MASTER OF MANAGEMENT
ENTREPRENEURSHIP AND NEW VENTURE CREATION

RESEARCH REPORT

ASSESSMENT OF THE INTERNAL STATE OF THE SA PUBLIC SECTOR
(LOCAL GOVERNMENT) TO IMPLEMENT CORPORATE
ENTREPRENEURSHIP

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This report is submitted in partial fulfilment of the requirements for the Master of
Management Entrepreneur and Venture Creation (MMENVC) at the University of the
Witwatersrand Business School
March 2015
ABSTRACT

The 21\textsuperscript{st} century is characterised by fast-paced changes because of global competition, innovation and development. However, changes are also enhanced by stronger demands made to organisations and the public sector by labour and society at large. For organisations to remain relevant and sustainable, they have to move beyond business as usual and incorporate into their strategies an element of entrepreneurship, something that was previously only represented by emerging businesses. The public sector is not immune to these changes and, therefore, is also expected to evolve from its previous ‘old systems’ orientation and better serve the needs of citizens. Many organisations are starting to implement corporate entrepreneurship, a management approach that incorporates the mobility, innovation and development thinking of an entrepreneur into the management structures that were common in large organisations and to some extent the public sector. Corporate entrepreneurship has proven to improve organisational and financial performance of organisations, thereby creating competitive advantage for those who implement it. The purpose of this study is to conduct a descriptive research that will assess whether the internal factors such as organisational structure, culture and rewards enhance or inhibit corporate entrepreneurship in municipalities and their influence on service delivery. This study is significant in that previous research studies concentrated on the private sector and not much research was conducted in the public sector. The study tests the propositions and hypotheses linked to the following constructs: organisational structure, organisational culture, rewards and entrepreneurial orientation. Given that an assessment was envisaged as an end product, the research was conducted from a positivist approach and therefore the quantitative research methodology was employed. The sample population comprised municipal managers and the sampling frame was middle managers. The purposive fit sampling technique was utilised as this group of managers serve as a link between top management and lower level employees. The research instrument that was used is the questionnaire survey which was adapted from Morris and Covin (1989), and Kuratko and Hornsby (2013). The data was analysed through the use of multivariate regression analysis and correlation techniques. The results of the study indicate that the concept of corporate entrepreneurship is present and can be applied in the local government as it is the norm in the private sector.
DECLARATION

By my signature, I declare that the contents hereof are my own unaided work and all sources have been referenced. It is being submitted in partial fulfilment of the requirements for the Master of Management Entrepreneur and Venture Creation (MMENVC) at the University of the Witwatersrand Business School. It has not been submitted before for any degree or examination in any university.

_______________________
Signature
ACKNOWLEDGEMENTS

I would like to acknowledge my supervisor Prof Boris Urban for his leadership, understanding and guidance, which he provided throughout the research study.

I would also like to express my gratitude to my family and friends for their unwavering support and patience. A special thank you to my daughter Lethabo Nkhumishe for her understanding and resilience she demonstrated during this period.
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CHAPTER 1: INTRODUCTION

1.1 Purpose of the Study

The purpose of this research is to conduct a descriptive study to determine the internal state of the South African public sector (local government/municipalities) to implement corporate entrepreneurship by examining how entrepreneurial employee activity is constrained or enhanced by organisational factors such as structure, culture and rewards. These factors are significant in improving service delivery to the citizens of the country. In this regard, variable factors such as entrepreneurial orientation, organisational structure, culture and rewards will be tested.

1.2 Context of the Study

The transitional journey of the Republic of South Africa into a true democratic state is considered a success story within the global community; however, this transition brought with it a number of significant changes in the various spheres of South African society. One of the major changes occurred in local government, which graduated from being a single statutory institution which previously served a minority of South Africans to becoming a formal sphere of government (Powell, 2012), with a mandate to serve all members of society, irrespective of their locality. The establishment of local government was underpinned by the provisions of the Constitution of the Republic of South Africa in 1996, with the mandate of ensuring the provision of services to communities, promotion of social, economic development as well as a safe and healthy environment (Constitution of RSA, 1996). The ideals of establishing local government was to ensure that government is located within communities, is able to address concerns, needs as well as expectations of the local habitats and is directly engaged with the community that it serves (Koma, 2010). Furthermore, local government was to serve as a ‘port of call’ that policy makers could use when considering changes in legislation or policy direction. As such, local government is a structure through which the state decentralises its powers to the lowest level (National Treasury, 2012), so that service delivery can be expedited in various communities. In this regard, provision of basic services such as access to water, electricity, housing, sanitation, roads and storm water drainage, etc. fall within the jurisdiction of local government (Koma, 2010; Powell, 2012).
On 27 April 2014, South Africa commemorated 20 years of democracy; however, the majority of its citizens still struggle with access to elementary services such as electricity, housing, water and sanitation (Russel & Bvuma, 2001; Koma, 2010; Powell, 2012). The dawn of democracy in 1994 was met with high expectations from the millions of South Africans who previously did not have access to basic services. The new democratically elected government was expected to ensure that the transition will address these needs (Labuschagne & van Vuuren, 2012). Subsequently, parliament approved for implementation the Local Government Municipal Structures Act (Act 117 of 1998) to create vehicles/mechanisms/structures of providing basic services to citizens from their local base. The transitional period for the establishment of these local government structures was plagued with an exodus of skilled and experienced employees, resulting in inefficiencies and resistance to transformation (Labuschagne & van Vuuren, 2012). As a result, over the past few years, the country experienced a surge in the number of violent service delivery protests (Koma, 2010; Powell, 2012) from its citizens who are not satisfied with the quality of services from their respective local governments. These service delivery protests are coupled with diminishing financial resources (National Treasury, 2008), compounded by lack of governance (Labuschagne & van Vuuren, 2012), withholding of rates by certain members of society (Powell, 2012), and a lack of disposable income resultant from high levels of unemployment (Van Rensburg, Campell & Brue, 2011). Inversely, the current rapid population growth, massive infrastructure backlog legacy, increased urban and informal settlement growth (National Treasury, 2008) had a negative impact on the already constrained local government structures. The aforementioned are an indication that provision of services by local government can no longer continue to be conducted in the same manner. There is a need for the local government sector to review the manner in which business is conducted and pursue other alternative solutions. This view is supported by Powell (2012), who asserted that factors impacting the effectiveness of local government are not policy related, as adequate measures are provided for in various legislation. However, there is a need to rejuvenate the actual implementation of service delivery. This will require a different approach in managing resources and responding effectively and efficiently to the needs of communities. Therefore, the introduction and application of practices such as corporate entrepreneurship (hereafter referred to as CE) in the local government set up should be considered.

This should be viewed against the background that the prevalence of fast-paced changes in the world of business and society in general force organisations (whether public or private) to be agile
so that they can remain relevant (Rwigema, Urban & Venter, 2010). As a result, being enterprising is no longer just applicable to the private sector or to independent entrepreneurs (Du Gray, 2004 cited in Kearney, Hisrich & Roche, 2009). Large, small and public organisations also need to apply an enterprising spirit (Thompson, 1999 cited in Kearney et al., 2009) to remain competitive. The public sector should also be alive to the potential impact of becoming enterprising, since it operates in a turbulent environment, characterised by increasing needs and expectations from its citizens (Prelipcean, Islam, Peebles, Barakat & Yao, 2014). Unpredictable global economic conditions such as the global recession and economic downturn put pressure on the public sector to reduce expenditure whilst ensuring that government tasks are still performed effectively (Kim, 2010, cited in Prelipcean et al., 2014), rendering traditional expensive methods of service delivery obsolete.

A review of literature suggests that the public sector is able to pursue CE in the form of public/civic entrepreneurship (Miles & Snow, 1978, Osborne & Gebler, 1993; Morris & Jones, 1999; cited in Kurakto, Morris & Covin, 2011). Furthermore, the notion of public entrepreneurship has been contextualised as a process of creating value for citizens (Kearney et al., 2009) by bringing together a unique combination of resources from the public and private sectors with the view of exploiting social opportunities (Morris & Jones, 1999, cited in Kearney et al., 2009). Moreover, empirical research by Bosma, Wennekers, Guerrero, Martiarena, Singer and Amoros (2013) suggested that in one third of the 52 countries that participated in the research, employee entrepreneurial activity occurs in the not-for-profit and government sectors, which affirms the notion that entrepreneurial behaviour is not only restricted to the private sector. It is against this background that this study intends to assess the internal state of the SA public sector (local government/municipalities) to implement corporate entrepreneurship, by examining how entrepreneurial employee activity is constrained or enhanced, based on organisational factors such as organisational structure, culture and rewards.
1.3 Problem Statement

1.3.1 Main problem

To determine the internal state of the South African public sector (local government/municipalities) and readiness to implement corporate entrepreneurship by examining how entrepreneurial employee activity (through entrepreneurial orientation) is constrained or enhanced, based on organisational factors such as structure, culture and rewards.

1.3.2 Sub-problem one

• To measure the level of entrepreneurial orientation of the local government (municipalities) in South Africa.

1.3.3 Sub-problem two

• To measure the degree of local government’s (municipalities’) organisational structures for corporate entrepreneurship within in South Africa.

• To measure the relationship between the organisational structure and elements of entrepreneurial orientation (innovation, risk and proactiveness) within the local government (municipalities) in South Africa.

1.3.4 Sub-problem three

• To measure the level of organisational culture within the local government (municipalities) for corporate entrepreneurship in South Africa.

• To measure the relationship between organisational culture and elements of entrepreneurial orientation (innovation, risk and proactiveness) within the local government (municipalities) in South Africa.
1.3.5 Sub-problem four

- To measure the level of reward systems for corporate entrepreneurship within the local government (municipalities) in South Africa
- To measure the relationship between the reward systems and elements of entrepreneurial orientation (innovation, risk and proactiveness) within the local government (municipalities) in South Africa.
1.4 Significance of the Study

Entrepreneurship is a widely researched phenomenon which has been in existence for as long as humans have traded and provided goods and/or services; however, its prevalence and application in the public sector is fairly new and still emerging (Ireland, Covin & Kuratko, 2009) in many countries. There is not much research available on corporate entrepreneurship within public or non-profit organisations and previous studies leaned towards the private sector (Klein, Mahoney, McGahan & Pitelis, 2010).

The emergence of research on public entrepreneurship is more evident in some of the developed countries compared to the developing countries. There exists a research gap, especially within the African context, where some countries are still in the process of achieving political stability. Therefore, academically, this study will contribute to the body of knowledge that exists particularly on corporate entrepreneurship in the public sector context.

The outcomes of this study could further present valuable insights on clarifying the factors that constrain or enhance entrepreneurial activity within local government in South Africa. Considering that the targeted participants are middle managers who are the link between strategy development and implementation (Kuratko, 2005, cited in Hornsby et al., 2009) and have the authority to deploy resources to capitalise on available opportunities, the outcome of the study will indicate the critical role of middle managers in implementing corporate entrepreneurship in local government and whether there is difference to that of middle managers in a private sector context.

Also, the study will be valuable in partially validating the results of the special research study on employee entrepreneurial activity across the globe which rated South Africa and other emerging or efficiency economies low as depicted in the GEM report (Bosma et al, 2013).

Furthermore, the findings of the study will have implications for policy makers and local government structures who may consider piloting corporate entrepreneurship in certain municipalities as part of improving services and fulfilling the constitutional obligations of local government.
1.5 Delimitations of the Study

The delimitations of this study which are of importance to note, include the following:

- Internal organisational factors pertaining to corporate entrepreneurship are many and varied; this study will focus on organisational structure, organisational culture and rewards
- The study will test the following elements of entrepreneurial orientation: innovation, risk and proactiveness. As such, autonomy and aggressiveness will be excluded from the study
- The study will be carried out through the quantitative research approach and therefore, there will not be any interviews with respondents
- The study will be conducted on local government structures (municipalities) within the borders of the Republic of South Africa. It excludes national and provincial government as well as all state-owned entities
- The study will only focus on the following measurable variables: organisational structure, organisational culture, rewards and entrepreneurial orientation within municipalities
- The level of employees that will be targeted by the study is middle managers within the municipalities. The study will exclude top level managers and all other employees
- The study will focus on municipalities in three provinces in South Africa and these are Gauteng, Limpopo and North West
- As part of ensuring that the targeted people are reached, the study will be conducted through the Institute of Municipal Finance Institute of South Africa.

The aforementioned are intended to clarify the parameters of this research study as it aligns to the broader purpose.
1.6 Definition of Terms

- **Corporate entrepreneurship:** A term used to describe entrepreneurial behaviour inside established mid-sized and large organisations (Goodale, Kuratko, Hornsby & Covin, 2011).

- **Entrepreneurial orientation:** The degree to which a firm applies the three dimensions of entrepreneurship which are innovation, risk taking and proactiveness (Dess & Lumpkin, 2005).

- **Local government/municipality:** is defined as a “municipality that has the right to govern, on its own initiative, the local government affairs of its community, subject to national and provincial legislation” (Constitution of RSA, 1996: p74)

- **Middle managers:** A group of employees who operationalise and respond to strategic vision and objectives set by the leadership of an organisation by ensuring proper resource allocation, management of others to result in achievement of set goals (Kuratko, Ireland, Covin & Hornsby, 2005; Hales, 2006)

- **Public entrepreneurship:** The process of creating value for citizens by bringing together unique combinations of public and/or private resources to exploit social opportunities (Ghina & Permana, 2012).

- **Service delivery:** means provision of services such as provision of housing, electricity, water and sanitation which are usually provided by local government structures such as a municipality (Constitution of RSA, 1996).
1.7 Assumptions

The following assumptions were made in this research study:

- The study assumes that the application of corporate entrepreneurship leads to improvement in performance of an organisation, irrespective of whether it is a public or private entity (Kuratko, 2007; Kim, 2010)

- The study further assumes that the integrated corporate entrepreneurship model (Kuratko, 2007) has many other elements which are excluded from this research

- The participants of the study have sound managerial experience and therefore understand terms related to the corporate entrepreneurship field as it relates to the public sector. Also, the participants will be regarded as a fair representation of the employees of the municipalities in the three provinces of South Africa

- The participants have the necessary Information and Communication Technology skills which will enable them to access and respond to an Internet-based survey without experiencing challenges

- The targeted respondents were not remunerated or rewarded in any other form for partaking in the study.
2 CHAPTER 2 – LITERATURE REVIEW

For many decades, the concept of entrepreneurship was associated with the private sector environment (Labuschagne & van Vuuren, 2012) and it has, so far, proven valuable as positive results are yielded either financially or otherwise (Dess & Lumpkin (2005) cited in Kuratko et al., 2011) for businesses that applied it. Through these practices, the concept of corporate entrepreneurship (Kuratko et al., 2005) emerged. It was also supported by Thompson (1999) who argued that large and small businesses need CE as it is instrumental in improving performance (Kuratko et al., 2005) and can lead to positive results such as increased organisational growth, organisational change and customer value-added services (Dess & Lumpkin, 2005, cited in Kuratko, Morris & Covin, 2011).

Furthermore, the changing needs of the 21st century demand that organisations across all sectors should be more responsive to the needs of their stakeholders (Nayyar & Mahmood, 2014) who have high expectations regarding service levels (MasoudPourkiani, Salajegheh & Mohammadi, 2012) and have a thorough understanding of their rights as consumers. As such, the concept of corporate entrepreneurship/enterprising has found space in the public sector (Kim, 2010), because of the challenges, effectiveness and efficiency experienced by these institutions and their subsequent stakeholders (Nayyar & Mahmood, 2014). Furthermore, awareness and participation levels of citizens, coupled with increasing costs, diminishing state resources and growing needs of the citizens (Prelipcean et al., 2014) demand the public sector to be innovative and dynamic (Kearney et al., 2009).

2.1 Corporate Entrepreneurship

2.1.1 Definition of Entrepreneurship

Entrepreneurship is a complex and dynamic field which has evolved and been applied in different settings. It is imperative that one understands the entrepreneurship underpinnings prior to applying the term in the different disciples that it is being used in. Based on literature, there are many definitions of entrepreneurship. In traditional entrepreneurship literature, it is described as disruptive innovation (Schumpeter, 1934 cited in Rwigema et al., 2010) wherein efforts of an
individual convert a specific vision into a prosperous business initiative (Collins & Moore, 1964). Other scholars (Shane & Venkataraman, 2001) adopted an opportunity-based definition which suggested that entrepreneurship is about discovery and exploitation of profitable opportunities. Furthermore, Shane & Venkataraman (2001) as cited in Rwigema et al. (2010) described it is an activity that involves the discovery, evaluation and exploitation of opportunities to introduce new goods and services, ways of organising markets, processes and raw materials through organising efforts that previously had not existed. Literature has demonstrated that entrepreneurship is not an easy and automatic process; its fruition can take some time to be realised.

It was also acknowledged by Bosma et al., (2013) that entrepreneurship is a multi-dimensional concept and can take different forms such as corporate, technological, public and others and therefore can occur in economic markets, organisations and governments (Slaughter & Leslie, 1997, cited in Klein, Mahoney, McGahan, & Pitelis, 2010) and may result in economic profits (Schumpeter, 1934), growth and performance (Kuratko, 2007) or product innovation (Jennings & Young, 1990, cited in Nayyar & Mahmood, 2014). Bosma et al. (2013) further argued that, as opposed to an independent entrepreneur, the pursuit of entrepreneurial opportunity can also occur within organisations. This is known as entrepreneurial employee activity or corporate entrepreneurship or intrapreneurship. Given this dimension of entrepreneurship, it is important to understand what it means, what it involves and where it is applied and by whom.

2.1.2 Corporate Entrepreneurship

Extensive research studies conducted over the years by many scholars on the corporate entrepreneurship process have provided different definitions of the concept which are outlined below:

- Corporate entrepreneurship is seen as the sum of a company’s innovation, renewal and venturing efforts. Innovation involves creating and introducing products, production processes and organisational systems (Zahra & Covin, 1995). Renewal means revitalising the company’s operations by changing the scope of its business, its competitive approaches or both (Zahra, 1996). It also means building or acquiring new capabilities and then creatively leveraging them to add value for shareholders; venturing means that the firm will enter new

- Corporate entrepreneurship is a term used to described entrepreneurial behaviour within established medium and big organisations (Kuratko et al., 2005);
- According to Antoncic & Hisrich (2003) cited in Shah & Bhutta (2013), corporate entrepreneurship is defined as entrepreneurship within an existing organisation, including nascent behavioural intentions and behaviours of firms related to departures from the customary.

### 2.1.3 Other Definitions

<table>
<thead>
<tr>
<th>Author (s)</th>
<th>Definition</th>
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<tr>
<td>Zahra (1991)</td>
<td>Corporate entrepreneurship refers to formal and informal activities aimed at creating new business in establishing companies through product and process innovation and market development.</td>
</tr>
<tr>
<td>Kuratko &amp; Hornsby (2014)</td>
<td>Corporate entrepreneurs are visionaries who do not follow the status quo; these employees display entrepreneurial disposition in the manner in which they approach their work.</td>
</tr>
<tr>
<td>Burgelman (1985), Guth &amp; Ginsberg (1990), Pinchot (1985), Zahra (1991)</td>
<td>Corporate entrepreneurship is described as a method to offer an organisation a strategic option to refine its business concept, meet changing customer needs and expectations, and enhance its competitive position.</td>
</tr>
<tr>
<td>Miller (1983)</td>
<td>Corporate entrepreneurship describes activities that an organisation undertakes to enhance its product innovation, risk taking and proactive response to environmental forces.</td>
</tr>
<tr>
<td>Gautam &amp; Verma (1997)</td>
<td>Corporate entrepreneurship refers to all formalised entrepreneurial activities within an existing business organisation where intrapreneurs receive explicit organisational</td>
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<tr>
<td>Author(s)</td>
<td>Definition</td>
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<tr>
<td>Russel &amp; Russel (1992)</td>
<td>Corporate entrepreneurship is described as new business opportunities undertaken in an organisation through a better mobilisation of corporate resources with the view to attain improved organisational performance.</td>
</tr>
<tr>
<td>Schumpeter (1934)</td>
<td>Corporate entrepreneurship involves the pursuit of creative or new solutions to challenges confronting the firm, including the development or enhancement of old and new products and services, markets and administrative techniques and techniques for performing organisational functions.</td>
</tr>
<tr>
<td>Mokaya (2012)</td>
<td>Corporate entrepreneurship is a process by which individuals within an organisation pursue opportunities without regard to resources they currently control.</td>
</tr>
<tr>
<td>Ahmad, Aiuzzat &amp; Zainal (2011) (p.g40)</td>
<td>Intrapreneurship refers to entrepreneurship within an existing organisation, whereby employees initiate to undertake something new, although they are not being asked to do so.</td>
</tr>
<tr>
<td>Hayton &amp; Kelley (2006)</td>
<td>Corporate entrepreneurship involves a diverse set of activities such as innovation in products and processes, the development of internal and external corporate ventures and the development of new business models which require an array of roles, behaviours and individual competencies.</td>
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</table>

### 2.1.4 Similarities and Differences between the Definitions

A review of the aforementioned definitions indicates that authors have used similar terminologies to highlight key features of corporate entrepreneurship. It was also noted that some researchers have used different expressions to emphasise the concept of corporate entrepreneurship. The commonalities across these definitions relate to opportunity recognition and definition (Rwigema et al., 2010), need a unique commercial concept in the form of an invention, service or process and
entail a window of opportunity within which the concept can be successfully exploited (Kuratko et al., 2011). Furthermore, the definitions place emphasis on strategic renewal of a firm, its structure and culture; also the idea of bringing novelty to the existing business (Shah & Bhutta, 2013) is embedded in the definitions. The definitions above confirm the strong consensus amongst researchers (Kuratko, 2007, 2011; Zahra 1995, 1996; Antoncic & Hisrich, 2003) that corporate entrepreneurship occurs within an organisation, irrespective of being for profit, non-profit or government.

