-of-project-management-capacity trap, where public institutions lack trained project management civil servants or use them ineffectively. Even when municipalities and other public institutions do have a few technical professionals, the number and size of government projects may be too overwhelming and thus require more time and resources that government officials are able to give or use.

Chapter 2 alluded to the fact that project management success in Africa is closely linked to ensuring that all stakeholders are part of the project and that they all contribute to the success of the project. This was a factor that was evidently missing in the Lehae case, with the local community opting to illegally occupy 52 houses and the implementing agency emphasising the City of Johannesburg's lack of adequate and effective engagement.

Therefore, as much as construction project management is very much a technical skill and is concerned with ensuring that infrastructure is well built, social and political matters affect the success of a project and should thus be of major concern to urban management.

The last project failure trap that projects executed in Africa tend to fall into the cultural trap. This trap takes the top-down approach and neglects to take into consideration the local

community that will be benefiting from the project. It leads with paternalism in that it assumes that project managers and other technical professionals know better and thus knows what suits and fit for a local community. Whereas other authors argue that project management success is closely linked to ensuring that all stakeholders are part of the project and that they all contribute to the success of the project. Thus, encouraging that project management tools and approaches be tailored to the cultural context of the recipients of the project. Therefore, this emphasises that the success of a project is not solely reliant on the success of project management, even though project management plays a key role in the success of a project.

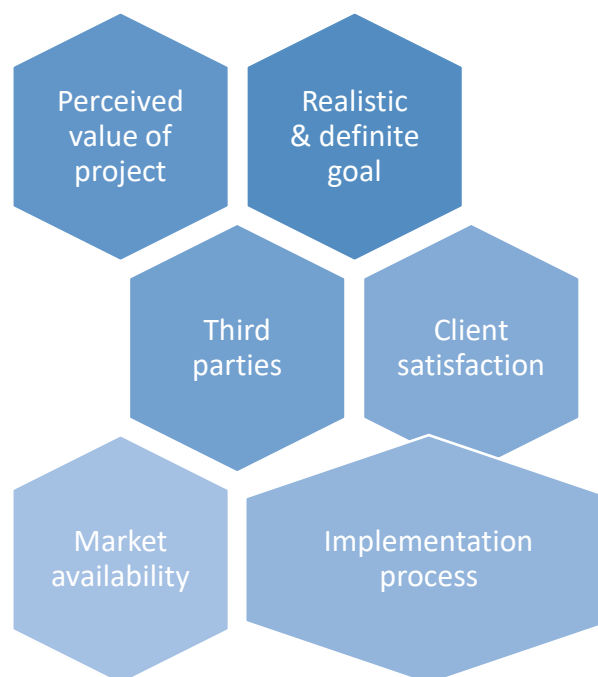


Figure 16: project success items according to Morris and Hugh (1986)

Figure 16 above illustrates the key items that contribute to the success of a project. It also shows that only two of the items are related to project management, defining the realistic goal of a project is within the responsibilities of project management, and so it the implementation process. All other factors that contribute towards the success of a project are equally as important. Urban management, which can be summed up as a conceptual approach to the holistic management of urban development, should be in control of all the above items. Be knowledgeable and involved in the economic, social and practical aspects of the development project, to ensure its success.



Figure 17: project management success items according to Munns and Bjeirmi 1996

Figure 17 above is a similar diagram that depicts the items that contribute to successful project management. Developing strategies, methods and philosophies of project implementation early in the project conceptualisation is also important for project success. However, other writers express that successful project management practice is unlikely to prevent project failure, due to inability to control non-project management related factors. However, good project management practice can contribute towards project success.

The overview and analysis of the Lehae Mixed-Income Housing Development project management process and practice from the perspective of the urban manager illustrated that the success or failure of a project is dependent on multiple factors. With the Lehae project falling victim to the one-size-fits-all, accountability-for-results, lack of project management and cultural traps. The City officials interviewed also emphasised that the Lehae project was no exception to how projects are seen through to their completion. Which suggests that the approach that the City uses is vulnerable to continual inefficiency and lack of improvement and adaptation.