Although the definitions demonstrate issues of convergence, there are some key differences between a corporate entrepreneur and a start-up, which include the context in which the entrepreneurial act occurs (Nayyar & Mahmood, 2014). Furthermore, scholars such as Kuratko et al., (2011) noted that the differences are also pertaining to risk and ownership of the novelties. In a start-up, the entrepreneur assumes all the risk and has ultimate ownership of the idea.

In the case of a corporate entrepreneur, the organisation absorbs the risk and owns the idea. According to Nayyar and Mahmood (2014), entrepreneurs innovate for themselves and intrapreneurs innovate for the organisation where they are employed and have abundance of resources. In this study, corporate entrepreneurship will be studied as it relates to organisations in the public sector.

### 2.2 Benefits of Corporate Entrepreneurship

Literature indicates that organisations that introduce and implement corporate entrepreneurship show high levels of organisational performance (Urbano & Turro, 2013) which results in sustainability of that firm (Corbett, Covin, O’Connor, Tucci, 2013). Furthermore, corporate entrepreneurship leads to organisational renewal of established firms and viability, it also improves their level of competitiveness through the utilisation of various innovation-based initiatives (Corbett et al., 2013).

Corporate entrepreneurship also assists organisations to focus on long-term financial orientation, innovative operations and industry leadership (Covin & Adler, 2009) and organisations are therefore able to ensure that they have a significant share of their industry. Many organisations today are faced with challenges of talent retention; according to Herbert and Brazeal (1998),
corporate entrepreneurship assists organisations in maintaining organisational loyalty as well as development of creative/innovative processes; collective and collaborative efforts of innovation-minded players, goal orientation, team centre coordination within groups, willingness to stray beyond prescribed organisational boundaries, and is an outcome enhancer. It is also a legitimate path to achieving higher and better results against competitors.

2.3 Contextualisation of Corporate Entrepreneurship in the Public Sector

As previously mentioned, many scholars (Zahra, 1995, 1996; Ireland et al., 2009) emphasised that corporate entrepreneurship occurs within an organisation/firm, which indicates that it also extends to the public sector; this type of entrepreneurship is termed public entrepreneurship. It was defined by researchers (Kearney et al., 2009) as a process that exists within public sector organisations that result in innovative activities such as the development of new and existing services, technologies, administrative techniques and new improved strategies. Other scholars (Kuratko et al., 2007), defined public entrepreneurship as the practice of creating value for persons in a country by fusing unique combinations of resources from the public and/or private sector to exploit social opportunities. Both definitions demonstrate strong consensus that corporate entrepreneurship in the public sector is about increasing the opportunity to innovate in order to offer high quality services to citizens (Kim, 2010) of a country. Corporate entrepreneurship in the public sector is becoming important because of the need to improve performance in the public sector (MasoudPourkiani et al., 2012), as well as the need to fulfil administrative responsibilities which include improvement of service levels. According to MasoudPourkiani et al. (2012), public sector entrepreneurship is important as it allows government organisations to identify opportunities and introduce new processes and services. Furthermore, Kim (2010), affirms that adopting entrepreneurial methods in the public sector has the potential to improve capacities for contributing to core public sector values. Reported research outcomes reinforce the positive effects of corporate entrepreneurship on a firm’s performance (Covin & Slevin, 1991; Kuratko et al., 2014) which translates into efficiency and effectiveness (Kim, 2010) within the non-profit or government sector.

Although research confirmed the positive impact of corporate entrepreneurship in the public sector, Tosterud (1999) cited in Kim (2010), argued that innovation brings with it a certain degree of risk.
and a high chance of failure. Furthermore, Tosterud (1999), argue that the cost and possible magnitude of failure could result in disastrous consequences for the public at large or even the state as a whole. Innovation is good; however, the costs associated with it are too high for a state to bear; as such it is recommended that the public sector should choose the safe path (Tosterud, 1999).

Both arguments have merits; however, this research study supports the argument for the application of corporate entrepreneurship in the public sector. This stance is supported by the views of classical theorists who argue that a nation’s innovation and technological changes emanate from individual entrepreneurs with their fiery spirit generating creative destruction of old ways and replacing them with new ones (Schumpeter 1912, 1924, 1934 as cited in Malik & Mahmood, 2012). Young (1983) also argued that entrepreneurial motivation in non-profit organisations focuses on personal development which eventually translates into performance (Malik & Mahmood, 2012). There is compelling evidence (Bosma et al., 2013) which indicates that within corporates, there exists a higher level of human capital which can be used to innovate and improve goods and services. Furthermore, risk is an inherent element of entrepreneurship (Rwigema et al., 2010) and therefore requires high levels of management. There is a need within the South African public sector to find alternative ways of rendering services; this is on the backdrop of diminishing financial resources which has a negative effect on the provisioning of human resources and other necessities (Mubangizi & Gray, 2012). Therefore, the public sector is expected to still be in a position to serve the public even with limited resources. These challenges are an indication that new models of operation are required and corporate entrepreneurship presents such an opportunity. This view is supported by the Schumpeterian concept of entrepreneurship, which affirms that there should be essential changes in the public or non-profit organisations for the identification of a new need and the set-up of new service (Malik & Mahmood, 2012).

2.4 Conceptual Model of Corporate Entrepreneurship

A review of literature suggests that the integrative model of corporate entrepreneurship strategy created by Kurakto et al. (2005) represents key components of corporate entrepreneurship which are necessary for the stimulation/nurturing of entrepreneurship within organisations. The model is comprehensive and broad enough to be applied in different settings such as the private and public sectors. According to scholars (Ireland et al., 2009), the integrative model of corporate
entrepreneurship strategy is based on the work of various theorists who contributed to its conceptualisation. In this regard, Shah and Bhutta (2013) indicated that contributions on the issue of the environment emanated from the works of Guth and Ginsberg (1990); Covin and Slevin (1991); Zahra (1993); Goosen, De Coning and Smit (2002); Kearney et al. (2008). Furthermore, the aforementioned theorists as well as Barret and Weinstein (1998); Lumpkin and Dess (1996) provided insights into other elements of the model such as entrepreneurial orientation, organisational factors, internal processes and organisational performance (Shah & Bhutta, 2013).

According to Ireland et al. (2009), the key elements of the model include the following:

- An entrepreneurial strategic vision
- Pro-entrepreneurial organisational architecture which indicates the recursive path through which entrepreneurial vision and behaviours interact to create CE strategy
- Entrepreneurial processes and behaviour as exhibited across the organisation.

The model depicted below is the existing integrated model of corporate entrepreneurship and for the purposes of this research study, focus will be on the pro-entrepreneurial organisational architecture which indicates the recursive path through which entrepreneurial vision and behaviours interact to create CE strategy (Kuratko et al., 2011).
Figure 1: Integrated Model of Corporate Entrepreneurship

Antecedents of a corporate entrepreneurship strategy
- External environment conditions
  - Competitive intensity
  - Technological change
  - Product market fragmentation
  - Product market emergence
- Individual entrepreneurial cognitions
  - Entrepreneurial
    - Beliefs
    - Attitudes
    - Values

Elements of a corporate entrepreneurship strategy
- Pro-Entrepreneurship organisational architecture
  - Structure
  - Culture
  - Resources/capabilities
  - Rewards Systems
- Entrepreneurial strategic vision
- Entrepreneurial processes and behaviour
  - Opportunity recognition
  - Opportunity exploitation

Consequences of using a corporate entrepreneurship strategy
- Competitive capability
- Strategic repositioning

Source: Ireland, Covin & Kuratko, 2009
2.5 Conceptual Model of Corporate Entrepreneurship in the Public Sector

The elements of the integrative model of corporate entrepreneurship strategy have informed the model of corporate entrepreneurship within the public sector. The conceptual model of corporate entrepreneurship for local government sector is presented below, marked Figure 2. For the purpose of this study, focus was on the organisational architecture as it relates to the entrepreneurial orientation of the local government / municipalities in South Africa.

Figure 2: Conceptual model for the research study

Source: Adapted from Ireland et al., 2009

2.6 Corporate Entrepreneurship Context

2.6.1 Entrepreneurial orientation

South Africa operates within a global village where economic growth through various organisations in different sectors is of critical importance. To achieve the envisaged outcome, it is expected that an organisation will continuously innovate (Urban, 2010, cited in Molokwu, Barreira & Urban, 2013) to ensure that it stays ahead of its competitors. In today’s turbulent and volatile economic environment, with increased competition, scholars such as Fang, Yuli and Hongzhi (2009) argued that entrepreneurial orientation is a prerequisite for organisational success. Research studies conducted over the past three to five decades (Covin & Slevin, 1989, 1991, 1997; Lumpkin & Dess,
1996) affirmed that entrepreneurial orientation (EO) dimensions such as innovativeness, risk taking and proactiveness are critical.

According to Covin & Lumpkin (2011), entrepreneurial orientation refers to the concurrent exhibition of behaviours reflecting risk taking, innovativeness and proactiveness; or the domain of activity that includes the dimensions of risk taking, innovative and proactiveness. On the other hand, McGuinnes (2008, pg 8) defined EO as the process, practices and decision-making activities that lead to new entry. It can happen at organisational and individual level (Miller, 1983). In essence, EO translates into capabilities of an organisation that belongs to that specific firm which distinguishes/sets it apart from its competitors (Lumpkin & Dess, 1996; Wiklund & Sheperd, 2005) and ensures improved performance (Miller, 1983; Lumpkin & Dess, 2001; Wiklund, 1999; Wiklund & Sheperd, 2005). The notion of improved organisational performance was also affirmed by Corbett et al. (2013) who indicated that EO is a significant and consistent predictor of organisational performance. The outcomes of research studies conducted by various scholars (Covin & Slevin, 1991; Lumpkin & Dess, 1996; Wiklund, 1999; Lui et al., 2009; Simon et al., 2011, cited in Arief, Thoyib, Sudiro, & Rohman, 2013) indicate that there is a significant relationship between EO and organisational performance.

Organisations that adopted high levels of EO experience, are growth orientated and are more inclined to spot opportunities (Kirzner, 1978), capitalise on them, and their net worth is positively related to EO (Arbaugh, Cox & Camp, 2009).

A further review of literature indicates that the basis for entrepreneurial activity in any organisation is its degree of entrepreneurial orientation (Dess & Lumpkin, 2005, cited in Ghina & Permana, 2012). These theorists (Dess & Lumpkin, 2005) suggested that entrepreneurial orientation when adopted has the potential to enhance performance (Wiklund & Shepherd, 2005, cited in Ghina & Permana, 2012) which eventually translates into client/stakeholder satisfaction (Lumpkin & Dess, 1996, cited in Ghina & Permana, 2012). According to Lumpkin & Dess (2005), cited in Ghina (2012), innovation, proactiveness and risk taking are prioritised and this study will only focus on these aspects.
2.6.1.1 Innovation

The concept of innovation dates back to Schumpeter’s theory (1934, 1942) which emphasised that wealth creation was preceded by disruptive introduction of new factors/novelties in the form of products and services (Taylor, 2013). According to theorists such as Schumpeter (1934) and Drucker (1979), an entrepreneurial organisation is underpinned by inventions of products as well as processes. The concept of innovativeness is embodied in an organisation as an attribute that propels it to novelties which may have a return on investment (Molokwa et al., 2013). The core of entrepreneurship is innovation (Rwigema et al., 2010) which refers to the development of new products or services or reinventing new processes (Schumpeter, 1934, cited in Rwigema et al., 2010). It was also mentioned that innovation can take the form of new or improved services (Kuratko et al., 2007), which benefit the organisation’s stakeholders and enhance the organisation’s performance. Innovation has the ability to ensure business growth and differentiation of an organisation to its competitors (Taylor, 2013). A firm with an innovative stance is able to achieve a significant return on its investment (Ambad & Wahab, 2013) and there is a degree of self-reliance on its resources (Hafeez, et al., 2012).

Innovative organisations imply in their profile that they are able to commercialise what was invented and value is created for the firm (Hafeez et al., 2012); innovativeness is an attribute that shows that an organisation is willing to challenge the status quo (Taylor, 2013).

Research studies (Lwamba, Bwiswa & Sakwa, 2013) on a firm’s product and innovativeness as well as organisational innovativeness were found to have a positive effect on the firm’s financial performance. Also, recent studies by scholars such as (van Vuuren, Groenewald & Gantsho, 2009; Sarooghi, Libaers & Burkemper, 2014) found that entrepreneurial organisations have a significant presence of innovation which enhances corporate entrepreneurship and that innovation can be associated with large firms.

From a public sector perspective, innovation denotes improving organisational performance. However, it does not come naturally to the public sector organisations (Tosterud, 1999), as there are many features of the public sector which serve as barriers to innovation. Research studies by Tosterud (1999) and Ramamurti (1986) asserted that the mission and vision of the public sector is mainly influenced by political forces, and as such, innovative initiatives may be discouraged or distorted as they be perceived to be politically incorrect, inappropriate or even potentially harmful.
It was further argued that it is easy to quantify innovation in the private sector whereas, it is difficult to measure innovation in the public sector as it relates to quantity and quality (Tosterud, 1999). Research study by Bartlett & Dibben (2010) found that innovation champions in the public sector often experience internal conflict which presents itself in the form of resistance to change, conflicting interests and fellow employees wanting to maintain the status quo. The study found that conflict also manifests at the community and public level where innovation is perceived to be encroaching on their territories.

To collaborate the aforementioned literature review, two research studies (Bosma et al., 2012, 2013) on employee entrepreneurial activity revealed that over the past ten years or so, South Africa has consistently shown low total entrepreneurial activity (TEA) rates and the country remains amongst the worst performing countries with regard to entrepreneurial activity, despite its high levels of unemployment, poverty and under-development.

2.6.1.2 Risk taking

According to Dess & Lumpkin (2005), risk taking refers to a firm’s willingness to seize a venture opportunity even though it does not know whether the venture will be successful and to act boldly without knowing the consequences. Risk taking is also characterised by organisational practices and behaviours that include experimentation, taking calculated risks, resource allocation (Aloulou & Fayolle, 2005; Voss & Moorman, 2005, cited in Molokwa et al., 2013) and commitment to support that the outcome is not known (Covin & Slevin, 1991; Wiklund & Sheperd, 2005). The underlying fact is that risk taking is one of the fundamental pillars of entrepreneurship (Lumpkin & Dess, 1996; Schillo, 2011, cited in Taylor, 2013).

Risk taking is an inherent element in an organisation, it is present in the operations and processes; decision-making and risk-taking tendencies do not guarantee high returns, in fact their consequences are oblivious/unknown to the firm (Lotz & van der Merwe, 2014). Some theorists further assert that through corporate entrepreneurship, firms take higher risks and usually get the associated returns as such risk is accepted as part of the company’s strategy and outlook. However, Dess and Lumpkin (2005) cautioned that companies should always take calculated risks.

Research (Ambad & Wahab, 2013) indicates that organisations with high risk-taking profiles tend to have a matching financial performance. Previous research studies (Klomp & van Leeuwen, 2001;
Calantone, Cavusgil, & Zhao, 2002; Rauch et al., 2004; Casillas & Moreno, 2010; Gibb & Haar, 2010; Wang & Yen, 2012) confirmed the outcome that risk-taking tendencies have a direct positive effect on firm performance, whilst moderated risk takers were outperformed by firms with high risk-taking levels (Awang, Khalid, Yusof, 2009).

However, from a public sector perspective, Tosterud (1999) argued that innovation brings with it a certain degree of risk and a high chance of potential failure. He argued that the cost and possible magnitude of failure could result in disastrous consequences for the public at large or even the state as a whole. Tosterud (1999) further argued that innovation is good; however, the cost associated with it are too high for a state to bear; as such he recommended that the public sector should choose the safe path in innovating.

Sadler (1999) argued that the public sector gets its funding allocation from the fiscus and is, therefore, accountable to state representatives who are themselves risk-averse. The scholar further argued that the state representative’s risk aversion is linked to public scrutiny, electoral period and reappointment of office bearers, as such public sector risk management is focused on accountabilities and control mechanisms. It is important to note that, whilst entrepreneurial activities in government may involve risk taking, the risk need not necessarily have to be monetary.

2.6.1.3 Proactiveness

Proactiveness is concerned with the implementation of innovative ideas (Kearney et al., 2007) in order to bring the entrepreneurial concept to fruition. It was defined (Lumpkin & Dess, 1996, cited in Kearney et al., 2007) as a posture of anticipating and acting on future wants and needs in the market place; it involves a high level of commitment and perseverance, flexibility and adaptability and a willingness to take responsibility for possible failure. Proactive tendencies also involve acting quickly before the competitors do so and relate to pioneering and initiating practices and behaviours in entering new territories ahead of competitors (Xaba & Malindi, 2010). Proactiveness also involves being on the lookout for future market needs and wants and having the notion of first-mover advantage (Lieberman & Montgomery, 1988) for it gives the organisation a head-start on the market (Lumpkin & Dess, 1996, cited in Taylor, 2013). Proactiveness requires deliberate and planned actions because an organisation should be in a position to anticipate potential future opportunities through proper entrepreneurial actions, so that they can become leaders in the market rather than followers (Schillo, 2011). Proactive organisations have to have a degree of tolerating
failure and should, therefore, be adaptable to changes in the external and internal environment (Molokwa et al., 2013). Proactive behaviours/practices ensure that an organisation sets standards, trends that competitors will follow, results in high profit margins; captures customers’ loyalty and the firm’s products are automatically authenticated by its brand/s (Ambad & Wahab, 2013). Proactive practices require continuous improvement, in order to deal with and plan for future needs of customers. Such an organisation is able to attract the best talent and investments to continue with its goal of being a market leader. Research studies by Kearney et al. (2007, 2009) and Malik & Mahmood (2012) suggest that the act of being proactive is the same for organisations in the public and private sector. These theorists asserted that proactivity requires the ability to interpret policies, networking skills and the ability to leverage resources. It is against this that Kearney et al. (2009) emphasised that there is no need for public sector managers not to be proactive. On the other hand, research a study by Ambad & Wahab (2013) found that proactiveness has no relationship with a firm’s performance, but that this relationship is moderated by the environmental hostility. When the environment is unfavourable or hostile, proactiveness can enhance a firm’s performance. Contrary to the aforementioned research findings (Sebora, Theerapatvong, 2009) found that proactiveness by managers is associated with internal/organisational factors such as structure, culture and rewards.

Based on the work of various researchers (Tosterud, 1999; Bartlett & Dibben, 2002; Ramamurti, 1986; Ireland et al., 2009, cited in Kuratko et al., 2011; Bosma et al., 2013) and in line with the first sub-problem which is to measure the level of entrepreneurial orientation (innovation, risk taking and proactiveness) of local government (municipalities) in South Africa, the following propositions are framed;

**Proposition 1:**

There are the levels of innovation in local government (municipalities) of South Africa.

**Proposition 2:**

There are levels of risk taking in the local government (municipalities) of South Africa.

**Proposition 3:**

There are levels of proactiveness in local government (municipalities) of South Africa.
The aforementioned elements of entrepreneurial orientation are dependent on the type of organisational architecture that exists and these include organisational structure, culture and rewards. These internal factors have the ability to either enhance or inhibit entrepreneurial activity/behaviour which may result in corporate entrepreneurship being adopted in an organisation. The internal factors are discussed further in the paragraphs that follow.

2.6.2 Internal Factors that Constrain or Enhance Corporate Entrepreneurship

Corporate entrepreneurship is considered a probable turnaround strategy for both private and public sector organisations. However, the internal factors such as organisational structure, culture and rewards can either be enablers or disablers of corporate entrepreneurship to thrive. Theorists such as Chen and Cangahuala (2010) asserted that the internal factors individually or combined play a critical role in creating CE and should therefore be viewed as strategic forerunners of corporate entrepreneurship.

Furthermore, a review of literature (Kuratko et al., 2004, cited in Zampetakis & Moustakis, 2010) confirms this notion by indicating that there are two main streams of research concerning factors that enhance or impede corporate entrepreneurship, i.e. the organisation and the individual. The organisation is at the centre of the research as it sets the scene for corporate entrepreneurship to emerge and be nurtured. The internal factors to an organisation determine whether CE will emerge or not. CE is critical to any organisation as its consequences are improved organisational performance (Kearney et al., 2007). This study focused on the internal factors such as organisational structure, culture and rewards that may hinder or enhance corporate entrepreneurship to thrive.