Weak Public-Private Partnership Practice in Housing Projects

The literary chapter concluded with an overview of global housing policy and narrowing down the scale to housing policy adopted in South Africa. This is especially important for the understanding of the case study, Lehae Mixed Income Housing Development project, and how it was to be executed by the City of Johannesburg. The literary concepts assisted the researcher with understanding the diverse role of urban management and how project management is just one of the tasks that must be performed well for a city to be developed well.

Chapter 3 responded to sub-question 2 which asks what laws and policies govern project management in South Africa. Chapter 3 set the context for the research case study. The chapter located and provided an overview of the case study area and project itself. Since the case study for this research is a housing development project, chapter 3 reintroduced the housing development approaches that have been adopted in South Africa, over the last few years, specifically in Johannesburg. The chapter outlines two main approaches that have been introduced to the Johannesburg context. The most recent being the Inclusionary Housing approach, which provides incentives to private developers to include affordable housing and social housing into their market-driven developments. This approach was recently recognised as a policy for housing development in Johannesburg, however, there have been fruitless attempts at legislating this policy.

Chapter 3 then went onto illustrating that South Africa has been influenced to join the international approach to housing models, and that is the mixed-income housing model. The mixed-income housing approach develops housing projects in partnership with private sector housing developers & financial institutions. This housing approach also has a mix of housing typologies in one development. This mix of housing could include social housing, government subsidised affordable housing, government subsidised rental stock and bonded houses. Most of the time, such development includes other amenities as well, such as schools, libraries, and clinics.

There have been several attempts at such developments in South Africa, such as the **Cosmo City Integrated Housing Project**. The Cosmo City Integrated Housing Project began in the year 2000. It can be argued that this project adheres to the basic characteristics of the

mixed-income housing model, in that the Cosmo City Integrated Housing Project as City of Johannesburg project in partnership with the Department of Housing and private developers. The development also had multiple housing typologies, namely: social housing, government subsidised affordable housing and bonded houses. The last shared characteristic of the Cosmo City Integrated Housing Project as well as the mixed-income housing model is that development also had other amenities on it such as primary and high schools, public open spaces, churches and other amenities. As much as the Cosmo City Integrated Housing Project was not titled a mixed-income housing project, it adheres to all the main characteristics of the mixed-income housing development approach.

The **South Hills project** which is also a City of Johannesburg integrated housing development was introduced in 2015. The South Hills project was public-private partnership between the City of Johannesburg, Standard Bank and Calgro M3. The project developed a total of 6 204 units. This included 1 904 Breaking New Ground units, 457 social housing units, 2 397 GAP housing units and 1 446 freestanding open market units. The South Hills integrated housing development also has other amenities such as churches, schools and parks. This research's case study, the **Lehae Mixed-Income Housing Development project** is also an example of a project that adheres to the characteristics of the mixed-income housing model, with 5 344 housing units in total. This project had BNG, bonded and affordable rental units. The development also accommodates other amenities such as schools, churches, business sites and taxi ranks.

All the referred to projects have met the objectives of the mixed-income housing development approach in that government or the City of Johannesburg does not embark on them alone, and the developments have a mix of housing typologies. However, these projects were not conceptualised with the mixed-income housing development approach in mind and were rather focused on an integrative approach. Therefore, the projects that exist do not focus or have strong public-private partnership practices. This then contributes to the implementation failure of government infrastructure and housing projects. As the public-private partnership should be strong throughout the whole project lifecycle, not only the conceptual phase of the project.

Chapter 3 then went onto proving the stance of government infrastructure and housing development implementation failures across the country by providing a collage of

newspaper headlines on government projects that are somehow not up to par. The provided headlines were of projects that had quality issues, some with incomplete projects, some projects that were halted by residents and so on. One of the projects that made it to the headlines was the Lehae Mixed-Income Development project, the case study for this research. Many of these projects ended up making newspaper headlines as a result of civil society protests due to the service delivery inadequacy and inefficiency that they were faced with. Writers referred to in the literature review also highlight that protest is one of the only forms of communication that government responds to. Finally, chapter 3 speaks to one of the newspaper headlines by the Daily Maverick from the collage. The article alluded to mismanagement of funds and poor project management practice by stating that 93% of the infrastructure budget had been spent but less than half of the infrastructure targets were met.