2.6.2.1 Organisational structure

Depending on the context of the organisation or environment, the concept of organisational structure is defined differently by many theorists and as such varying interpretations can be derived from these definitions. According to Kuratko et al. (2011), organisational structure is defined as proper arrangements in terms of groupings of people and jobs, and the manner in which activities of different persons or functions in an organisation are connected. Firouzyar and Kojouri (2013) viewed organisational structure as a driving force for corporate entrepreneurship, which is
characterised by flexibility, adaptability and agility; it is organic in nature and encourages intrapreneurship. An alternative definition of organisational structure is the existence of policies, procedures and rules which bind all employees and management (Hempel, Zhang & Han, 2012, cited in Dermirci, 2013). On the other hand, Chen and Cangahuala (2010) described it as a platform which provides for the evaluation of new ideas, their selection and applicability in an organisation. This description is similar to that of Chinie (2013) which was defined as mechanisms to outline expected outcomes from organisational work and measures for evaluation, selection and utilisation of innovation within an entity.

Based on the aforementioned, the summative definition that will accommodate the differing views indicates that organisational structure is the architecture of a firm which defines roles, lines of communication, expected performance outcomes and it can be either hierarchical or organic, depending on the need and context.

2.6.3 Theoretical perspective on organisational structure

(a) Purpose of an organisational structure

Organisational structure gives effect on how far employees can operate (Rafien, 2014) as such; these boundaries may either hinder or encourage entrepreneurial activity in an organisation. Gargari (2014) argued that organisational structure is fundamental to CE and entrepreneurial activity as such; it is viewed as a skeleton of collection.

(b) Types of organisational structures

According to Dermirci (2013), distinction exists between organic structures and mechanistic structures. These organisational structures are characterised by relationships of authority, communications and work flow (La Nafie et al., 2014). Furthermore, organisational structures can also be characterised by complexity which refers to the hierarchy of an organisation (horizontal, vertical and geographical distribution), focus, versatility, innovation and independence (Beheshtifar & Shariatifar, 2013). The prevalent types of structures are organic and mechanistic and they are discussed below;

(i) Organic structure
According to Dermirci (2013), organic organisational structures are flexible, encourage innovation and are conducive for corporate entrepreneurship. These structures are for changing environments (Paunovic, 2012) and have the ability to drive employees to engage in entrepreneurial activities (Dermirci, 2013).

Organic structures also have the potential to raise levels of organisational commitment and job satisfaction amongst employees which in turn may result in improved organisational performance. More innovation is derived from organic structures (Dermirci, 2013) than mechanistic ones. Organic structures occur in the form of flat structures (Burgess, 2013) and project-orientated structures which have the ability to influence CE and risk is calculated properly (Gerrikabeitia, Quesada & Labutu, 2012) or entrepreneurial organisational structures (Paunovic, 2012).

According to (Burgess, 2013), flatter structures are ideal for CE as they facilitate faster, effective decision-making processes; the organisation becomes more adaptable and can take risks. Theorists such as Anderson, Potocnik and Zhou (2014) argued that innovation is mainly facilitated by organisational structures which are characterised by decentralisation, commitment to low power differentiation (Shipton, West, Dawson, Birdi, & Patterson, 2006, cited in Potocnik et al., 2014). Their view affirmed that decentralisation of authority to the lowest level enables entrepreneurs to respond rapidly to changes in the environment and take steps towards the creation of value for the organisation (Burgess, 2013). Furthermore, through decentralisation, flow of information improves drastically and this accelerates entrepreneurship behaviour amongst employees and in turn pushes the level of performance of managers (Burgess, 2013). The devolved authority facilitates CE at lower levels of the organisation; this creates ownership and increased scope of responsibility. The positive aspect of this is accelerated career growth and exposure to new aspects of the job and the organisation in total. The negative effect is that it can lead to stress/burnout which may affect the degree of innovation that an organisation hoped to get.

Similarly to the flat structures, entrepreneurial organisational structures are the opposite of the traditional structures in that they require close contact/a relationship between the executive and the operations (Paunovic, 2012). These structures are underpinned by creativity, risk taking, innovative conduct, constant questioning of the status quo, drive to be the best amongst competitors, accelerated decision making as well as speed.
(b) Mechanistic structure

On the other hand, mechanistic structures are rigid, tightly controlled and not ideal for corporate entrepreneurship which requires some degree of agility. Mechanistic structures hinder/impede entrepreneurial orientation (Dermirci, 2013). According to Mokaya (2012), conservative organisational structures stifle corporate entrepreneurship; however, organisational structures that are conducive for intrapreneurship lead to better or improved performance results. Within these structures, entrepreneurial behaviour is discouraged in organisations which are underpinned by bureaucracies, the environments are infested with non-existence of creativity and innovation as well as risk aversion (Singer, Alpeza & Balkic, 2009) Furthermore, these complex structures have the potential to discourage initiative amongst employees, prolong decision-making levels, and reduce the speed of information flow within an organisation (Paunovic, 2012); they are ideal in stable environments (Dermirci, 2013).

Mechanistic structures are also found in traditional organisations such as the state or public sector, as they require hierarchical structures which were designed to ensure control and maintenance of order (Paunovic, 2012); these structures are typically accompanied by over-regulation in the form of policies, practices, rigidity and bureaucracy (Moku & Ngugi, 2013). They are characterised by bureaucracy, long chains of command which result in a slow-paced turnaround on decision making, parameters for operations, rule-bound behaviour, less creativity and more monotony in how work is done, which resembles centralisation. According to Parrish (2010), traditional organisational structures do not work; it is therefore important to find a match between the organisational structure and the environment for a given goal.

Consequently, within mechanistic structures, there is choking of entrepreneurial drive amongst employees, employees are not enthusiastic to take up tasks that are outside their scope of work due to limited boundaries and associated resources (Dermirci, 2013). Those who undertook entrepreneurial endeavours were not recognised, as their efforts remained at the lowest level of the organisation.

(c) Alternatives of organic or mechanistic structures

Although there is adequate theoretical basis for either the organic or mechanistic structure, some theorist have alternative views; according to Saxena (1991) cited in Onu (2013), the size of the
organisation does not or is not necessarily the obstacle or hindrances to CE. However, the inherent bureaucracies and conservative approaches and practices inhibit CE to thrive; management needs to find ways of working around these to ensure that the organisation can be entrepreneurial.

Paunovic (2012) proposed that alternatives in the form of sub structures, independent structures, strategic alliances, outsourcing or creation of project-based organisations are created with the view of instilling flexibility and nurture entrepreneurial behaviour.

On the other hand, Kelley (2011) argued that organisational structure is critical for the implementation of CE; in big organisations, where CE receptiveness is low, management should consider separating areas that require innovation into their own business entities. As in the case of agile structures, human resources assigned to these units should display entrepreneurial behaviours. Furthermore, they should be given the necessary support, resources, flexibility and authority to operate entrepreneurially (Kelley, 2011).

Research studies by various scholars (Firouzyar & Kojouri, 2013; Chen & Cangahuala, 2010; La Nafie et al., 2014) found that there is a positive relationship between organic structure and CE. According to Chen and Cangahuala (2010), organisational performance is positively related to organisational structure; employees will perform better if there is clarity in processes, standard operating procedures and rules. Contrary to the aforementioned findings, La Nafie et al. (2014) found that although supportive organisational structure is positively related to CE, it is not significant; in fact, the more supportive the organisational structure the less corporate entrepreneurship will be implemented.

Dermirci (2013) found that formalisation/mechanistic structures result in rigidity, reactiveness, and discourage entrepreneurial behaviour amongst employees and teams. Creativity can be uncovered within organic structures as opposed to mechanistic structures. Furthermore, some theorists (Liebcap, 1986; Sadler, 1999, cited in Onu, 2013) contended that size of the organisation is critical for effective introduction and implementation of CE, where smaller organisations are adaptable and flexible and respond to changes in the environment in an innovative way so that they can meet the needs of the market, whereas bigger organisational structures have a tendency to stifle innovation/entrepreneurial initiatives due to bureaucratic requirements that need to be met.
Research by Onu (2013) indicated that there is a positive relationship between the sizes of an organisation and intended/anticipated entrepreneurial goals. Other theorists such as Mokua and Ngugi (2013) argued that the type of structure adopted influences entrepreneurial activity that will take place. Their research found that CE in complex/complicated structures is negatively influenced by leaders’ busy schedules which do not permit time to review creative/innovative ideas, their evaluation as well as recommended implementation (Mokua & Ngugi, 2013).

A research study by Chigamba, Rungani and Mudenda (2014) affirmed that flat organisational structures are ideal for the implementation of CE as they encourage free flow of information amongst all key employees within an organisation. Furthermore, there is a quick and prompt response to issues as they occur. It is, however, the responsibility of management to ensure that barriers to effective communication are continuously identified and timeously addressed or removed. These theorists (Chigamba et al., 2014) also asserted that flat structures create an atmosphere in which employees have a sense of belonging and as a result will give their best/do the job to the best of their abilities. Organisational structure also plays a role in formalising mechanisms of idea generation until its implementation and the rewards are linked to the innovation, based on its impact to the organisation. This form of structure has the capability of creating multi-disciplinary and diverse teams which are powerful in driving innovation and creativity, and as such promote corporate entrepreneurship.

According to Dermirci (2013), formalisation is associated with a high-power distance culture which is discouraged by Hofstede (1997). However, some degree of formalisation is needed to ensure control and reduce confusion, misunderstanding of expected outcomes and possible overlaps in functions (Dermirci, 2013).

Another research study, conducted by Sahranavard and Asadollahi (2014), indicated that organisations with fewer complexities and use of cooperative management increases CE. Improper and excessive control lessens creativity among team members, generates low levels of self-confidence and lower degrees of cooperation. Bureaucracies/red tape have a negative impact on an organisation’s ability to be agile. Information flow contributes to the willingness and ability of employees to innovate/take part in entrepreneurial activity.
The type of prevailing structure of an organisation dictates the institutionalised practices which will either encourage or prohibit CE to flourish. Further findings of the study revealed that supportive structures have a positive influence on CE initiatives undertaken by employees of an organisation.

Research by various scholars (Cornwall & Perlman, 1990; Jennings, 2004; Slevin & Covin, 1990, cited in Malik & Mahmood, 2012) suggested that organisations with organic structures are more flexible and foster entrepreneurial behaviour. Furthermore, Ireland et al. (2009) argued that greater organicity of an organisation’s structure breeds elements such as expertise, devolved decision-making powers, lower levels of formality and a wider span of control. Decentralised structures also facilitate innovation (Anderson, Potocnik & Zhou, 2014) for those organisations that apply such structures. In other organisations, structures are often represented through hierarchical arrangements which indicate reporting and communication lines (Kuratko et al., 2009). These theorists argued that this type of organisational structure has an impact on the performance of a firm and its ability to innovate. Within the public sector environment, structures are characterised by written policies, job profiles, organograms, corporate and business plans (which contain strategic objectives) and setting systems (Baum & Wally, 2003, cited in Kearney et al., 2009). Furthermore, literature demonstrated strong consensus that these structures have elements of hierarchy, formalisation, and a low degree of flexibility (Slevin & Covin, 1990, cited in Malik & Mahmood, 2012) and inhibit an organisation’s ability to foster entrepreneurship (Cornwall & Perlman, 1990; Slevin & Covin, 1990, cited in Kearney et al., 2009). Ireland et al. (2009) further argued that entrepreneurial strategic vision is not associated with mechanistic structures. Furthermore, recent research studies by scholars such as (Bohloodi & Chakherlouy, 2014) confirmed that organisational structure is one of the critical factors that can inhibit or encourage corporate entrepreneurship. However, contrary to the aforementioned, Walker (2013) found that the size of the organisational structure of local government has an effect on the municipality’s ability to adopt process innovation. This is further confirmed by (Urban & Oosthuizen, 2009) who found that the presence of hierarchical controls hampers corporate entrepreneurship.

Based on the work of various researchers (Cornwall & Perlman, 1990; Jennings, 2004; Slevin & Covin, 1990, cited in Malik & Mahmood, 2012; Ireland et al., 2009; Kuratko et al., 2011; Baum & Wally, 2003, cited in Kearney et al., 2009) and in line with the second sub-problem which is to measure the degree of local government’s (municipalities’) organisational structures for corporate
entrepreneurship within in South Africa; and the relationship between the organisational structure and dimensions of entrepreneurial orientation (innovation, risk taking and proactiveness) within local government (municipalities) in South Africa, the following hypothesis was framed;

**Hypothesis 1**

- There is a positive relationship between elements of entrepreneurial orientation (innovation, risk taking, proactiveness) and organisational structures of municipalities in South Africa

### 2.6.4 Organisational culture

Many scholars define organisational culture in many different ways. Wickham (2006), cited in Nayyar and Mahmood (2014), described culture as norms, symbols and values shared by the members of an organisation as it is critical in creating motivation, setting attitudes and is an important aspect of competitiveness. The concept of culture is further discussed by Zahra (1993) and Moon (1999), cited in Nayyar and Mahmood (2014) who emphasised that culture is an influential factor in the promotion of entrepreneurship. Also, scholars such as Hofstede (1997); Beheshtifar and Shariatifar (2012); Daft and Marcic (2009), cited in Yildiz (2014) defined organisational culture as a set of beliefs, values and norms that are common within an organisation, shared and lived by management and employees respectively. Other theorists (Singer, Alpeza & Balkic, 2009), defined it as a management mechanism which provides employees with a framework of desired and undesired behaviours. Organisational culture is passed from generation to generation and defines the entity (Covin & Slevin, 1991, cited in Yildiz, 2014); it becomes the DNA of that organisation. It is also critical as it provides/influences attitudes and behaviours that are geared towards the achievement of organisational goals (Singer et al., 2009).

Based on the definitions provided, it is clear that the tone for organisational culture is set from the top and employees behave in line with prescribed behaviours; these types of behaviour can be generational. Hence, some scholars note that it is organisational culture that drives and empowers employees to do the right things and doing them right for the benefit of their career prospects and the organisation (Paunovic, 2012).
An organisational culture is also underpinned by certain dimensions which Hofstede (1997) and Paunovic (2012) believed asserts/affirms that the following are some of the key dimensions of an organisational culture:

(a) Transition from individualism to collectivism – higher dependence on entrepreneurial teams as opposed to an individual person.

(b) Lower power distance – which is characterised by organisational structures that encourage open communication and informal relations.

(c) Low uncertainty avoidance – a culture which is receptive/accommodates mistakes and sees them as learning curves.

(d) Balance between masculine and feminine values – culture that encourages team to work together whilst adopting a ‘can do’ attitude/culture.

The aforementioned dimensions are present in every culture. They shape the type of organisational culture that will exist in that organisation. The dimensions will shape and reflect on the features and characteristics of an organisational culture; this will manifest in the clarity of purpose, cohesion of the organisation, existence of strong organisational relations, avoiding severe control, and management support, risk taking, reward systems supporting creativity, organisational identity and innovation in the organisation (Soleimani & Shahnazari, 2013). Literature also indicates that the following are elements of culture, goal ambiguity (Drucker, 1995; Hall & du Gray, 1996), accountability and performance objectives (Youhee, 2007) which underpin the concept of organisational culture for an organisation intending to implement corporate entrepreneurship. Kuratko and Zhara (2002), cited in Ireland et al., (2009), found that organisational culture characterised by management support and work discretion/autonomy promoted entrepreneurial behaviour in an organisation.

Depending on the type of leadership, an organisational culture can be weak or strong; a strong organisational culture has the ability to propel individual intrapreneurs to develop an entrepreneurial culture and excel (Paunovic, 2012) far ahead of its competitors. This view is also echoed by Singer et al. (2009) who asserted that a strong organisational culture ensures convergent of teams towards a common goal.
Although culture is present in all organisations, these cultures are different; however, the focus would be on entrepreneurial organisational culture. Entrepreneurial culture sets a base for creativity and innovation; as it evolves, its key components can be institutionalised to achieve improved organisational performance. An entrepreneurial organisational culture as a minimum is characterised by an effective and robust rewards and recognition system, encouragement of risk taking and management’s level of tolerance for failure from employees whilst engaging in innovative projects (Singer et al., 2009). According to Beheshtifar and Shariatifar (2013), the key feature of entrepreneurial organisations is the existence of entrepreneurial culture which is characterised by flexibility and strategic focus externally and internally. One of the key issues that an entrepreneurial culture embraces is failure; the culture encourages risk taking and therefore, failure should not be shunned and not be associated with punitive measures; it should be encouraged and viewed as an opportunity to learn and plan better for future projects (Herbert & Brazeal, 1998). This view was expanded further by Mokaya (2012) who asserted that an entrepreneurial culture acknowledges that failure is an inherent element; therefore room for failure should be created with the view to learn from mistakes; therefore, the culture of fear of failure should be discouraged and employees should be encouraged to extent their boundaries and be creative. Ground-breaking behaviours should be modelled and depicted as desired behaviour for employees within an organisation. Rules and processes should be designed in a way that they are able to capitalise on new opportunities as they arise (Mokaya, 2012).

An entrepreneurial posture of an organisation is embedded in its culture which has an effect on the vision, mission and strategies that would be pursued (Yildiz, 2014). It enables an organisation to react quickly, ensures a conducive environment for growth and development, and stimulates more entrepreneurial behaviour, competiveness, strategic positioning for investment (Beheshtifar & Shariatifar, 2013), which becomes an entrepreneurial culture. The management team of any organisation plays an important role in that managers set the tone for the kind of organisational culture that would prevail at any point in time (Singer et al., 2009). However, they also have the ability to hinder or foster CE through the existence or lack of adequate planning, partnerships in creative actions, operating in silos/seclusion (Firouzyar & Kojouri, 2013). Hence, Mokaya (2012) emphasised that as part of ensuring and creating an entrepreneurial culture, management should be in a position and be willing to recognise and acknowledge innovative ideas, irrespective of the
Herbert and Brazeal (1998) indicated that organisational culture is a powerful tool with which an organisation can create consistent patterns of behaviours which are geared towards the achievement of entrepreneurial objectives/goals. The success of a good organisational culture is driven by the fact that staff has internalised it, are able to maintain it or live up to it. In order to maintain an entrepreneurial character, an organisation ought to ensure that there is compatibility between employees’ profiles and the vision of the organisation and there is a degree of consistency of the same culture across all the various departments/business clusters/units. It is, therefore, important that management continuously induces and puts measures in place to maintain a positive entrepreneurial culture which is internalised by all employees. An organisational culture is an indicator of entrepreneurial activity in any organisation (Singer et al., 2009; Firouzyar & Kojouri 2013; Yildiz, 2014)

Fundamental differences regarding organisational culture for public sector organisations are noted by Ramamurti (1986), cited in Kuratko et al. (2011) which range from multiplicity and ambiguity of goals to lack of accountability among managers for innovation. This lead to a situation where goals are too rigid and strictly developed (Jennings & Lumpkin, 1989, as cited by Nayyar & Mahmood, 2014). Performance objectives indicate the direction that an organisation intends taking and the subsequent value that would be derived. Kuratko et al. (2011) argued that political influence and limited managerial autonomy impact directly on the entrepreneurial behaviour (Nayyar & Mahmood, 2014). It was further argued by Anderson et al., (2014) that high power distance inhibits organisational innovation. These theorists further argued that the national culture also has an impact on the level of organisational innovation.

Over the years, many research studies were conducted on organisational culture; according to Soleimani and Shahnazari (2013), organisational culture is considered an important factor in the introduction or implementation of CE. Research indicates that there is a positive relationship between organisational culture and CE, the latter being important in determining the failure or success of an organisation. The aforementioned outcomes were also confirmed by Yildiz (2014) that there is a positive relationship between CE and elements of organisational culture such as power distance, masculinity, femininity, uncertainty avoidance, and the results of the study also
highlight the strategic importance of organisational culture for CE. Research studies by Elenkov and Manev (2005), cited in Anderson et al. (2014), confirmed that national culture moderated the relationship between top management and organisational innovation. Furthermore, in the research study by Dehnad and Mobarak (2010), cited in Firouzyar and Kojouri (2013), risk culture and the creation of common goals and values were found to be the driving factors of corporate entrepreneurship. This in turn impacts on productivity, absenteeism and tardiness, and should be addressed by equitable reward systems/structures (Hornsby & Kuratko, 2011).

There is a firm consensus that entrepreneurial culture manifests from the top of an organisation, in that a leader who is not prepared to maintain the status quo would push boundaries and provide entrepreneurial employees with the necessary support (Ghina & Permana, 2012). This would be achieved through unlocking bureaucratic practices/policies by simplifying red tape for purposes of efficient service delivery.

According to Murphy (2010), corporations that have an entrepreneurial culture have mastered key attributes that distinguish them from their competitors; first an entrepreneurial culture needs constant raising of awareness about entrepreneurship within the organisation which is accompanied by deliberate legitimisation of an entrepreneurial mind-set through mini competitions within the organisation. Of importance is to ensure that the entrepreneurial culture that is being nurtured manifests in a fertile environment; this environment should value intrapreneurs and they should be considered and projected as role models for the organisation. The environment should also be encouraging risk taking with a high degree of tolerating failure which may arise as a result of venturing into entrepreneurial activities (Murphy, 2010).

Of importance to note is that an entrepreneurial culture is mainly driven by management; organisations that have mastered/successfully implemented it have reaped significant benefits in the form of improved performance (Kenney, Khanfar & Kizer, 2010). Employees and executives who work for organisations with such vibrant entrepreneurial culture also benefitted from it in the form of career growth, reputation, distinct track records. An intense entrepreneurial culture has the ability to attract and uncover aspirant corporate entrepreneurs who have the capabilities of taking the organisation to greater heights (Kenney et al., 2010). However, it is imperative that organisations should be aware of the fact that some of the new ideas may flourish and create value whilst others may do the opposite. It is therefore important for employees to be given the latitude to experiment
and make errors and learn from those processes (Ahmad, Aizzat & Zainal, 2011). Furthermore, like many theorists indicated that organisational culture is driven from the top, leadership’s aptitude towards CE/intrapreneurship influences how employees will behave or conduct CE initiatives.

Although there are benefits to having an entrepreneurial culture, a traditional corporate culture has a potential to dampen the entrepreneurial drive in an organisation because it is underpinned by a conservative approach to business which is characterised by centralisation of decision-making powers. It is important that entrepreneurial culture is carefully nurtured and fostered in an organisation as it is characterised by uncertainty and ambiguity, as it reduces complacency and maintenance of the status quo (Hashimoto & Nassif, 2014), a greater degree of uncertainty increases levels of creativity and innovation which are integral to an entrepreneurial culture (Mokua & Ngugi, 2013; Hashimoto & Nassif, 2014).

Empirical studies by Beheshtifar and Shariatifar (2013) indicated that CE is significantly related to organisational culture, whilst Ahmad, Aizzat and Zainal (2011) found that intrapreneurship thrives in an organisation that is socially stable, and has established strong interlinkages through diverse teams that are working cohesively towards a common goal. The organisational culture should be in such a way that it encourages learning with the view of stimulating innovation or creativity amongst its employees. A research study by Mokua and Ngugi (2013) found that the existence of an entrepreneurial culture influences CE in an organisation, especially where corporate strategies are geared towards entrepreneurship, is further aligned/supported by management attitude and conduct which encourages creativity/innovation at all levels and prioritises it. Their drive is to remove bureaucratic barriers which inhibit employees to be innovative, by also giving them the latitude to explore new avenues which would create value for the organisation (Mokua & Ngugi, 2013).

Another research study by Yildiz (2014) highlighted the influence of national culture; it affirms that national culture affects individual behaviour which can have a positive or negative impact on strategic orientation of an organisation, thereby affecting entrepreneurial activities. Thus, the influence of organisational culture on entrepreneurial activities should not be taken lightly by management.

In conclusion, it is evident from theory and empirical studies that organisational culture is a necessary condition for introduction/implementation of corporate entrepreneurship (Yildiz, 2014).
However, its successful engineering is dependent on appropriate development and implementation of human resource practices such as rewards and an employee recognition scheme specifically set up for innovative behaviours (Herbert & Brazeal, 1998). It is, therefore, important to ensure that appropriate enhancements of an organisational culture which is entrepreneurial are implemented as they have the potential to foster CE. An organisation that is underpinned by an entrepreneurial culture stands a good chance of being a leader in its industry and thereby improves its overall performance and strategic position in the market.

Based on the results of the studies of the following researchers (Anderson et al., 2014; Kuratko et al., 2011; Kuratko & Zhara, 2002, cited in Ireland et al., 2009; Ramamurti, 1986, cited in Kuratko et al., 2011; Zahra, 1993, Moon, 1999, cited in Nayyar & Mahmood, 2014) and in line with the third sub-problem which is to measure the level of organisational culture within local government (municipalities) in South Africa for corporate entrepreneurship and the relationship between organisational culture and dimensions of entrepreneurial orientation (innovation, risk taking and proactiveness) in local government (municipalities) in South Africa, the following proposition is framed:

Hypothesis 2:

There is a positive relationship between organisational culture and elements of entrepreneurial orientation (innovation, risk taking, proactiveness) within municipalities in South Africa.

2.6.4 Rewards

Rewards form a critical part of entrepreneurial behaviour; they serve as motivation enhancement, especially for employees who intend participating in entrepreneurial initiatives (Kearney et al., 2009); rewards also promote individual contribution towards innovation (Zampetakis & Moustakakis, 2010). Scholars define rewards in different ways, depending on the context that they are intended to be used in. In the view of scholars such as Kuratko et al. (2005), as cited in Chinie (2013), rewards are defined as a system that is linked and premised on individual or team performance which emphasises high achievement, whilst encouraging employees to venture into challenging projects or tasks with the view of adding value to the broader organisation. On the other hand, according to Dermirci (2013), rewards are a perception of employees that management recognises entrepreneurial and innovative initiatives. La Nafie, Nimran, Musadieq and Suyadi (2014) defined
Based on the aforementioned definitions, rewards can therefore be defined as monetary and non-monetary incentives that are introduced with the intention of recognising those employees and managers who engage in entrepreneurial activity which may directly or indirectly add value to the organisation.

### 2.6.3.1 Key elements of rewards

Although many scholars advocate for the introduction or presence of rewards in an organisation, there are certain key elements that must be present in these reward systems.

According to Chen and Cangahuala (2010), the key elements of a reward system are individual responsibility, clear goals and feedback. It is important that the achievement of the set goals are linked to a results-based incentive scheme which is critical to the promotion and implementation of entrepreneurial activity in an organisation. Mokua and Ngugi (2013) also emphasised that a reward system should indicate clarity of employee responsibility and potential outcomes that one will attain and such system should be communicated to all employees.

According to Morris et al. (2008, cited in Ewe & Keat, 2012), management should be able to differentiate the types of rewards that can be found or applied in an organisation. These theorists (Morris et al., 2008, cited in Ewe & Keat, 2012) asserted that rewards can be in monetary or non-monetary form (personal growth, career enhancement, status and power as well as self-fulfilment). Another key element of any reward system is that it should resonate with what employees and managers would desire and what would influence their desire to engage in entrepreneurial activities.

Rewards are mainly used as a method of discouraging risk-aversion among employees and instead encouraging innovativeness which will eventually push their boundaries to confront the unknown (Dermirci, 2013) and result in increased or improved entrepreneurial activities. The notion of discouraging risk aversion is also supported by Maalej, Amami and Saadaoui (2014), who argued that good reward systems have the capability of influencing employees to have an appetite for risk and be involved in new projects that they would not have pursued before. Furthermore, Chen and
Cangahuala (2010) also believed that an appropriate reward system is able to promote entrepreneurial activity in an organisation, rewards are able to increase the willingness of middle managers’ appetite for risk in relation to an organisation’s strategic goals and objectives.

Recognition of employees – when they have attained the set goals – is also key. Mokua and Ngugi (2013) indicated that organisations that recognised individual and team work which met the criteria of being innovative, were rewarded even before the commercial impact was known by all. This encouraged employees even further, especially when they were paid and rewarded like entrepreneurs. These practices elevate innovative people to be known in the organisation, and this brings with it a sense of pride, loyalty and determination to want to achieve more (La Nafie et al., 2014). This can be achieved in instances where rewards are granted on the basis of creative work by employees of an organisation and not for role-based behaviour that is not encouraging innovation and therefore hindering corporate entrepreneurship (Aliei & Rafien, 2014).

Another key element of an effective reward system is an intertwined relationship between rewards and performance at individual, divisional and corporate level (Mokaya, 2012) which ensures seamless integration to the set strategy of an organisation. It is further argued that employees within an organisation become more motivated when they are aware that their drive will lead to rewards; consequently, they will increase entrepreneurial propensity within an organisation and thereby attain a sense of accomplishment.

Although the establishment of a rewards system is seen as a step in the right direction, Mokua and Ngugi (2013) cautioned that the organisation’s systems must be orientated towards the recognition of innovative efforts. These theorists warned that a recognition system that rewards employees for expected behaviour may not achieve the intended objective which is the stimulation of entrepreneurial behaviour.

Empirical evidence from studies conducted by scholars such as La Nafie et al. (2014) indicated that the existence of a rewards system is positively related to corporate entrepreneurship. Their findings are collaborated by studies conducted by other authors (Shahnazari, 2013; Firouzyar & Kojouri, 2013; Hornsby & Kuratko, 2011; La Nafie et al., 2014) who found that generally there is a positive relationship between rewards and corporate entrepreneurship. It was also found that rewards have a direct influence on employees’ behaviour towards corporate entrepreneurship initiatives (Ahmad,
Nasurdin & Zainal, 2011). As part of ensuring that employees are continuously motivated to act entrepreneurially, it is necessary to ensure that an appropriate reward system is implemented. The research study by Chen and Cangahuala (2010) found that there is a positive relationship between rewards, innovation and organisational performance. This indicates that the more an organisation gives appropriate and linked rewards, the more it becomes competitive and innovation levels increase exponentially with time (Chen & Cangahuala, 2010). Furthermore, it was found that rewards contribute to positive employee satisfaction levels; encourage employees to take on more challenging and interesting tasks; and instils a sense of belonging and pride in their jobs and the broader organisation (Shahnazari, 2013). Research conducted by Hornsby and Kuratko (2011) affirmed the findings of the aforementioned study, by indicating that equitable reward systems that acknowledge and appreciate new ideas have the potential to improve organisational performance and in turn job satisfaction among employees. Findings of further research (La Nafie et al., 2014) indicated that employees become more innovative when rewards are given. However, the study by Ghina (2012) revealed that some reward systems, management attitude towards risk and particularly employee perception regarding possible punishment associated with failure, are some of the factors that hinder effective performance by public service institutions.

It is evident, theoretically and empirically, that rewards play an important role in the promotion of corporate entrepreneurship. Many theorists (Hornsby et al., 1993; Lau & Ngo, 2004; Cohen, 2002; Kuratko et al., 1993; Kuratko et al., 2001; Barringer & Milkovich, 1998; Kuratko, Hornsby & Zhara, 2002; Sathe, 2003; De Jong & Wennekers, 2008, cited in La Nafie et al., 2014) argued that rewards are one of the critical internal factors that can enhance or hinder CE activities and therefore suitable, appropriate and linked rewards systems should be seriously considered by organisations intending to foster corporate entrepreneurship.

Literature demonstrates strong consensus that reward systems should be structured with clear goals, feedback mechanisms, emphasis on individual responsibility and that they must be results driven (Hornsby et al., 2002, cited in Kearney et al., 2009). Furthermore, the rewards systems should encourage risk taking and innovation (Kuratko et al., 2009) which can spark entrepreneurial activity in a firm (Malik & Mahmood, 2012). Younhee (2007, cited in Malik & Mahmood, 2012) argued that in the public service organisations, there is a lack of performance-based rewards systems, which in turn discourages innovation. As a result, public administrators are not motivated to venture
into novelties; this is also due to the widespread fear of failure which brings about punishment to those who erred (Younhee, 2007, cited in Malik & Mahmood, 2012). It was further emphasised by Kearney et al. (2009) that in an event that no recognition is provided for good performance, employees will see no reason to take risks or even innovate. Hence, Ghina (2012) emphasised that it is critical that the public sector should develop appropriate rewards systems with appealing incentives which would stimulate entrepreneurial behaviour and reduce or deter corrupt activities between public servants and clients. In public institutions, it is important that the employee welfare standards are carefully considered with the view to improve them, in order to ensure motivated teams who can innovate, take risks and be proactive in their endeavours for service delivery (Ghina & Permana, 2012).

Notwithstanding the argument that employees should be rewarded for novelties and taking risks, equally so, organisations must ensure that the environment encourages calculated risks with maintenance for a tolerance for failure (Kearney et al., 2009). There should be a balance between recognition of good performance and tolerance for failure. Although rewards are considered important for the promotion/ fostering of corporate entrepreneurship, the recent studies (Walker, 2013) found that the importance of reward system is moderate.

Based on empirical evidence of the various researchers (Kearney et al., 2009; Younhee, 2007, cited in Malik & Mahmood, 2012; Zampetakis & Moustakis, 2010; Ghina & Permana, 2012; Hornsby et al., 1993; Lau & Ngo, 2004; Cohen, 2002; Kuratko et al., 1993; Kuratko et al., 2001; Barringer & Milkovich, 1998; Kuratko et al., 2002; Sathe, 2003; De Jong & Wennekers, 2008, cited in La Nafie et al., 2014; Shahnazari, 2013; Firouzyar & Kojouri, 2013; Hornsby & Kuratko, 2011; La Nafie et al., 2014) and in line with the fourth sub-problem which is to measure the levels of reward systems for corporate entrepreneurship within local government (municipalities) in South Africa and the relationship between the reward systems and corporate entrepreneurship within the local government (municipalities) in South Africa, the following proposition is framed;

**Hypothesis 3:**

- Rewards are positively related to elements of entrepreneurial orientation (innovation, risk taking, proactiveness) for municipalities of South Africa.
2.6.5 Conclusion of the literature review

Corporate entrepreneurship is hailed by many scholars (Ireland et al., 2009; Dees & Lumpkin, 2005) as a strategy that can be used to revitalise organisations for better performance. Some theorists (Mokaya, 2012) regarded CE as a survival necessity for many organisations as it is linked to performance, strategic positioning, competitiveness, efficiency and effectiveness. It should, however, be noted that the implementation of corporate entrepreneurship requires a specific type of environment that will ensure that it thrives. It should be noted that CE is influenced by internal and external factors; however, the internal factors are the determinants of an effective CE. Furthermore, the internal factors – individually or as a combination – have the capacity to influence corporate entrepreneurship. For instance, if organisational structure and culture are inflexible, this suppresses the emergence of CE and they are unable to respond appropriately to the external forces of the environment. Hence, Beheshtifar and Shariatifar (2013) argued that a thriving CE requires appropriate and flexible organisational structure and culture. This argument was further supported by Hornsby and Kuratko (2011) who also argued that sustained CE is achieved through an entrepreneurial culture that is based on an equitable rewards system.

It is evident from the literature review that internal organisational factors are inherent to the success of corporate entrepreneurship. Research suggests that organisational culture is able to adapt to changes; however, if the organisational structure is inflexible, rigid and a silo mentality prevails, there will be less entrepreneurial activity (Beheshtifar & Shariatifar, 2013). As a result, employees will not be encouraged to engage in innovative, risk-taking projects or activities.

The intention of the study was to assess whether local government (municipalities) are in a position to implement corporate entrepreneurship and what factors will enhance or hinder the implementation. The study was conducted through the testing of the following propositions;

**Proposition 1:**

There are levels of innovation in local government (municipalities) of South Africa.

**Proposition 2:**

There are levels of risk taking in local government (municipalities) of South Africa.
Proposition 3:

There are levels of proactiveness in local government (municipalities) of South Africa.

Hypothesis 1

There is a positive relationship between elements of entrepreneurial orientation (innovation, risk taking and proactiveness) and organisational structures of municipalities in South Africa.

Hypothesis 2:

There is a positive relationship between organisational culture and elements of entrepreneurial orientation (innovation, risk taking and proactiveness) within municipalities in South Africa.

Hypothesis 3:

Rewards are positively related to elements of entrepreneurial orientation (innovation, risk taking and proactiveness) for municipalities of South Africa.
## 2.7 CONSOLIDATED LITERATURE REVIEW FOR THE RESEARCH REPORT

<table>
<thead>
<tr>
<th>Constructs/Variables</th>
<th>Author</th>
<th>Findings</th>
<th>Hypotheses/ proposition or research question</th>
<th>Data</th>
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| **Corporate entrepreneurship** | Zhara 1995, 1996 cited in Shah and Bhutta, 2013 | - Corporate entrepreneurship has the potential to revitalize an organisation and ensure growth and competitive advantage  
- CE occurs within any organisation, irrespective of being for profit, non-profit or government |  | Ordinal |
| | Kuratko, 2007 2009; Antoncic and Hisrich 2003 | | | |
| **Entrepreneurial Orientation Innovation** | Ireland *et al.*, 2009 | - In the private sector, innovation leads to growth and performance  
- EO is a significant and consistent predictor of organisational performance | These findings are linked to the proposition made which is there are levels of innovation in local government (municipalities) of South Africa. | Ordinal |
<p>| | Arbaugh <em>et al.</em>, 2009 | - Net worth of a company is positively related to EO | | |</p>
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<td>• Innovation does not come naturally in the public sector</td>
<td>• Political governance and influence impacts negatively on the ability of the public sector to innovate</td>
<td>• In the public sector there are measurement challenges linked with the quantification of innovation</td>
<td>• Conflicts are encountered in the innovation process</td>
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<td>• Conflict are present internally and externally</td>
<td>• Public sector is plagued with multiplicity of visions and lack of accountability</td>
<td>• South Africa’s employee entrepreneurial activity was rated lower</td>
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<td>• Risk taking benefits an organisation to gain higher financial returns</td>
<td>• Found that moderated level risk takers were outperformed by firms with higher risk taking level</td>
<td>Risk taking is inherent element in an organisation.</td>
<td>These findings are linked to the proposition made which is that there are levels of risk taking in local government (municipalities) of South Africa.</td>
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<td>• Innovation bring with it a certain degree of risk and a high chance of</td>
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<td>Proactiveness</td>
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<td>Ambad &amp; Wahab, 2013</td>
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<td>• Organisations with organic structures are more flexible and foster entrepreneurial behavior</td>
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<td>• Greater organicity of an organization’s structure breeds elements such as expertise, devolved decision making</td>
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<td>Ireland et al., 2009</td>
<td>These findings are linked to the hypothesis made which is: Ordinal there is a positive relationship between elements of entrepreneurial orientation (innovation, risk taking and proactiveness) and organisational structures of municipalities in South Africa</td>
</tr>
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</table>
Mechanistic structures (public sector)

- Organisation structures that are represented through hierarchical arrangements which indicate reporting and communication lines - mechanistic.
- This type of organisational structure has an impact on the performance of a firm and its ability to innovate.
- Public sector environment structures are characterized by explicitly articulated and written firm policies, job descriptions, organisational charts, strategic and operational plans and objective setting systems.
- Hierarchy, formalisation, low degree of flexibility inhibit an organisation’s ability to foster entrepreneurship.
- Entrepreneurial strategic vision is not associated with mechanistic structures.
### Organisational Culture

<table>
<thead>
<tr>
<th>Source</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chen &amp; Cangahuala, 2010</td>
<td>Corporate entrepreneurship is positively related to organisational boundaries</td>
</tr>
<tr>
<td>La Nafie et al., 2014</td>
<td>Findings indicate that although supportive organisational structure is positively related to CE</td>
</tr>
<tr>
<td>Liebcap 1986; Sadler, 1999 cited in Onu, 2013</td>
<td>The size of the organisation is critical for effective introduction and implementation of corporate entrepreneurship</td>
</tr>
<tr>
<td>Mokua &amp; Ngugi, 2013</td>
<td>Supportive structures have a positive influence on CE initiatives undertaken by employees of an organisation</td>
</tr>
<tr>
<td>Zahra (1993); Moon (1999) cited in Nayyar &amp; Mahmood, 2014</td>
<td>Emphasize that culture is an influential factor in the promotion of entrepreneurship</td>
</tr>
<tr>
<td>Kenney et al., 2010</td>
<td>Organisational culture characterised by management support and work discretion/autonomy promoted entrepreneurial behaviour in an organisation.</td>
</tr>
<tr>
<td>Kuratko &amp; Zhara, (2002) cited in Ireland et al., 2009</td>
<td>These findings are linked to the hypothesis made which is: Ordinal there is a positive relationship between organisational culture and elements of entrepreneurial orientation (innovation, risk taking and proactiveness) within municipalities in South Africa.</td>
</tr>
</tbody>
</table>

### Public Sector

<table>
<thead>
<tr>
<th>Source</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramamurti (1986) cited in Kuratko et al., 2011</td>
<td>Organizational culture of public sector is characterized by</td>
</tr>
</tbody>
</table>
| **Rewards** | **Kuratko et al., 2011** | multiplicity and ambiguity of goals, lack of accountability among managers for innovation  
- Political influence, limited managerial autonomy impact directly on the entrepreneurial behaviour  
- Presence of high power distance inhibit organisational innovation  
- Organisational culture is significantly related to corporate entrepreneurship  
- Found that intrapreneurship thrives in an organisation that is socially stable  
- The existence of entrepreneurial culture influences corporate entrepreneurship  
  | **Rewards** | **Zampetakis & Moustakis, 2010** | **Kuratko et al., 2009** | **Chen & Cangahuala, 2010** | **Shahnazari, 2013** |  
- Rewards promote individual contribution towards innovation  
- Reward systems should encourage risk taking and innovation  
- Rewards are positively related to innovation and organisational performance  
- Rewards have a significant  
- These findings are linked to the hypothesis made which is that rewards are positively related to elements of entrepreneurial orientation (innovation, risk taking and proactiveness) for municipalities of South Africa. |
<table>
<thead>
<tr>
<th>Reference</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hornsby &amp; Kurato (2003)</td>
<td>relationship to corporate entrepreneurship</td>
</tr>
<tr>
<td></td>
<td>• Rewards have a the potential to improve organisational performance and job satisfaction</td>
</tr>
<tr>
<td>Firozuyar &amp; Kojouri, 2013</td>
<td>• Performance based rewards are the driving factors of CE</td>
</tr>
<tr>
<td>La Nafie et al., 2014</td>
<td>• Existence of reward systems is positively related to corporate entrepreneurship</td>
</tr>
<tr>
<td></td>
<td>• Public service organisation lack performance based reward systems, which discourages innovation</td>
</tr>
<tr>
<td></td>
<td>• Fear of failure which brings about punishment to those who erred</td>
</tr>
<tr>
<td></td>
<td>• The hindrances to effective performance by public service institutions stems from the rewards systems</td>
</tr>
</tbody>
</table>
CHAPTER 3: RESEARCH METHODOLOGY

This study was premised from a positivist research paradigm which advocates for the researcher to approach a study as an outsider and therefore scientific thinking is used to test theories (Tenkin & Kotaman, 2013). The positivist paradigm is theory-driven (Leitch, Hill & Harrison, 2010) and as such it is premised on the notion that full understanding of a research matter can be attained through experiment or observation (Lee, 2014). According to (Leitch et al., 2010) the positivist paradigm is well regarded by many scholars especially regarding the question of assessing quality in research. Furthermore, the positivist approach is linked to the quantitative research methodology which allows for the collection of numerical data which can be statistically analysed to arrive at a scientific conclusion (Cooper & Schindler, 2011). Additionally, the quantitative research methodology follows a deductive approach to the relation between theory and research with emphasis on testing of theories as such; it focuses on descriptions, explanations and predictions (Cooper & Schindler, 2011). According to Johnson and Onwueguzie (2004), the quantitative research methodology has higher credibility as it can be generalised and replicated on many different populations and sub-populations. Given the fact that many scholars and theorists have conducted studies on corporate entrepreneurship, their studies were considered and integrated into this study.