Municipalities receive an equitable share for the competencies that they need to cater for. In addition to that, municipalities may apply for infrastructure grants as national government is aware of the infrastructure backlog that the country is faced with. Chapter 3 illustrated that municipalities and departments usually spend their full budget, however, less than half of the infrastructure goals are met. This means that the development goals that are set are either unattainable or implementation of the development plans takes longer than the projected time. Whether the issue be unattainable development goals or project definition and scope issues, it all should concern urban management and project management concepts.

The research found that there is no specific project management practice law or policy was found during desktop study or referred to by city officials that stipulates or guides the frequency of communication between the City and the implementing agency. There was also no project management specific law or policy that was found or referred to that addresses how project management phase assessment is to be executed in the City of Johannesburg. How projects are executed seem to be on executive orders that are understood and followed throughout the department of housing. Those that are in charge of projects within the city are professionals that have project management experience and use project management tools to calculate the timeframe of a project. However, the timeframe of a project is also dependant on the available resources, and so at times projects

are broken onto multiple projects so that resources can be directed to upcoming projects as and when they come in.

The failure or mediocre standard of government projects should be an issue to be addressed by urban management as the concept of urban management is one of ensuring the spatial, social, environmental and economic development of a city. The failure of city projects should also be a cause for concern to project management practice as reasons for projects not being complete on time and/or within budget can be as a result of scope creep. That is as a result of a project not being effectively defined and conceptualised. Government projects, especially mixed-income housing developments are especially difficult from concept to completion, as there are multiple stakeholders. However, it is the task of the project owners to ensure that all stakeholders are involved and managed well.

The Sustainable Development Goals promote good partnership practice in order to achieve the goal of developing sustainable cities and communities. Sustainable Development Goal 17, which is 'Partnerships for the goals' aims to strengthen means of implementation and revitalise the global partnership for sustainable development. Before countries can participate in effective global partnerships, they need to develop effective development partnerships within the country. Local government in South Africa needs to improve the conceptual phase of project management by involving the main participating agents of partnerships even more to have a more direct and specific project concept. When the concept is strong, the execution of it has less room to fall into failure traps.

There are many other factors that affect the success of a project but effective public-private partnerships is a highly suggested manner of improving the management of city projects. Forming good partnerships and being active participants is not only in the interest of public institutions to improve its project management skills and urban management practice, but also in the interest of the private sector as well. As many infrastructure projects in developing countries are catalysed by government initiatives or tenders. Sustainable Development Goal 11: Sustainable Cities & Communities is the end goal, but the route there is through effective public-private partnerships.

Concluding Remarks

This research report sought to use the provision of housing as the spectacle of project management from the lens of an urban manager who has a holistic view of city building, both strategically and operationally. The objectives of this research were thus:

- to understand the functions of urban management,
- emphasise project management as a key role of urban management,
- assess knowledge of the fundamentals of project management and knowledge of tools available to project managers,
- investigate urban manager's understanding of the project management cycle and how it is to be applied in the municipal context

Desktop reviews of literature, legislation, policy and newspaper articles were done to understand the functions of urban management, and to emphasise project management as a key role of urban management. The last two objectives of this research report were realised through semi-structured interviews. The interviews conducted with the 3 CoJ city officials and 3 project managers illustrated that there are project management practices in place to monitor and oversee infrastructure development projects. However, a holistic urban management perspective at a more practical and operational level is not central to the implementation process of the City of Johannesburg. This research illustrated that there are many other factors that influence project success that are outside the control of project management but should be within the realm of urban management practice.

The analytical framework in figure 18 below illustrates the complexity of ensuring the completion of a municipal development project as compared to the rational comprehensive method of completing a development project depicted in figure 19. Figure 18 illustrates stakeholder management and collaborative governance as pivotal components of the city project management process. However, the figure also alludes that completing a development project in the estimated time and within the estimated budget is of equal importance. This depicts the balance and control dimensions of urban management. Figure 18 below also shows that an urban manager can take more than one hierarchical position with the municipal manager as well as city regional managers also being urban managers in their own right. This research as shown that as much as project management plays a central

role on the success of a project, there are other factors that affect project success. All such factors should theoretically be in the control of the urban manager. The research also showed that administrative capacity constrains infrastructure development just as much as if not more than financial capacity.