Therefore, this study through the use of quantitative research methods is intended to statistically obtain results from a sample of middle managers in municipalities so that its quantification and generalisation of results can be conducted.

3.1 Research Methodology

The study was based on a number of assumptions; key one being that the application of corporate entrepreneurship is an indicator of the existence of entrepreneurial orientation and may lead to improvement in performance of an organisation irrespective of whether it is a public or private entity (Kuratko, 2007; Kim, 2010). Through this research study, the objective was to test whether dimensions of entrepreneurial orientation are present within the internal environment of a South African municipality. The study focused mainly on the following internal factors organisational structure, culture and rewards. Furthermore, the study assumed that the participants had sound
managerial experience and therefore understood terms related to the corporate entrepreneurship field as it relates to the public sector. Based on this assumption, the sampling frame that was applied is the middle managers (or employees on equivalent level as middle managers). Also, the participants will be regarded as a fair representation of the middle managers in the municipalities of three provinces (Gauteng, Limpopo and North West) in South Africa. The municipalities that were chosen represent both metros, local and district municipalities. The intention was to ensure that the study covers the different spheres that municipalities operate in i.e. urban, semi urban and rural. The three chosen provinces have the aforementioned characteristics.

Through the use of quantitative methodology, the level of a municipality’s entrepreneurial orientation will be determined by examining the organisational structure, organisational culture, and rewards in relation to dimensions of entrepreneurial orientation.

Additionally, the quantitative research methodology follows a deductive approach to the relation between theory and research with emphasis on testing of theories; as such, it focuses on descriptions, explanations and predictions (Cooper & Schindler, 2011).

3.2 Research Design

Research designs are critical in research studies; they serve as a procedural outline for research and are used for selecting sources and types of information (Cooper & Schindler, 2011). These theorists asserted that research design is ultimately a framework for specifying the relationships among a study’s variables. Literature suggests that there are different categories of research strategies which can be used for different research studies and these are; experimental, quasi-experimental, non-experimental, correlational and descriptive research (Cooper & Schindler, 2011).

For the purposes of this study, the descriptive research strategy was used. This approach is appropriate for the study because they are formal and structured studies and they offer the researcher an opportunity to discover associations among different variables, estimations of proportions of a population that have specific characteristics as well as a description of a phenomenon associated with a subject population (Cooper & Schindler, 2011). The research strategy that was used is a cross-sectional survey, which implies that it will be carried out once and represent a snapshot of one point in time (Cooper & Schindler, 2011). The advantage of this strategy is that it is structured and enables the researcher to obtain quantifiable results.
3.3 Population and Sample

3.3.1 Population

Scholars such as Copper and Schindler (2011) defined population as the total number of subjects represented within a whole which a researcher wishes to make some inferences about. Yount (2006) asserted that population usually consists of all the persons a researcher wants to study. The target population of this research study was middle managers in municipalities based in three provinces in South Africa (Gauteng, Limpopo and North West), who have been in the employ of the respective local government. This sample was divided according to their geographical zones; this will ensure that a representation of the overall population is obtained (Lee, 2014). The intention of the study is to observe their views on their respective municipalities’ entrepreneurial orientation as it relates to organisational culture, organisational structure and rewards.

The local government of South Africa has a total of 283 municipalities (COGTA, 2009) and employs approximately 300 000 employees. The total percentage of managers (first level, middle level and top level) is estimated at 10% of the population (SALGA: 2012).

Given the vast landscape of South Africa, the population of interest is too large and scattered geographically; as such, a sample of the population was used to make inferences about the population characteristics (Yount, 2006), for determining their assessment of the municipality’s entrepreneurial orientation as it relates to organisational culture, organisational structure and rewards. Literature by scholars such as Lee (2014) cautioned that studying the entire population group can be expensive and administratively cumbersome, hence the recommendation to sample.

3.3.2 Sample and Sampling Method

Having considered the magnitude of the population group as well as the possible challenges of not having enough capacity to handle the responses timeously and considering time constraints, the research study focused on a sample. A sample examines a portion of the target population and
should be representative of the whole population (Copper & Schindler, 2011). For the purposes of this research, the probability sampling method was used with a convenience sample. The sample will be middle managers within the selected municipalities.

Middle managers have the capacity to either nurture or prevent corporate entrepreneurship in an organisation; they are key in the development of entrepreneurial drive or initiatives, as they are assigned with the responsibilities of resource allocation, project planning and execution, talent management and overall human resources management and planning (Singer et al., 2009). The potential of entrepreneurial initiatives to flourish rests with the middle managers, as they are a significant link between strategy development and implementation thereof.

According to Chen and Cangahuala (2010), middle managers are innovators as well as key sources of ideas within an organisation. Given that top managers are classified as creators of purpose, junior managers are entrepreneurs; middle managers play an important role of balancing the two levels. Middle managers serve as a compass to the introduction and implementation of CE, as they can be resolute to the paradox of capability – rigidity in the organisation,

According to Kuratko et al, 2005, cited in Hornsby et al., (2009) also emphasise the importance of middle managers in that they endorse, refine and shepherd entrepreneurial opportunities and identify, acquire and deploy resources needed to pursue those opportunities; they have the capacity to cultivate autonomous behaviour that encourages entrepreneurial activity in an organisation. The sample population was reached through the Institute of Municipal Finance Officers. The questionnaire that was used was distributed to participants during workshops and conferences as well as at the offices of different municipalities. The study covered employees/middle managers who worked for the selected municipalities at metro, district and local municipal level.

### 3.4 Research Instrument

The research instrument that was used is a survey questionnaire which consisted of multi-choice questions divided into sections. The first section required demographic information of the participants such as age, gender, position, and employment status. The next sections of the questionnaire dealt with dimensions of entrepreneurial orientation, organisational culture, organisational structure and rewards. The 5 point Likert-type scale was used in the design of the
questionnaire (Malhotra et al., 2004; Bertram, 2005; Cooper & Schindler, 2011), it is an ordinal psychometric measurement which consists of statements that express either a favourable or unfavourable attitude towards the object of interest. There are a number of advantages for using the Likert-type scale and Malhotra et al. (2004) cited that it is user-friendly for both the researcher and the respondent. The latter would be able to develop and administer the scale whilst the former would be able to complete it because of its simplicity to be understood, irrespective of whether it is delivered by mail or electronically. Furthermore, the Likert-type scale, which is also considered the most universal method of survey, is more reliable and provides greater volume of data compared to other scales (Copper & Schindler, 2011). The questionnaire that was used is based on an existing instrument developed by Covin and Slevin (1991). The questionnaire had a 5-point rating scale where 1 meant ‘strongly disagree’ and 5 meant ‘strongly agree’. The language of the questionnaire was adapted to be relevant to the public sector context. Given the fact that the municipalities do not develop new products, but they are service orientated, the questions relating to new product development or modification of the existing products were eliminated from the study.

For the purposes of this study, the following variable factors were tested through existing measurement scales (Covin & Slevin, 1989; Kuratko & Hornsby, 2013) that have been applied previously and their validity tested through rigorous processes.

The questionnaire tested the entrepreneurial orientation which is described as the degree to which an organisation applies the three dimensions of entrepreneurship which are innovation, risk taking and proactiveness (Dess & Lumpkin, 2005). The intent of the questions (part of Section 2 and ranged from Q1 – Q16), were to establish whether dimensions of EO are present and encouraged in a municipal environment. The existence of EO requires an internal environment which nurtures and fosters entrepreneurship. The following critical internal environmental factors were tested; organisational structure, this relates to the manner in which an organisation is organised whether through organic or mechanistic structure (Covin & Slevin, 1991). The study tested the following manifest variables regarding organisational structure; decision making, design of the structure, specialisation, shape, distribution of power and departmentalisation (Kuratko et al, 2007). The effects of the organisational structure were tested from Q17 to Q22.

Furthermore, organisational culture is well regarded, as it plays an important role in influencing employees’ willingness to accept change overall, but also specifically intended to foster corporate
entrepreneurship (Floyd & Wooldridge, 1999). The following manifest variables of culture will be tested; values, rules of conduct, vocabulary, methodology, rituals, myths and stories. This was tested through Q23 – Q27. The last variable that was tested is the reward system which is a system that is linked and premised on individual or team performance and emphasises high achievement whilst encouraging employees to venture into challenging projects or tasks with the view of adding value to the broader organisation (Kuratko et al., 2005, as cited in Chinie, 2013). The remainder of the questions Q28 – Q33 tested the existence of reward systems, their usage and alignment to intrapreneurship. The questionnaire was designed to test the aforementioned variables and was depicted as follows;

Table 1: Questions on variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Questions</th>
<th>Intent to be tested</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Section 1</td>
</tr>
<tr>
<td>Demographic information</td>
<td>Questions 1 - 8</td>
<td>Whether demographic information differs based on the respondents’ race, gender and their location in South Africa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Section 2</td>
</tr>
<tr>
<td>EO dimension: Innovation</td>
<td>Question 1 - 6</td>
<td>Existence of innovation within municipalities</td>
</tr>
<tr>
<td>EO dimension: Risk taking</td>
<td>Question 7 - 12</td>
<td>Whether risk taking is inherent in a municipality environment</td>
</tr>
<tr>
<td>EO dimension: Proactiveness</td>
<td>Questions 13 - 16</td>
<td>Whether proactive behaviour is encouraged in a municipality</td>
</tr>
<tr>
<td>Organisational structure</td>
<td>Questions 17 – 22</td>
<td>Whether the architect of municipal organisational structure encourages entrepreneurial behaviour.</td>
</tr>
<tr>
<td>Organisational culture</td>
<td>Questions 23 – 27</td>
<td>Whether the existing culture encourages intrapreneurs to flourish</td>
</tr>
</tbody>
</table>
3.5 Consideration of Ethics in Research

As part of the research study, consideration was given to ethics in research which is defined as a method, procedure or perspective for deciding how to act and for analysing complex problems and issues (Resnik, 2010). Amongst others, the researcher factored in the following ethical considerations;

(a) Informed consent was obtained from the Institute of Municipal Finance Officers as well as the participants who participated in the research study. The letter to participants indicated that, should they feel uncomfortable with the study, they were allowed to discontinue; and

(b) The participants and the IMFO were assured of their privacy and confidentiality regarding the information that they provided during the study.

Ethics in research are critical and non-compliance to them may result in harm to the study, institution and the participants. It was important to ensure that the required ethical standards are upheld at all times.

3.6 Procedure for Data Collection

In order to ensure that the purpose of the study is clear and supported by theory, an in-depth review of literature was conducted. This process was aligned to the deductive reasoning which purports that there are existing theories on the subject, and therefore, the study would test, confirm and/or refute some of the findings that were published by different scholars. A thorough review also indicated that there are existing instruments that could be used to conduct the study. The language of the instrument was revised accordingly to ensure that it is aligned to the public sector context. The Institute of Municipal Finance Officers was approached to assist with the distribution of questionnaires as well as the identification of fora where these questionnaires could be distributed. Furthermore, other key personnel in municipal offices were contacted to ensure that they become a point of entry in the different municipalities.
As part of ensuring that the instrument was proper, and its validity and reliability were still intact, a pilot study was conducted with employees of one municipality in Mpumalanga. During this period, a total of 20 questionnaires were distributed to participants (middle managers) who were attending a course during that period. A total number of 10 completed responses were received and analysed. The outcome of the process indicated that there was a need to refine two questions relating to EO dimension of risk taking as well as innovation to be applicable to the local government environment. The questionnaires were distributed electronically and as hard copies to the participants through the Institute for Municipal Finance Officers and other entry points in different municipalities. The respondents were given eight weeks to respond; however, weekly follow-up was conducted. As the responses were submitted, their capturing was made on a continuous basis. Of the 280 questionnaires that were distributed, 150 were received and analysed.

3.7 Data Analysis and Interpretation

As part of the process of analysing and interpreting data, the first step was the editing of raw data with the view of identifying errors and omissions; where possible, these were corrected (Copper & Schindler, 2011) prior to being analysed in the SPSS system. The data was analysed using statistical techniques such as multivariate analysis and descriptive statistics.

In this regard, the testing of the hypotheses was conducted through the multivariate technique, specifically regression analysis and correlations, the data was presented in the form of graphs and tables to unpack the different constructs being tested. The demographic data was analysed on educational statistics, race, gender, service, etc.

The following variables, being: innovation, risk taking and proactiveness, were analysed to determine their levels within the municipalities in North West, Gauteng and Limpopo. Given that the study intended to assess the level of corporate entrepreneurship by examining the effect of internal organisational factors (organisational structure, culture and rewards) on EO dimensions, it was necessary that a correlation analysis be conducted.

The Spearman’s rank order correlation was used to determine the correlations. It was identified as the most suitable technique due to the fact that data used required ordinal measures. This statistical tool deals with concordant and discordant pairs, which do not require bivariate normal distribution.
They are able to produce results that can be a perfect negative relationship (−1.0) and/or a perfect positive relationship (+1.0); this occurs when order is incorporated into the tool. The advantage of using Spearman’s statistical technique is that it allows for interpretation of data in terms of direction and the strength of the relationship. According to Hawkins, Jolliffe & Glickman (1992), correlation offers good results as it is about indication of strong linear relationships between variables, i.e. the strength of relationship between X and Y. Overall, Spearman’s tool is sensitive to a broader spectrum of relationships (Toothaker & Miller, 1996).

Regression analysis was conducted which reflects the predictive modelling nature of constructs, i.e. X and Y as part of conducting regression analysis, model fit, ANOVA on the constructs.

### 3.8 Limitations of the Analysis

The following were the identified limitations for the study:

- **Sampling**: The identified sample was reached through the Institute of Municipal Finance Officers. Although the organisation has a national reach, it was probable that not all required middle managers were reached. For the purposes of this study, the core participants are middle managers based in municipalities of Gauteng, Limpopo and North West. The sample is limited in comparison to the total number of middle managers employed in other municipalities. Furthermore, the highest number of responses was obtained from Gauteng and this could be attributed to the fact that the province has 3 metropolitan cities as opposed to only smaller towns being present in the other two provinces.

- **Analysis methods**
  
  The study used correlations and regression analysis which provided valuable insight into the body of knowledge. The exploration of other methods such as structural equation modelling could also provide another perspective on the data received and analysed.

### 3.9 Validity and Reliability of Research

Many scholars and researchers emphasise the importance of validity and reliability of research, as research should be conducted with the view of adding value to the body of knowledge. It should be useful to the academics and other stakeholders. According to Copper and Schindler (2011), research
validity refers to the extent to which one controls the other possible variables that could affect the research. The possible causal variables are still to be identified and dealt with prior to the commencement of the study. Research reliability refers to the extent to which the research can be repeated (i.e. the replicability of the study) and the results can be trusted (Copper & Schindler, 2011). To ensure the validity and reliability of the study, the contents of the established scales are to be used and not adjusted as this would affect the original research objectives, response types, data properties, number of dimensions, balance or unbalance, forced or unforced choices, number of scale points as well as rater errors (Copper & Schindler, 2011) In this regard, the scales from Covin and Slevin (1989), the original and adapted scales by Morris (1991) as well as Kuratko et al. (2013) were used. As part of measuring the construct validity exploratory factor analysis was conducted. The intention was to ensure that items with Eigenvalues which were more than 1 were kept. Furthermore, two types of factor loadings were conducted, the first one considered 3 factors and the other looked at 6 factors. The validity scores obtained from the two processes confirmed that there was a degree of construct validity. However, it should be noted that in certain instances cross loadings were noted especially on items that dealt with proactiveness, organisational structure and rewards. This can be attributed to the fact that some of the respondents were not able to differentiate between some of the statements posed.
Eigenvalue are the sum of the variances of the factor values, they yield an estimate of the amount of total variance explained by the factor. The above depiction is based on the eigenvalues outlined below.

**Table 2: Eigenvalues**

<table>
<thead>
<tr>
<th>Number</th>
<th>Eigenvalue</th>
<th>Percent</th>
<th>Percent Cum</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
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<td>41.926</td>
<td>41.926</td>
<td>41.926</td>
</tr>
<tr>
<td>2</td>
<td>2.3927</td>
<td>7.250</td>
<td>49.177</td>
<td>49.177</td>
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<tr>
<td>3</td>
<td>2.0704</td>
<td>6.274</td>
<td>55.451</td>
<td>55.451</td>
</tr>
<tr>
<td>4</td>
<td>1.3244</td>
<td>4.013</td>
<td>59.464</td>
<td>59.464</td>
</tr>
<tr>
<td>5</td>
<td>1.2919</td>
<td>3.915</td>
<td>63.379</td>
<td>63.379</td>
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<td>6</td>
<td>1.1015</td>
<td>3.338</td>
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<td>66.717</td>
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<td>Number</td>
<td>Eigenvalue</td>
<td>Percent</td>
<td>Percent Cum</td>
<td>Cum Percent</td>
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<td>0.242</td>
<td></td>
<td>100.000</td>
</tr>
</tbody>
</table>

**Table 3: Factor Analysis**

**Final Communality Estimates**

| innov 1  | 0.86072 |
| innov 2  | 0.79423 |
| innov 3  | 0.70958 |
| innov 4  | 0.43831 |
| innov 5  | 0.54681 |
| innov 6  | 0.52992 |
| risk7    | 0.50651 |
| risk8    | 0.67754 |
| risk9    | 0.63503 |
Factor analysis was used to examine patterns of relationships amongst select variables. Factor analysis was conducted on the 6 variables. The intention of doing factor analysis was to determine the inter correlations among the variables within the correlation matrix (Cooper & Schindler, 2011).

Table 4: Factor loading - Rotated Factor Loading

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>innov 1</td>
<td>0.224386</td>
<td>0.032102</td>
<td>0.044429</td>
<td>0.898513</td>
<td>-0.004847</td>
<td>0.003735</td>
</tr>
<tr>
<td>innov 2</td>
<td>0.153402</td>
<td>0.133490</td>
<td>0.072020</td>
<td>0.856253</td>
<td>0.120058</td>
<td>-0.010450</td>
</tr>
<tr>
<td>innov 3</td>
<td>0.084597</td>
<td>0.130895</td>
<td>0.114524</td>
<td>0.793232</td>
<td>0.206553</td>
<td>0.017074</td>
</tr>
<tr>
<td>innov 4</td>
<td>0.413882</td>
<td>0.271335</td>
<td>0.151370</td>
<td>0.400284</td>
<td>0.061758</td>
<td>0.080233</td>
</tr>
<tr>
<td>innov 5</td>
<td>0.466831</td>
<td>0.290222</td>
<td>0.243003</td>
<td>0.409619</td>
<td>0.116504</td>
<td>0.065136</td>
</tr>
<tr>
<td>innov 6</td>
<td>0.569638</td>
<td>0.260000</td>
<td>0.190641</td>
<td>0.311409</td>
<td>0.064648</td>
<td>0.018368</td>
</tr>
<tr>
<td>risk7</td>
<td>0.310022</td>
<td>0.123918</td>
<td>0.259885</td>
<td>0.016744</td>
<td>0.555092</td>
<td>0.138174</td>
</tr>
<tr>
<td>risk8</td>
<td>0.390766</td>
<td>0.385125</td>
<td>0.165026</td>
<td>0.182129</td>
<td>0.555274</td>
<td>0.088218</td>
</tr>
<tr>
<td>risk9</td>
<td>0.390120</td>
<td>0.243904</td>
<td>0.195609</td>
<td>0.069496</td>
<td>0.612923</td>
<td>0.067647</td>
</tr>
<tr>
<td>risk10</td>
<td>0.694717</td>
<td>0.160278</td>
<td>0.134708</td>
<td>0.158245</td>
<td>0.309655</td>
<td>0.069131</td>
</tr>
<tr>
<td>risk11</td>
<td>0.640065</td>
<td>0.312459</td>
<td>0.171604</td>
<td>0.123301</td>
<td>0.291951</td>
<td>0.008841</td>
</tr>
<tr>
<td>Proac12</td>
<td>0.698229</td>
<td>0.218458</td>
<td>0.121484</td>
<td>0.092197</td>
<td>0.403506</td>
<td>0.141808</td>
</tr>
</tbody>
</table>
Factor loading was also conducted on the data received.
Figure 4: Factor Analysis
The loading between the factors is higher. This is an indication that there is a greater contribution of the variable in defining a particular factor (Cooper & Schindler, 2011). Factor 1 is at 15%; factor 2 is at 12%; factor 3 is at 10%; factor 4 is at 9.77%; and factor 5 is at 8.23%.

3.9.1 External validity

External validity refers to the extent to which the conclusions of the study can be generalised on a wider population, across populations with different settings or contexts (Copper & Schindler, 2011). To ensure that external validity is achieved, the sample size will be representative in terms of race, gender and geographical location. Also, the compilation of the questionnaire was aligned to what the research is intending to achieve. In conducting the study it was necessary that the sample population was profiled in terms of race, gender and geographical location. The IMFO provided information on the list of candidates that were due to attend events and in the process a determination was made regarding their representivity for the study. Furthermore, those in municipalities such as Limpopo and North West provinces participants were profiled and targeted based on their geographical location and setting in this regard, rural setting was the focus.

3.9.2 Internal validity

According to Copper and Schindler (2011), internal validity refers to the extent the research results can be ambiguously ascribed to the independent variables of the research and how attempts will be made to maximise this. The internal validity of the research was maintained first, by ensuring that the research instrument measures what it was intended to achieve. This was achieved through concise and limited number of questions which were not lengthy in nature. In this regard, the number of questions were set between 5 and 6 per construct. The follow of questions were also logically set in such a way that a linkage between constructs was evident. Secondly, in ensuring that participants did not repeat the study, they (participants) were allocated time in between the events to complete the questionnaires and submit. Those that were emailed or handed in other geographical locations (Limpopo and North West) were also allocated time for completion and submission to the coordinator at a specific time. Lastly, participants were informed that their participation in the study was voluntary and they were at liberty to stop at any given time. The benefits of participating in the study were also communicated to the participants. The design of the study was in such a way that participants were not harmed, embarrassed or violated in any manner.
### 3.9.3 Reliability

As previously indicated, research reliability refers to the extent the research can be replicated. As part of ensuring reliability, the prepared questionnaires were circulated for pilot study purposes. The outcome indicated there were changes that had to be made to the proposed questionnaires. The revised questionnaires were circulated to participants and the outcome of the reliability is outlined below.

**Table 5: Reliability**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>Items left out</th>
<th>Mean</th>
<th>SD</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation</td>
<td>Q1,2,3,4,5,6</td>
<td>None</td>
<td>3.89</td>
<td>0.74</td>
<td>0.87</td>
</tr>
<tr>
<td>Risk taking</td>
<td>Q7,8,9,10,11,</td>
<td>None</td>
<td>3.52</td>
<td>0.82</td>
<td>0.86</td>
</tr>
<tr>
<td>Proactiveness</td>
<td>Q12,13,14,15,16,17</td>
<td>None</td>
<td>3.56</td>
<td>0.81</td>
<td>0.85</td>
</tr>
<tr>
<td>Organisational structure</td>
<td>Q18, 19, 20, 21, 22</td>
<td>None</td>
<td>3.56</td>
<td>0.90</td>
<td>0.86</td>
</tr>
<tr>
<td>Organisational culture</td>
<td>Q23, 24, 25, 26, 27</td>
<td>None</td>
<td>3.56</td>
<td>0.86</td>
<td>0.84</td>
</tr>
<tr>
<td>Rewards</td>
<td>Q28,29,30,31,32,33</td>
<td>None</td>
<td>3.77</td>
<td>0.79</td>
<td>0.80</td>
</tr>
</tbody>
</table>

The Cronbach Alpha of all constructs was reliable and scored 0.80 and above. This is an indication of the reliability of the study. In the process, there were no items that were left out in the study. The scales that were used were found to be highly reliable at cross-cultural levels (Knight, 1997).
CHAPTER 4: FINDINGS OF THE RESEARCH

In this chapter, the findings of the research will be presented with their associated tables, graphs and figures. The results will be presented on two levels, the first being about the demographic profile of the respondents to the study. The findings of the demographic profile include information pertaining to gender, race, educational status, employee’s tenure in their respective municipalities. The second part of the findings will be linked to the constructs being tested, i.e. innovation, risk taking, proactiveness, organisational structure, culture and rewards.

4.1 Demographic Profile of Respondents

The respondents were requested to complete a questionnaire which was divided into two sections, demographics and the constructs section. With regard to the demographics, respondents were asked questions relating to their highest education level attained, gender, race, age and province in which they are employed. Below are the findings of the study regarding their demographic profiles.

4.1.1 Educational status of the respondents

![Figure 5: Frequency distribution of the highest education level of respondents](image)

From the overall survey, the majority of the respondents have post matric qualifications. Out of the total of 150 responses, 65 respondents had a Bachelor’s degree as their highest qualification; 35 had BTech degrees, while 11 respondents had a Master’s degree, 1 person had a PhD. 35 Respondents had a Matric qualification and three respondents had not achieved a Matric qualification.
4.1.2 Gender

Figure 6: Frequency distribution for gender of respondents

The findings of the survey indicate that the majority of the respondents were males, totalling 99 compared to 51 female respondents.

4.1.3 Race

Figure 7: Frequency distribution of race representation of respondents

Out of the 150 respondents, Africans represented the highest number of respondents, totalling 126, which is significantly higher than Coloureds at 14, Whites at 7 and Asians with only 3 respondents. This is different from what was planned to be obtained in that the expectation had been that at least 50% of the sample population should have been a combination of Whites, Coloureds and Asians.
4.1.4 Age

Figure 8: Frequency distribution age level of respondents

The majority of the respondents are aged between 30-39 followed by 20-29 then 40-49. Those respondents who are above 50 years of age make up 14% of the respondents. The age profile of the respondents indicates that the workforce profiles of the various municipalities is youth (60% under the age of 40) to middle aged groups.

4.1.5 Province

Figure 9: Frequency distribution of provincial representation of respondents

The study focused on three provinces (Gauteng, Limpopo and North-West); a total of 95 respondents were from Gauteng compared to 50 and 5 from Limpopo and North West respectively. The trends can be attributed to the fact that most of the seminars/workshops where
surveys were circulated were held in Gauteng and the majority of delegates were from Gauteng. Although Gauteng is geographically small, it is bigger in terms of municipalities; it has three metros (City of Tshwane, City of Johannesburg and Ekurhuleni) whereas the other two provinces do not have metros.

### 4.1.6 Years of service

![Figure 10: Frequency distribution for years of service of respondents](image)

Out of the 150 respondents, 47% have been with their respective municipalities for a period of 10 and more years. This group is followed by 35% of respondents who have been with the municipality for a period of five to nine years.
### 4.2 Results pertaining to Proposition 1

Results pertaining to proposition 1: There are levels of innovation in the local government (municipalities) of South Africa. The findings of the study are depicted below.

#### 4.2.1 Results

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construct: Innovation</strong></td>
<td>N</td>
<td>% of Total</td>
<td>N</td>
<td>% of Total</td>
<td>N</td>
</tr>
<tr>
<td>Q1: Our municipality has introduced new services in the past two (2) years</td>
<td>2</td>
<td>1.34%</td>
<td>8</td>
<td>5.37%</td>
<td>36</td>
</tr>
<tr>
<td>Q2: These new services present modifications to existing services or extensions to existing services.</td>
<td>2</td>
<td>1.33%</td>
<td>13</td>
<td>8.67%</td>
<td>27</td>
</tr>
<tr>
<td>Q3: These new services exist in South African local government</td>
<td>3</td>
<td>2.00%</td>
<td>6</td>
<td>4.00%</td>
<td>24</td>
</tr>
<tr>
<td>Q4: Our municipality has introduced new operational processes compared with those of other municipalities.</td>
<td>1</td>
<td>0.67%</td>
<td>8</td>
<td>5.33%</td>
<td>39</td>
</tr>
<tr>
<td>Q5: Our municipality is characterised by a high rate of new service introduction, compared to other municipalities.</td>
<td>1</td>
<td>0.67%</td>
<td>14</td>
<td>9.33%</td>
<td>47</td>
</tr>
<tr>
<td>Q6: Our municipality is characterised by an emphasis on continuous improvement in methods of service delivery.</td>
<td>2</td>
<td>1.33%</td>
<td>13</td>
<td>8.67%</td>
<td>32</td>
</tr>
</tbody>
</table>

**Table 6: Innovation construct**

The above table indicates the trends of responses from various participants regarding the innovation construct. Question 3 (*These new services exist in South African local government*) received the highest responses on agreed and strongly agreed with a total of 46.6% and 33.33% of respondents. Question 5 (*Our municipality is characterised by a high rate of new service introduction, compared to other municipalities*) received the least number of positive responses with 32% and 26% respectively.
4.2.2 Distribution

Figure 11: Distribution

The distribution of the responses is not conforming to the normal distribution curve, there are two peaks, one at the score of 3.5 and another one at between 4.5 and 5. The responses received on the first hypothesis seem to resemble a bimodal distribution with two peaks of frequently found data.

4.2.3 Mean and standard deviation

<table>
<thead>
<tr>
<th>Mean</th>
<th>3.8995556</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std Dev</td>
<td>0.7452658</td>
</tr>
<tr>
<td>Std Err Mean</td>
<td>0.0608507</td>
</tr>
<tr>
<td>Upper 95% Mean</td>
<td>4.0197973</td>
</tr>
<tr>
<td>Lower 95% Mean</td>
<td>3.7793138</td>
</tr>
<tr>
<td>N</td>
<td>150</td>
</tr>
</tbody>
</table>

The mean for the innovation is at 3.8 whilst standard deviation is at 0.74 which both can be considered to be acceptable for the study.
4.2.4 Conclusion on Proposition 1

The findings for hypothesis 1 are that a significant number of respondents agree and strongly agree to the questions posed regarding innovation. The mean and the standard deviation are at acceptable levels 3.8 and 0.74.

4.3 Results Pertaining to Proposition 2:

The proposition 2 was that there are levels of risk-taking in local government (municipalities) of South Africa.

(a) Results from the responses

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q7: Our municipality is characterised by risk taking from key senior government officials in seizing and exploring risky growth opportunities.</td>
<td>5 3.33%</td>
<td>28 18.67%</td>
<td>37 24.67%</td>
<td>60 40.00%</td>
<td>20 13.33%</td>
</tr>
<tr>
<td>Q8: Our municipality is characterised by a “live and let live” philosophy in dealing with competitors</td>
<td>4 2.67%</td>
<td>21 14.00%</td>
<td>53 35.33%</td>
<td>53 35.33%</td>
<td>19 12.67%</td>
</tr>
<tr>
<td>Q9: Our municipality is characterised by seeking of unusual, novel solutions by senior government official to problems via the use of “idea people” brainstorming, etc.</td>
<td>3 2.00%</td>
<td>24 16.00%</td>
<td>42 28.00%</td>
<td>53 35.33%</td>
<td>28 18.67%</td>
</tr>
<tr>
<td>Q10: Our municipality is characterised by a top management philosophy that emphasises services, and prioritising service delivery</td>
<td>4 2.67%</td>
<td>20 13.33%</td>
<td>34 22.67%</td>
<td>56 37.33%</td>
<td>36 24.00%</td>
</tr>
<tr>
<td>Q11: Our municipality is characterised by a charismatic leader at the top</td>
<td>4 2.67%</td>
<td>19 12.67%</td>
<td>41 27.33%</td>
<td>52 34.67%</td>
<td>34 22.67%</td>
</tr>
</tbody>
</table>

Table 7: Risk Taking construct

The findings of the study indicate that a higher percentage of respondents were in agreement with the questions posed; however, a significant number of respondents were neutral about the same
questions. Also, a sizeable number of respondents at about 13% strongly disagreed with the questions posed.

(b) Distribution

![Distribution Diagram]

Figure 12: Distribution

The outcome is a bimodal distribution with two high peaks on agree and neutral. The degree of strongly disagree and strongly agree are both at their lowest levels.

(c) Mean and standard deviation

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.528</td>
</tr>
<tr>
<td>Std Dev</td>
<td>0.8294188</td>
</tr>
<tr>
<td>Std Err Mean</td>
<td>0.0677218</td>
</tr>
<tr>
<td>Upper 95% Mean</td>
<td>3.6618191</td>
</tr>
<tr>
<td>Lower 95% Mean</td>
<td>3.3941809</td>
</tr>
<tr>
<td>N</td>
<td>150</td>
</tr>
</tbody>
</table>

The mean is set at 3.5 and the standard deviation is at 0.82. The upper mean is at 3.66 and the lower mean is 3.39. The standard error mean is set at 0.06 which can be considered acceptable.
4.4 Results pertaining to Proposition 3: There are levels of proactiveness in the local government (municipalities) of South Africa.

(a) Results for the respondents

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construct: Proactiveness</strong></td>
<td>N % of Total</td>
<td>N % of Total</td>
<td>N % of Total</td>
<td>N % of Total</td>
<td>N % of Total</td>
</tr>
<tr>
<td>Q12: At our municipality, top level decision-making is characterised</td>
<td>2 1.33%</td>
<td>24 16.00%</td>
<td>35 23.33%</td>
<td>60 40.00%</td>
<td>29 19.33%</td>
</tr>
<tr>
<td>by: cautious, pragmatic, step-at-a-time adjustment to problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q13: Our municipality is characterised by active search</td>
<td>4 2.67%</td>
<td>26 17.33%</td>
<td>26 17.33%</td>
<td>55 36.67%</td>
<td>39 26.00%</td>
</tr>
<tr>
<td>for big opportunities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q14: Our municipality is characterised by large, bold decisions despite</td>
<td>5 3.33%</td>
<td>25 16.67%</td>
<td>42 28.00%</td>
<td>49 32.67%</td>
<td>29 19.33%</td>
</tr>
<tr>
<td>uncertainties of the outcomes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q15: Our municipality is characterised by compromises among the</td>
<td>6 4.00%</td>
<td>19 12.67%</td>
<td>47 31.33%</td>
<td>49 32.67%</td>
<td>29 19.33%</td>
</tr>
<tr>
<td>conflicting demands of office bearers, government, management,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>customers, employees, suppliers, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q16: Our municipality is characterised by steady growth and stability</td>
<td>3 2.00%</td>
<td>19 12.67%</td>
<td>31 20.67%</td>
<td>67 44.67%</td>
<td>30 20.00%</td>
</tr>
<tr>
<td>as primary concerns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q17: Our municipal structure is flat to facilitate the fluid flow of</td>
<td>8 5.33%</td>
<td>30 20.00%</td>
<td>31 20.67%</td>
<td>49 32.67%</td>
<td>32 21.33%</td>
</tr>
<tr>
<td>communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8: Proactiveness construct

The responses to the questions relating to proactiveness lean towards agreement (59%; 63%; 52%; 52%; 65%; 54% respectively). Highest agreement was with Q16 (Our municipality is characterised by steady growth and stability as primary concerns) and Q13 (Our municipality is characterised by active search for big opportunities). Fluid communication does not seem to be present in all municipalities.
(b) Distribution

![Distribution Chart]

Figure 12: Distribution

The distribution of the responses is skewed towards the right hand side. The responses peaked on agree; however, the responses for strongly agree and strongly disagree skew this picture.

(c) Mean and standard deviation

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.5622222</td>
</tr>
<tr>
<td>Std Dev</td>
<td>0.8138773</td>
</tr>
<tr>
<td>Std Err Mean</td>
<td>0.0664528</td>
</tr>
<tr>
<td>Upper 95% Mean</td>
<td>3.6935338</td>
</tr>
<tr>
<td>Lower 95% Mean</td>
<td>3.4309106</td>
</tr>
<tr>
<td>N</td>
<td>150</td>
</tr>
</tbody>
</table>

The mean is at 3.5 and the standard deviation is at 0.81, acceptable levels.
4.5 Results Pertaining to Hypothesis 1:

There is a positive relationship between elements of entrepreneurial orientation (innovation, risk taking, proactiveness) and organisational structures of municipalities in South Africa.

Results of the respondents

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational structure</td>
<td>N</td>
<td>% of Total</td>
<td>N</td>
<td>% of Total</td>
<td>N</td>
</tr>
<tr>
<td>Q18: Our reporting structure does not hinder the ease and speed with which we approve new projects and exploit market opportunities</td>
<td>6</td>
<td>4.00%</td>
<td>24</td>
<td>16.00%</td>
<td>40</td>
</tr>
<tr>
<td>Q19: Our structure is process-based and cuts across all silos in order to maximise our chances at opportunity identification and exploitation</td>
<td>4</td>
<td>2.67%</td>
<td>24</td>
<td>16.00%</td>
<td>51</td>
</tr>
<tr>
<td>Q20: Communication in our reporting structure is both top-down and down-up</td>
<td>6</td>
<td>4.00%</td>
<td>17</td>
<td>11.33%</td>
<td>45</td>
</tr>
<tr>
<td>Q21: Our municipal structure enhances genuine employee empowerment</td>
<td>11</td>
<td>7.33%</td>
<td>25</td>
<td>16.67%</td>
<td>27</td>
</tr>
<tr>
<td>Q22: The empowering environment encourages employee creativity and innovativeness</td>
<td>6</td>
<td>4.00%</td>
<td>19</td>
<td>12.67%</td>
<td>31</td>
</tr>
</tbody>
</table>

Table 9: Organisational Structure construct

The majority of the respondents scored between neutral and strongly agree, the question that received the highest number of responses is Q22 (The empowering environment encourages employee creativity and innovativeness) whereas Q20 (Communication in our reporting structure is both top-down and down-up) received the least. On the other hand, Q21 (Our municipal structure enhances genuine employee empowerment) received the highest number of responses that disagree and strongly disagree.
(a) Distribution

![Distribution Graph](image)

**Figure 13: Distribution**

The graphical distribution curve indicates the trends in responses for the various questions. The graph has a number of areas where it peaks and areas where it is low.

(b) **Mean and standard deviation**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.562667</td>
</tr>
<tr>
<td>Std Dev</td>
<td>0.9094247</td>
</tr>
<tr>
<td>Std Err Mean</td>
<td>0.0742542</td>
</tr>
<tr>
<td>Upper 95% Mean</td>
<td>3.709394</td>
</tr>
<tr>
<td>Lower 95% Mean</td>
<td>3.4159394</td>
</tr>
<tr>
<td>N</td>
<td>150</td>
</tr>
</tbody>
</table>
4.6 Results Pertaining to Hypothesis 2:

There is a positive relationship between organisational culture and elements of entrepreneurial orientation (innovation, risk taking, proactiveness) within municipalities in South Africa.

Results of the respondents

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construct: Organisational culture</strong></td>
<td>N % of Total</td>
<td>N % of Total</td>
<td>N % of Total</td>
<td>N % of Total</td>
<td>N % of Total</td>
</tr>
<tr>
<td>Q23: The culture of our municipality is one that encourages the entrepreneurial “seed” in employees to blossom</td>
<td>7 4.67%</td>
<td>28 18.67%</td>
<td>37 24.67%</td>
<td>42 28.00%</td>
<td>36 24.00%</td>
</tr>
<tr>
<td>Q24: Our municipal culture is built upon the cornerstone of clearly defined values and ethics</td>
<td>2 1.33%</td>
<td>20 13.33%</td>
<td>34 22.67%</td>
<td>48 32.00%</td>
<td>46 30.67%</td>
</tr>
<tr>
<td>Q25: Our municipal values are clearly understood and practised by our employees</td>
<td>5 3.33%</td>
<td>25 16.67%</td>
<td>37 24.67%</td>
<td>46 30.67%</td>
<td>37 24.67%</td>
</tr>
<tr>
<td>Q26: Our municipality is never complacent about our successes in the province/district. We guard against “we are indispensable” mind-set</td>
<td>4 2.68%</td>
<td>22 14.77%</td>
<td>49 32.89%</td>
<td>44 29.53%</td>
<td>30 20.13%</td>
</tr>
<tr>
<td>Q27: The ultimate goal of our municipal culture is to have entrepreneurship as the life-blood of our municipality</td>
<td>6 4.00%</td>
<td>19 12.67%</td>
<td>51 34.00%</td>
<td>43 28.67%</td>
<td>31 20.67%</td>
</tr>
</tbody>
</table>

Table 10: Organisational culture

The table indicates that Q24 (Our municipal culture is built upon the cornerstone of clearly defined values and ethics) received the highest percentage (63%) of responses for respondents who agree and strongly agree, Q23 (The culture of our municipality is one that encourages the entrepreneurial “seed” in employees to blossom) received the highest level of disagreement.
(a) Distribution

Figure 14: Distribution

As a result of the varying manner in which responses were spread, the distribution of the scores seem to be bimodal with two peaks on the score of between 3.0 and 3.5 as well as between 4.0 and 4.5. There is no representation on the score of 1.5 and 2.0.