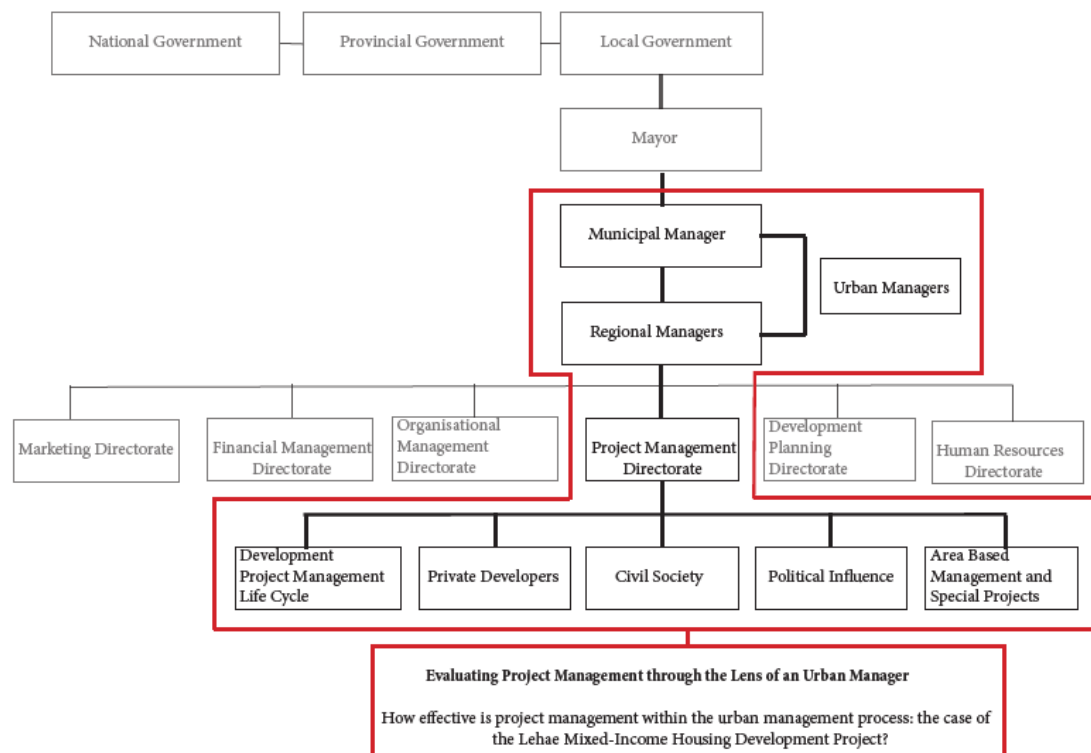


Figure 18: Analytical Framework



Figure 19: Project Management Life Cycle

This research report aimed to evaluate project management from the perspective of an urban manager. The exploratory research sought to understand the urban management concept by slicing through one of the main tasks that municipalities have and that is to provide basic services, and as such need to execute projects in order to provide such basic

services. The research found that the urban management concept in the context of South African local government would prove to be a difficult task. The complexity theory demonstrated that collaborative governance and public-private partnerships are pivotal to ensuring the improved development of a city. The fieldwork findings revealed that in reality effective collaborative governance and public-private partnerships are rare.

Therefore, the key elements of urban management are not well-practiced in the context of the City of Johannesburg project management. This research also found that urban management is not a well-known approach that is central to how municipalities work. It is broadly understood by urban practitioners as a theory of holistic management of the urban, but not as a concept that local government in South Africa is or should even aim towards practicing. This is largely attributed to the structure of government and governance in South Africa.

Subsequently, urban management is not intentionally practiced in the City of Johannesburg, as a result of the decentralised structure of government and specialised positions within the City of Johannesburg. The mayor and the municipal manager of the City do, however, have the oversight mandate and thus take the urban manager role. Applying the urban management approach at a more specialised practical level has proven difficult. However, project management is still practiced as City projects need to be executed. Project management is therefore practiced in a manner that is not integrative. Hence its practice is a contributing factor to the failure of multiple city projects.

This research illustrated that much is still to be done in terms of improving project management practice and policy in the City of Johannesburg. As much as this research was mainly focused on the Lehae Mixed-Income Housing Development project, many other projects were analysed, and in addition, it was found that the implementation of the project was no exception to the standard process that is used to execute a project in the City of Johannesburg. It can therefore be argued that this exploratory research could be applicable to many other housing projects in the country.

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