(b) Mean and standard deviation

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.5613333</td>
</tr>
<tr>
<td>Std Dev</td>
<td>0.8656601</td>
</tr>
<tr>
<td>Std Err Mean</td>
<td>0.0706808</td>
</tr>
<tr>
<td>Upper 95% Mean</td>
<td>3.7009996</td>
</tr>
<tr>
<td>Lower 95% Mean</td>
<td>3.421667</td>
</tr>
<tr>
<td>N</td>
<td>150</td>
</tr>
</tbody>
</table>
4.7 Results Pertaining to Hypothesis 3:

Rewards are positively related to elements of entrepreneurial orientation (innovation, risk taking, proactiveness) for municipalities of South Africa

Results of the respondents

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q28: My manager helps me get my work done by removing obstacles</td>
<td>6</td>
<td>14</td>
<td>38</td>
<td>53</td>
<td>39</td>
</tr>
<tr>
<td>Q29: The rewards I receive are dependent upon my work on the job.</td>
<td>9</td>
<td>10</td>
<td>33</td>
<td>60</td>
<td>38</td>
</tr>
<tr>
<td>Q30: My supervisor will increase my job responsibilities if I am performing well in my job.</td>
<td>8</td>
<td>20</td>
<td>31</td>
<td>48</td>
<td>43</td>
</tr>
<tr>
<td>Q31: My supervisor will give me special recognition if my work performance is especially good</td>
<td>8</td>
<td>14</td>
<td>26</td>
<td>56</td>
<td>46</td>
</tr>
<tr>
<td>Q32: My manager would tell his/her superior if my work was outstanding</td>
<td>10</td>
<td>15</td>
<td>34</td>
<td>43</td>
<td>48</td>
</tr>
<tr>
<td>Q33: There are lot of challenges in my job.</td>
<td>2</td>
<td>11</td>
<td>21</td>
<td>51</td>
<td>65</td>
</tr>
</tbody>
</table>

Table 11: Rewards construct

The responses from the participants reflect that the questions that received a highest number of agreeing responses were to Q33 (There are a lot of challenges in my job) at 77% and to Q31 (My supervisor will give me special recognition if my work performance is especially good) at 68%.

Q30 (My supervisor will increase my job responsibilities if I am performing well in my job) and Q32 (My manager would tell his/her superior if my work was outstanding) received the highest number of negative responses (19% and 17% respectively).
(a) Distribution

![Distribution Curve]

Figure 14: Distribution

The distribution curve for rewards is skewed to the right with most of the respondent scored between 3.0 and 5.5. The curve does not represent the normal distribution curve.

(b) Mean and standard deviation

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.7766667</td>
</tr>
<tr>
<td>Std Dev</td>
<td>0.7928253</td>
</tr>
<tr>
<td>Std Err Mean</td>
<td>0.0647339</td>
</tr>
<tr>
<td>Upper 95% Mean</td>
<td>3.9045817</td>
</tr>
<tr>
<td>Lower 95% Mean</td>
<td>3.6487516</td>
</tr>
<tr>
<td>N</td>
<td>150</td>
</tr>
</tbody>
</table>

The mean and the standard deviation of the construct rewards have a score of 3.77 and 0.79 respectively.
4.8 CORRELATIONS

The results of the study indicate the correlations as indicated below; these are depicted through the nonparametric Spearman’s $\rho$.

**Nonparametric: Spearman's $\rho$**

| Variable by Variable | Spearman $\rho$ | Prob>|$\rho$< |
|----------------------|-----------------|------------------|
| Risk score           | Innovation score| 0.5223           | <.0001*         |
| Pro-active score     | Innovation score| 0.5267           | <.0001*         |
| Pro-active score     | Risk score      | 0.7702           | <.0001*         |
| Organisational structure score | Innovation score | 0.5915 | <.0001*         |
| Organisational structure score | Risk score | 0.6642 | <.0001*         |
| Organisational structure score | Pro-active score | 0.7339 | <.0001*         |
| Organisational culture score | Innovation score | 0.5762 | <.0001*         |
| Organisational culture score | Risk score | 0.7522 | <.0001*         |
| Organisational culture score | Pro-active score | 0.7665 | <.0001*         |
| Organisational culture score | Organisational structure score | 0.8287 | <.0001*         |
| Rewards score        | Innovation score| 0.4010           | <.0001*         |
| Rewards score        | Risk score      | 0.4879           | <.0001*         |
| Rewards score        | Pro-active score| 0.4611           | <.0001*         |
| Rewards score        | Organisational structure score | 0.5923 | <.0001*         |
| Rewards score        | Organisational culture score | 0.6042 | <.0001*         |

**Table 12: Spearman’s $\rho$**

The Spearman’s $\rho$ indicates the correlations between the six constructs, i.e. risk, innovation, proactiveness, organisational structure, organisational culture and rewards. The correlations are for each variable against the other five variables. This provides a holistic picture of the correlations that exists between the set variables.

Furthermore, the findings also indicate the associated probability value for each of the correlations of the various variables.
4.9 Findings of the Regression Analysis

Response Innovation Score

Whole Model

Actual by Predicted Plot

Figure 14: Innovation

The above graph indicates the actual predicted regression score for the construct innovation to organisational structure, organisational culture and rewards. The overall predicted innovation score is P<.0001 and the RSq=0.38. The graph also indicates the plotting of scores from participants.

4.9.1 Summary of Fit

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSquare</td>
<td>0.478611</td>
</tr>
<tr>
<td>RSquare Adj</td>
<td>0.365843</td>
</tr>
<tr>
<td>Root Mean Square Error</td>
<td>0.593485</td>
</tr>
<tr>
<td>Mean of Response</td>
<td>3.899556</td>
</tr>
<tr>
<td>Observations (or Sum Wgts)</td>
<td>150</td>
</tr>
</tbody>
</table>
The findings indicate that the R square is 0.47 which is acceptable, the score is accompanied by a mean response of 3.8 which is closer to 4. The R square adjustment is at a score of 0.36.

### 4.9.2 Analysis of Variance (ANOVA)

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F Ratio</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>3</td>
<td>31.332978</td>
<td>10.4443</td>
<td>29.6525</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>146</td>
<td>51.424770</td>
<td>0.3522</td>
<td>0.0001*</td>
<td></td>
</tr>
<tr>
<td>C. Total</td>
<td>149</td>
<td>82.757748</td>
<td></td>
<td></td>
<td>&lt;.0001*</td>
</tr>
</tbody>
</table>

The Analysis of variance results indicate that the \( p \) value score is <.0001. The mean square is 10.4443 whilst the total sum of squares is 82.75.

### 4.9.3 Parameter Estimates

| Term                   | Estimate  | Std Error | t Ratio | Prob>|t| | Std Beta | VIF |
|------------------------|-----------|-----------|---------|------|-------|---------|-----|
| Intercept              | 1.8751942 | 0.248517  | 7.55    | <.0001* | 0     | .      |
| Organisational structure score | 0.2430989 | 0.094225  | 2.58    | 0.0109* | 0.296646 | 3.1061907 |
| Organisational culture score | 0.2630938 | 0.102179  | 2.57    | 0.0110* | 0.305595 | 3.3097013 |
| Rewards score          | 0.058601  | 0.079232  | 0.74    | 0.4607 | 0.062341 | 1.6692765 |

The scores of the parameter estimates are 1.8 intercept with organisational structure score at 0.24 and organisational culture at 0.26. The score the variable rewards is 0.05. The probability t-test for the intercept is <.0001.
4.9.4 Residual by Predicted Plot

Figure 14: Innovation residual

The innovation score residuals are plotted against the straight line and present between 0.0 and 1.5 and well as between 0.0 and -2.5. The predicted innovation score ranges between 3 and 5.
4.9.5 Organisational structure score

Leverage Plot

Figure 15: Organisational residual

The leverage plot is a reflection of the innovation score leverage residual and organisational structure score leverage. The latter’s score is P=0.0109 and the plotting results are spread both above and below the straight line.
4.9.6 Organisational culture score

Leverage Plot

Figure 16: Leverage Plot innovation/organisational culture

The organisational culture score leverage is $P=0.0110$, the plotting scattered above and below the straight line. There are also some outliers.
4.9.7 Rewards score

Leverage Plot

Figure 17: Leverage plot innovation/rewards

The leverage plot score for innovation and rewards is $P=0.4607$. The responses are scattered above and below the straight line with few outliers mainly below the straight line. The lowest outlier is innovation score residual of 2.0 and the highest is on 5.5.
4.9.8 Prediction Profiler

Figure 18: Innovation and three factors regression analysis

The prediction profiler indicates the regression analysis of innovation to organisational structure, organisational culture and rewards. The score for innovation is 3.89, organisational structure is 3.56, organisational culture is 3.56 and rewards are at 3.77. The prediction profiler also provides a graphical depiction of the three independent variables to innovation as a dependent variable.
4.9.9 Response Risk score

Whole Model

Actual by Predicted Plot

Figure 18: Risk score

The findings on the whole model is that the risk score predicted is $P<0.001$ with RSq of 0.60 and RMSE=0.5272. The responses are plotted above and below the straight line, with a few outliers.

Summary of Fit

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSquare</td>
<td>0.604119</td>
</tr>
<tr>
<td>RSquare Adj</td>
<td>0.595984</td>
</tr>
<tr>
<td>Root Mean Square Error</td>
<td>0.527197</td>
</tr>
<tr>
<td>Mean of Response</td>
<td>3.528</td>
</tr>
<tr>
<td>Observations (or Sum Wgts)</td>
<td>150</td>
</tr>
</tbody>
</table>

The summary fit of the model is represented by the Rsq of 0.60 and a mean of responses of 3.5.
Analysis of Variance (ANOVA)

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F Ratio</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>3</td>
<td>61.92362</td>
<td>20.6412</td>
<td>74.2658</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>146</td>
<td>40.57878</td>
<td>0.2779</td>
<td></td>
<td>Prob &gt; F</td>
</tr>
<tr>
<td>C. Total</td>
<td>149</td>
<td>102.50240</td>
<td></td>
<td></td>
<td>&lt;.0001*</td>
</tr>
</tbody>
</table>

The ANOVA score for the variable risk is a p <.0001 which is regarded as good and an indicator that there is a good fit. The level of accuracy is significant.

Parameter Estimates

| Term                      | Estimate | Std Error | t Ratio | Prob>|t| | Std Beta | VIF |
|---------------------------|----------|-----------|---------|------|-----|----------|------|
| Interception              | 0.8298013| 0.220759  | 3.76    | 0.0002* | 0  |          |      |
| Organisational structure  | 0.2003579| 0.0837    | 2.39    | 0.0179* | 0.219684 | 3.1061907 |
| Organisational culture    | 0.5695056| 0.090767  | 6.27    | <.0001* | 0.59439 | 3.3097013 |
| Rewards                   | -0.0116  | 0.070383  | -0.16   | 0.8693 | -0.01109 | 1.6692765 |

The parameter estimates score for the intercept is 0.0002, for the organisational structure it is 0.0179, and organisational culture is <.0001 and for rewards it is 0.8693. With regard to the T-ratio, organisational culture scored 6.27 which is the highest and rewards scored -0.16 which is the lowest amongst the three variables.
4.9.10 *Residual by Predicted Plot*

![Residual by Predicted Plot](image)

**Figure 19: Risk predicted/residual**

The Risk score residual and risk score predicted is plotted between the straight line; in both instances there are a number of outliers. Above the straight line, there is one outlier which is high and aligned to 2.0 on the graph, whilst the lowest is at -1.5 of the graph.
4.9.11 Organisational structure score

Leverage Plot

Figure 20: Risk taking /organisational structure

The organisational structure score leverage is $P=0.0179$. The leverage plot has a few outliers, especially above the straight line. The scores are leaning more around 3.0 and 4.5 on the graph.
4.9.12 Organisational culture score

Leverage Plot

Figure 21: Risk residual/organisational culture

The leverage score for organisational culture is $P<0.0001$. The scores of the respondents are mainly plotted between 3.0 and 4.5. The majority of the outliers are found above the straight line, one along the 2.5 score and the others along the 5.5 score.
4.9.13 Rewards score

Leverage Plot

Figure 22: Risk residual/rewards

The rewards score leverage is $P=0.8693$ and the respondents scores are mainly plotted between 3.0 and 4.5 with a few outliers. The line depicting the rewards is closely aligned with the straight line.
4.9.14 Prediction Profiler

Figure 23: Risk versus 3 factors

The prediction profiler for risk is 3.52 on organisational structure which is 3.56, organisational culture at 3.56 as well as rewards at 3.77.

Response Pro-active score
Whole Model
Actual by Predicted Plot

Figure 24: Proactiveness
The proactive score predicted is P<.0001 with Rsq=0.66 and RMSE=0.4826. The responses are spread above and below the straight line. The pro-activeness actual score is also reflected by the red line which at 90 degrees.

**Summary of Fit**

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F Ratio</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>3</td>
<td>64.699652</td>
<td>21.5666</td>
<td>92.6164</td>
<td>&lt;.0001*</td>
</tr>
<tr>
<td>Error</td>
<td>146</td>
<td>33.997385</td>
<td>0.2329</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Total</td>
<td>149</td>
<td>98.697037</td>
<td>0.2329</td>
<td></td>
<td>&lt;.0001*</td>
</tr>
</tbody>
</table>

The fit of the model is depicted by the R square score of 0.655 accompanied by a mean of response which is at 3.56.

**Analysis of Variance (ANOVA)**

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F Ratio</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>3</td>
<td>64.699652</td>
<td>21.5666</td>
<td>92.6164</td>
<td>&lt;.0001*</td>
</tr>
<tr>
<td>Error</td>
<td>146</td>
<td>33.997385</td>
<td>0.2329</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Total</td>
<td>149</td>
<td>98.697037</td>
<td>0.2329</td>
<td></td>
<td>&lt;.0001*</td>
</tr>
</tbody>
</table>

The analysis of variance is prob <.0001 with a total of sum squares of 98.697 and a mean square of 21.56 for the model. The mean error of the model is 0.23.

**Parameter Estimates**

| Term                          | Estimate | Std Error | t Ratio | Prob>|t| | Std Beta | VIF |
|-------------------------------|----------|-----------|---------|--------|----------|-------|
| Intercept                     | 0.9416056| 0.202065  | 4.66    | <.0001*| 0        |       |
| Organisational structure score| 0.3544521| 0.076613  | 4.63    | <.0001*| 0.396064 | 3.1061907|
| Organisational culture score  | 0.4781748| 0.083081  | 5.76    | <.0001*| 0.508599 | 3.3097013|
| Rewards score                 | -0.091382| 0.064423  | -1.42   | 0.1582 | -0.08902 | 1.6692765|

The parameter estimates of the organisational structure and organisational culture are both at p <.0001, whereas, rewards is at 0.1582. The score for intercept is also at p <.0001.
4.9.15 Residual by Predicted Plot

The residual by predicted plot indicates that the responses were spread above and below the straight line. For both residual and predicted, the responses range between 2.5 and 4.5 on the continuum.
4.9.16 Organisational structure score

Leverage Plot

The leverage plot on organisational structure produced a score of $p<.0001$, which is supported by the clustering of responses around 3.5 and 4.0. The number of outliers to the left of the continuum are fewer compared to those on the right of the graph.

Figure 26: Po-active/organisational structure
**4.9.17 Organisational culture score**

Leverage Plot

![Leverage Plot](image)

**Figure 26: Pro-active residual/organisational culture**

The organisational culture score leverage is $p<.0001$, the majority of the responses are cluttered around the score of 3.0 and 4.0. There are few outliers above and below the straight line.
4.9.18 Rewards score

Leverage Plot

Figure 27: Pro-active residual/rewards

With regard to the leverage plot, the rewards score is $p=0.1582$, the majority of the respondents’ scores are clustered around 3.0 and 4.0. The rewards line is downward sloping starting above the straight line and crossing below it.
4.9.19 Prediction Profiler

Figure 27: Pro-active versus 3 factors

The prediction profiler score for pro-activeness is 3.56, and on organisational structure is 3.56, while organisational culture is 3.56 and rewards is at 3.77. The graphical depictions for both organisational structure and culture are upward sloping, while rewards are downward sloping.
CHAPTER 5: DISCUSSION OF THE RESULTS

The purpose of this chapter discusses and explains the results of the research study as it relates to the literature review that was presented in Chapter 2 of the report. The chapter will first deal with the demographic profile of the respondents and follow through on the different propositions and hypotheses that were intended to be tested.

5.1 Demographic profile of the respondents

The results of the survey indicated that the majority of the respondents possessed post-Matric qualifications. Only 3% of the respondent did not have a Matric qualification. This was expected based on the fact that these individuals had extensive experience in local government and been promoted to managerial positions based on their work experience. The gender of the respondents is mainly males, this can be attributed to statistics that indicate that a sizeable number of males occupy managerial positions compared to their female counterparts.

The age of the majority of respondents is between the ages of 20-40 years, which is an indication that local government’s workforce is fairly young. This is further confirmed by the years of service of the respondents which ranges between 5 and 10 years. It was also noted that the majority of respondents were Africans at 84% compared to other racial groups which comprised of Whites, Asians and Coloureds, represented at a combined 16%. This figure is aligned to the census statistics of South Africa which records Africans to be the highest population in the country (Stats SA, 2011). The census report (Stats SA, 2011) records that provincial the racial census are as follows; Limpopo (there are approximately 5.2 million Africans; 14 000 coloureds, 17 500 Asians; 139 000 whites), Gauteng (there are approximately 9.4 million Africans; 423 000 coloureds; 356 000 Asians and 1.9million whites) and North West (there are approximately 3.1 million Africans; 71 000 coloureds; 20 000 Asians and 255 000 whites). The aforementioned statistics affirms the respondents’ sample that was received for the study.

Furthermore, the majority of the respondents were from Gauteng province at 63% whilst 33% of the other respondents were from Limpopo and the remainder at 3% were from North West. This skewedness may be attributed to the fact that Gauteng province has three metros and although it is
geographically small it has a number of strong local and district municipalities compared to the other two provinces.

5.2 Discussion of the Proposition 1: Innovation

One of the core elements of corporate entrepreneurship is reflected by the level of innovation that an organisation displays and is able to sustain ahead of its competitors; hence these organisations are underpinned by inventions of products, services and processes (Drucker, 1979). The outcome of the study indicates that the majority of the respondents affirm that there is a certain level of innovation occurring in their various municipalities. This is indicated by a total response of 79.93% who agreed that new services exist in South African local government. The overall mean for innovation is 3.89 with a standard deviation of 0.74, which is above the norm. The distribution of the results for innovation is also skewed towards the scores of between 3.0 and 5.0 which indicates that middle managers’ perception is that there are noticeable levels of innovation within the municipalities.

The outcome of the aforementioned results is aligned to the argument of Rwigema et al. (2010) that enterprising is no longer a practice unique to private sector organisations, but that the public sector organisations need it. The results also affirm that innovation can take the form of new or improved services (Kuratko et al., 2007), which may have an impact on the performance of an organisation (Dess & Lumpkin, 2005). Although the outcome of the study found that there are levels of innovation in municipalities which is consistent with research studies of other scholars (Lwamba et al., 2013; Dess & Lumpkin, 2005; Kuratko et al., 2011; Gcaza & Urban, 2015) who found that an organisation’s innovativeness was positively related to performance, corporate venturing and it formed the core of entrepreneurship in the organisation, the results are contradicting the situation in the different municipalities. During 2012 – 2014 period, there was a spike in civic protests for service delivery wherein 30% occurred in Gauteng, 10% in North West and 6% in Limpopo (Powell, O’Donovan & De Visser, 2014). The report further indicate that 45% of the grievances behind the protest was municipal services in the form of water and electricity (de Wet & Moseki, 2013; Powell et al., 2014). The perception of levels of innovation is also not consistent with the outcome of the audits conducted by the Office of the Auditor General which mainly found that in the three provinces (Gauteng, North West and Limpopo) there was consistent mismanagement of
finance, high vacancy rate, instability in key positions and/or over reliance on consultants (AG, 2014).

Many theorists (Drucker, 1979; Kuratko et al., 2007; Kuratko et al., 2011) believe that innovation is critical for organisational success, especially in the private sector. The outcome of the study does not contest or refute the argument of theorists such as Tousterud (1999) and Ramamurti (1986) who indicated that innovation does not come naturally to public sector organisations. The scholars further asserted that it is difficult to measure innovation in public sector organisations due to the fact that there are many barriers to innovation.

The results of the study indicate that there is a certain level of innovation taking place in local government (municipalities) of South Africa. However, because of low communication levels, instability in key positions (AG, 2014) this innovation is not wide-spread. The starting point for corporate entrepreneurship is innovation which serves as an indication of an organisation’s entrepreneurial orientation. In most of successful organisations, innovation is driven from the top (Kuratko et al., 2011), the challenge of the municipalities in the three provinces is that the instability in key positions such as Municipal manager and executive positions makes it difficult to sustain and maintain the innovation levels.

5.3 Discussion of the Proposition 2: Risk taking

A number of participants agreed that risk taking characterised their municipality. A number of respondents affirmed that their municipality is characterised by risk-taking from key senior government officials in seizing and exploring risky growth opportunities. These responses indicate that within various municipalities, there are some risk-taking behaviours which scholars (Klomp & van Leeuwen, 2001; Calantone et al., 2002; Rauch et al., 2004; Casillas & Moreno, 2010; Gibb & Haar, 2010; Wang & Yen, 2012; Aloulou & Fayolle, 2005; Voss & Moorman, 2005, cited in Molokwa et al., 2013) indicated that it may include experimentation, taking calculated risks. Although the distribution curve is sparsely represented, there are a significant number of respondents who believe that there is some level of risk-taking behaviour in their municipality.

Some previous research studies (Lumpkin & Dess, 1996; Schillo, 2011; Ambad & Wahab, 2013) affirm that risk-taking is an important element of entrepreneurial orientation, Sadler (1999) and
Tosterud (1999) refuted this finding, especially for public service organisations. Risk-taking is considered a dangerous move which may result in disastrous consequences for the organisation and one that would not be welcomed by the taxpayers and other stakeholders (Sadler, 1999; Tosterud, 1999). Their studies (Sadler, 1999; Tosterud, 1999) further indicated that risk-taking should not have monetary implications, as it may be too costly for the state to bear. Research by scholars such as Gcaza & Urban (2015) found that there is no relationship between risking and any of the CE strategies. Nonetheless, the results of the study by middle managers in municipalities of Limpopo, Gauteng and North-West indicate that there are certain levels of risk-taking behaviour; this was affirmed by the mean of 3.5 and standard deviation of 0.82. According to Kuratko et al., (2011) one of the key aspects of risk taking is financial. The aforementioned results are contrary to the outcome of the audit reports which indicate that financial mismanagement (in the form of wasteful, irregular expenditures) continue to be challenges of municipalities in Gauteng, Limpopo and North West (AG, 2014). The report further indicates that some of the municipalities in North West have a challenge of financial viability due to poor financial management (AG, 2014), which is an indication of the deterioration of their financial muscle which is necessary for risk taking endeavours. Furthermore (Fourie, 2007; 2009) also indicates that the increasing patterns of fraud and corruption in the public service continue to erode the ability of the state organs to render effective services to its citizens. The view is also supported by researchers such as (Mafunisa, 2014) who advocate for improvement in ethical culture of public servants in dealing with fraud and corruption profile of the state.

5.4 Discussion of the Proposition 3: Pro-activeness

The responses relating to pro-activeness are mixed, in the sense that there are those respondents who disagree with the notion that there is pro-activeness in local government. Although the distribution curve indicates a peak on responses pertaining to neutral and agrees, there is a considerable number of respondents who do not agree. With regard to Q13 (Our municipality is characterised by active search for big opportunities), 17% of the respondents disagreed with the statement, this is a significant percentage. Notwithstanding the above, the majority of the respondents agreed and strongly agreed that their municipalities have a considerable level of pro-activeness. The outcome of the research is consistent with that of scholars such as Kearney et al., (2007, 2009), Malik and Mahmood (2012), Gcaza & Urban (2015) who found that being proactive
is the same for organisations in the private sector and those operating in the public sphere. It is believed that pro-activeness in the public sector requires the ability to interpret policies.

Although research indicates that pro-activeness is possible even in the public sector, other theorists (Ambad & Wahab, 2013; Tosterud, 1999; Ramamurti, 1986) indicated that there is no relationship between being proactive and the performance of an organisation; however, in instances where the environment is hostile and unfavourable, an organisation can still be proactive. One can, therefore, conclude that, in certain instances, pro-activeness is triggered by the environment it operates in.

5.5 Discussion of the Hypothesis 1: Organisational structure

The findings from the respondents indicated that there are certain questions that they agreed and disagreed with. A significant number of respondents indicated that they disagreed with Q20 (Communication in our reporting structure is both top-down and down-up), and this is one of the important elements of an entrepreneurial structure. Nonetheless, Q22 (The empowering environment encourages employee creativity and innovativeness) received positive response from the participants who indicated that they either agree or strongly agree with the statement. The overall mean for the variable organisational structure is 3.5 with a standard deviation of 0.90. These are significant and positive indication that the overall results of the variable are positive.

The Spearman’s correlation findings are that organisational structure is positively correlated to innovation, risk taking and pro-activeness with scores of 0.59; 0.66 and 0.73 respectively. With regard to regression analysis, the actual predicted regression score for the construct innovation to organisational structure, organisational culture and rewards, the overall predicted innovation score is P<.0001 and the RSq=0.47.

The findings indicate that the R square is 0.47 which is acceptable, the score is accompanied by a mean response of 3.8 which is closer to 4 with a p value score of <.0001. The mean square is 10.4443 whilst the total sum of squares is 82.75. Innovation score residual are plotted against the straight line and present between 0.0 and 1.5 and well as between 0.0 and -2.5. The predicted innovation score ranges between 3 and 5. The leverage plot is a reflection of innovation score leverage residual and organisational structure score leverage. The latter’s score is P=0.0109 and the plotting results are spread both above and below the straight line. The prediction profiler indicates
the regression analysis of innovation to organisational structure is 3.89 and organisational structure is at 3.56. Risk-taking scored 3.56 respectively with leverage score of $P=0.0179$ whilst pro-activeness also scored 3.56 with a leverage of $P<.0001$. This indicated that innovation is dependent on organisational structure.

The outcome of the study is similar to that of those by other authors (Firouzyar & Kojouri, 2013; Chen & Cangahuala, 2010; La Nafie et al., 2014) who also found that there was a positive relationship between organisational structure and corporate entrepreneurship. Employees who operate in these kinds of structures are entrepreneurial and have the ability to adapt to changing environmental conditions. The current research outcome affirmed the relationship that exists between organisational structure and CE, but it was silent on whether CE is fostered within and by organic or mechanistic structures. This outcome is contrary to the research findings of other theorists (Dermirci, 2013; Chigamba et al., 2014; Gargari, 2014; Cornwall & Perlman, 1990; Jennings, 2004; Slevin & Covin, 1990, cited in Malik & Mahmood, 2012) who found that CE thrives in an organic/flat structure because there are fewer bureaucracies, better cooperation, less complicated and faster communication. Furthermore, scholars such as Anderson et al., 2014, Potocnik and Zhou, 2014 argued that flat structures facilitate innovation. However, structures represented by hierarchies, with lower degrees of flexibility and formalisation tend to inhibit corporate entrepreneurship (Slevin & Covin, 1990, cited in Malik & Mahmood, 2012). Research conducted by other theorists such as Ireland et al., (2009) found that there was no relationship between entrepreneurial strategic vision and mechanistic structures. Although mechanistic structures are prevalent in traditional organisations such as the state (Paunovic, 2012), where introduction and implementation of corporate entrepreneurship is minimal, the outcome of this study contradicts this notion to some extent. This is evident by the medium to strong relationship of organisational structure and innovation displayed by their scores of 3.56 to 3.8 respectively.
2.6 Discussion of the Hypothesis 2: Organisational Culture

The respondents in this study mainly agreed with Q27 (*The ultimate goal of our municipal culture is to have entrepreneurship as the life-blood of our municipality*) and disagreed with Q23 (*The culture of our municipality is one that encourages the entrepreneurial seed in “seed” in employees to blossom*). The distribution of the results has two peaks which are aligned to the results achieved. The overall mean for the variable is 3.56 with an associated standard deviation of 0.86. The results indicate that the organisational culture has a significant role to play in introducing or implementing corporate entrepreneurship. The outcome of the Spearman’s correlations indicates that organisational culture is positively related to innovation; however, the relationship is moderate. Also, organisational culture is positively related to risk-taking, and the relationship is medium to strong, and same applies to organisational culture and pro-activeness with a score of 0.76. The outcome of the regression analysis is that, the organisational culture score leverage to innovation is \( P=0.0110 \), the prediction profiler indicates the regression analysis of innovation to organisational culture to be 3.56 with a leverage score of \( P=0.0110 \), risk-taking is scored at 3.5 with leverage value of \( P<.0001 \), while pro-activeness is also scored the same at 3.5 with leverage value of \( P<.0001 \).

Empirical research by various scholars (Beheshtifar & Shariatifar, 2013; Ahmad *et al.*, 2011; Mokua & Ngugi, 2013; Zhara & Covin 1995; Yiu & Lau, 2008; Urban, Barreira & Nkosi, 2012; Steffens, Davidsson, Fitzsimmons, 2009) found that organisational culture is significantly related to corporate entrepreneurship and that intrapreneurship thrives in an organisation that is socially stable. According to Yildiz (2014), organisational culture is a necessary condition for the introduction and implementation of corporate entrepreneurship. On the other hand, scholars such as Ramamurti (1986, cited in Kuratko *et al.*, 2011) argued that organisational culture in the public service is characterised by multiplicity and ambiguity of goals as well as lack of accountability amongst managers for innovation which makes it difficult for the introduction and sustainability of corporate entrepreneurship. The results of the study is contrary to this notion and well as the number of oversight reports that were presented lately. Although, the results indicate that within municipalities, there is a certain degree of innovation, risk-taking and pro-activeness, however, some oversight reports (COGTA,2009) indicates that in the local government there are cultures of ineffective public service, compounded by lack of financial management (AG,2014). This finding is further supported by the report on increasing wasteful and irregular expenditures by some of the
municipalities (AG, 2013) as well as non-performance or attainment of set strategic objectives (AG, 2014). Furthermore, an assessment of the Strategic plan documents or Integrated Development Plans of some of the municipalities in Gauteng, North West and Limpopo does not include entrepreneurial culture as a value or embedded in the mission or vision statements. Thus the culture that exists within the different municipalities can either encourage/enhance corporate entrepreneurship.

5.7 Discussion of the Hypothesis 3: Rewards

The outcome of the study indicates that rewards are important for an organisation. Most of the participants agreed strongly with Q29 (The rewards I receive are dependent upon my work on the job), while Q32 (My manager would tell his/her superior if my work was outstanding) received a considerable number of disagree or strongly disagree comments. The overall mean for the variable is 3.77 with a standard deviation of 0.79. With regard to the outcome of correlations, innovation, risk-taking and pro-activeness scored 0.40, 0.48 and 0.46 respectively. This indicates that though there is positive correlation, it is not significant. The outcome of the regression analysis indicates that the prediction profiler of innovation to rewards is 3.77 for innovation, risk-taking and pro-activeness. However, their leverage scores differ, innovation is P=0.4607, risk-taking is P=0.8693 whilst pro-activeness is P<.1582.

The outcome of the study refutes the results found by other theorists (La Nafie et al., 2014; Shahnazari, 2013; Firouzyar & Kojouri, 2013; Hornsby & Kuratko, 2011) which asserted that reward systems are positively related to corporate entrepreneurship. Also, Ahmad et al. (2011) found that the appropriate rewards have a direct influence on employees’ behaviour towards corporate entrepreneurship. Although a study by Chen and Cangahuala (2012) found that there is a positive relationship between rewards and innovation as well as organisational performance, the results of the current study do not strongly confirm this outcome. The possible explanation of these results is that there do not seem to be proper reward systems linked to innovation, risk-taking and pro-activeness (Younhee, 2007, cited in Malik & Mahmood, 2012) in the public sector and this lack discourages entrepreneurial behaviour. However, it could also be that management attitude towards risk as well as employees’ perception of possible punishment for failed attempts (Ghina & Permana, 2011) makes it difficult for corporate entrepreneurship to flourish in public service
organisations. Furthermore, recent study by Walker (2013) also confirmed that although rewards systems are positively related to elements of entrepreneurial orientation, their importance is moderate, whereas in other studies (Urban & Oosthuizen, 2009) it was found that there was no correlation between rewards and innovation.

Furthermore, it is argued that the public sector is mainly about the control of resources, maintenance of order and accountability to the electorate; therefore, the approach to using available resources is more conservative (Paunovic, 2012), as opposed to being innovative. Corporate entrepreneurship is driven by a culture that recognises and acknowledges failure as part of its evolution and a good reward system can assist in igniting innovation, risk-taking and pro-activeness, and as such employees will be able to display entrepreneurial drive. Reward systems are beneficial for an organization that intends to explore corporate entrepreneurship, however, they are not the defining technique, and they are preceded by other internal factors such as organisational structure and culture.
CHAPTER 6: CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

This chapter will provide an outline of the conclusions reached regarding the study and indicate the different implications for academic practitioners, policymakers in local government and top managers who are considering the introduction of corporate entrepreneurship in the public sector. The chapter will conclude with recommendations for future research.

6.1 Conclusions of the Study

The study was intended to provide an assessment of the internal state of the South African public sector (local government) and its readiness or willingness to implement corporate entrepreneurship. The approach was to review the level of innovation, risk-taking and pro-activeness in relation to the internal environment (organisational structure, organisational culture and rewards) of municipalities. The purpose was to test whether these internal factors affected the three dimensions of entrepreneurial orientation and thereby hinder or foster corporate entrepreneurship.

The outcome of the study is that there seems to be a certain level of innovativeness, risk-taking and pro-activeness in local government of South Africa. Furthermore, the results also proved that there is a positive and strong relationship between organisational structure and the three EO dimensions. It should, however, be noted that this outcome did not differentiate between the types of structures that existed in the municipality. With regard to organisational culture and the three EO dimensions, the results confirmed that there is a strong and positive relationship between the variable. It was also confirmed that organisational culture is the imperative internal factor that can foster or inhibit corporate entrepreneurship. The relationship between the variables was significant and is aligned to many previous research studies which found that organisational culture is positively related to innovation, risk-taking and pro-activeness. Finally the variable of rewards in relation to innovation, risk taking and pro-activeness found that although there is a relationship, it is not significant. The outcome of the study affirmed that there is a weak relationship between these variables. This can be attributed to the notion that within the public sector, there is a low degree or no tolerance for failure and given the fact that the administration is accountable to the electorate; there is a high degree of conservativeness. Also, there does not seem to be appropriate reward systems linking to entrepreneurial activities.
Although the outcome of the research indicates that EO elements are related to internal factors such as organisational structure, culture and rewards, the consequence of this relationship does not translate into effective and improved service delivery. The oversight reports from institutions such as the Auditor General, National Treasury and COGTA indicates that there are service challenges which amongst others can be attributed to financial mismanagement, lack of capacity, lack of accountability, culture of non-performance. The effects of the external environmental factors also contribute to the existing challenges in the municipalities. Political changes in the local government has an effect on the administration of some of the municipalities (COGTA, 2009). In certain instances the lack of proper interface between political office bearers and administration also contribute to the challenges that prevail in some of the municipalities (COGTA, 2009).

Given the above, one can therefore conclude that, corporate entrepreneurship is possible in all spheres be it public or private sector, however, it is dependent on the prevailing internal factors whether they are geared towards enhancement or prohibition of employee entrepreneurial activity. Although the research study by Bosma et al., (2013) indicate that South Africa is one of the lowest regarding the presence of EEA, the current research outcome indicates that CE is possible even within a local government setting. The deliberate introduction and implementation of corporate entrepreneurship will assist in addressing the quality of services to the citizens of the country thereby decrease the prevailing service delivery protests and the costs associated with them.
6.2 Implications and Recommendations

The concept of corporate entrepreneurship is fairly new and a number of organisations can benefit from introducing and implementing it. The SA public sector can reap a lot of benefits such as solving service delivery problems, restoring the image of local government and creating confidence in the sector by the public. The implications of the study are as follows;

(a) Policymakers

The study has implications for policymakers in local government in that it challenges the mode of operation that has been applied in rendering services to the public. The policies of local government need to be aligned to accommodate and encourage the emergence of corporate entrepreneurship. There is a need to review the organisational development practices pertaining to formulation of structures which will potentially eliminate bureaucracies, unnecessarily long chains of command, delayed communication channels and long decision-making protocols. It is recommended that the different types of corporate entrepreneurship such as sustained regeneration, organisational rejuvenation, strategic renewal and domain redefinition (Kuratko et al., 2011) should be explored and customised to the specific and different needs of municipalities. With regard to the promotion of an entrepreneurial culture, an approach of inculcating this type of culture should be found. As a critical part of corporate entrepreneurship, tolerance for failure should form a major part of the municipal culture when trying to encourage an entrepreneurial and innovative (problem-solving) spirit; this in turn should be aligned to an efficient reward system that needs to be put in place.

(b) Managers in municipalities

Although policymakers will have the bigger responsibility in developing relevant and necessary policies, the results can be achieved through the implementers who are managers within the different municipalities. More so, municipal managers are faced with the challenge of service delivery protests which put pressure on their organisations. There is a need for them to find and implement alternative solutions to the challenges they are facing. It is, therefore, recommended that the outcome of the study be taken into consideration by municipal management, especially when new strategies are forged. As an alternative to the traditional mode of operating, corporate entrepreneurship can be introduced in the coal face of service delivery departments. It is vital that
experiences of the participants be documented with the view of identifying lessons and areas of potential improvement.

(c) Academic practitioners

The introduction and implementation of corporate entrepreneurship in South Africa is still at its infancy, particularly in the public sector. It is recommended that more research be done in this field focusing on the public sector, as this sector is plagued with many challenges and sustainable solutions are required.
6.3 Suggestions for Future Research

The research study needs to be extended further within the public service (local government). Given that the study only focused on the three dimensions of EO in relation to organisational structure, culture and rewards, there is a need for further research on the following:

(a) External environmental conditions
   • Competitive intensity
   • Technological change
(b) Individual entrepreneurial cognitions
   • Beliefs
   • Attitudes
   • Values
(c) Entrepreneurial processes and behaviour
   • Opportunity recognition
   • Opportunity exploitation
(d) Entrepreneurial strategic vision
(e) Pro-entrepreneurship organisational architecture
   • Resources/capabilities

It is further recommended that the study should be extended to all provinces in South Africa on the same concepts that were tested by this study. The results of a country-wide study will prove valuable to policymakers, managers in local municipalities as well as academic practitioners.
REFERENCES


Pinchot III, G. (1985). Intrapreneuring: Why you don't have to leave the corporation to become an entrepreneur. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.


SALGA (2012). Annual Report


APPENDIX A

Letter to participants

To whom it may concern:

The government of the Republic of South Africa is faced with pressing expectations regarding basic services. After twenty (20) years into democracy, the local government is inundated with service delivery protests. Faced with shrinking budget allocation, the local government is still expected to provide the much needed services to a growing population. As such, alternative solutions such as implementation of Corporate Entrepreneurship are explored. It is against this background that a study to determine factors that constrain or enhance corporate entrepreneurship in the public sector will be conducted. The research study is part of the requirements of completing Masters in Entrepreneurship and New Venture Creation offered by the Wits Business School.

The information gathered by me in this research, will be held in strictest confidence and both the identity of the municipality analysed for this research and all respondents will be kept anonymous in the final research report.

Your participation in this study is voluntary and once again note that all data will be kept anonymous. However, it is expected that this research will be useful in not only adding to the academic body of knowledge, but also in assisting local government in understanding the challenges that affect the implementation of Corporate Entrepreneurship in the public sector.

Please complete the survey questionnaire at this link address.

Thanking you in advance.

Researcher:

Name: Linda Nkhumishe
APPENDIX B

RESEARCH QUESTIONNAIRE

For questions in the questionnaire, show your extent of agreement / disagreements that the following items are important in enhancing or inhabiting corporate entrepreneurship in your municipality. This section will utilise a five-point response scale ranging from strongly agree (with a score of 5) to strongly disagree (with a score of 1) where score 5 denotes an entrepreneurial organisation, while score 1 denotes a non-entrepreneur organisation.

SECTION A: BACKGROUND INFORMATION

1. Please indicate your gender
   [ ] Male          [ ] Female

2. Age
   [ ] 20 – 29          [ ] 30 – 39
   [ ] 40 – 49          [ ] 50 – 59          [ ] 60 and older

3. Race group
   [ ] African          [ ] White
   [ ] Coloured         [ ] Indian

4. Province
   [ ] Gauteng          [ ] North West
   [ ] Limpopo

5. Highest qualification obtained/passed
   [ ] Below matric     [ ] Matric
   [ ] Bachelor degree/ National Diploma
   [ ] B Tech/ Honours  [ ] M Tech/ Masters
   [ ] PHD

6. Length of service with the municipality
   [ ] Less than a year
   [ ] Two – five years
   [ ] Six to ten years
   [ ] Ten and more years

7. Your position/employment level in the municipality
   [ ] Top manager      [ ] Middle manager [ ] First level supervisor

8. How many employees are reporting to you directly
   [ ] 0           [ ] 1 – 5
   [ ] 6 – 10       [ ] 11 -15
   [ ] 16 and more
### Section 2

Please complete the following questionnaire on a scale of 1 to 5. 1 strongly disagree and 5 Strongly agree

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Our municipality has introduced new services in the past two (2) years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. These new services present modifications to existing services or extensions to existing services.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. These new services exist in South African local government</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Our municipality has introduced new operational processes compared with that of other municipalities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Our municipality is characterized by a high rate of new service introduction, compared to other municipalities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. Our municipality is characterized by an emphasis on continuous improvement in methods of service delivery.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Our municipality is characterized by risk taking from key senior government officials in seizing and exploring risky growth opportunities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Our municipality is characterized by a “live and let live” philosophy in dealing with competitors</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. Our municipality is characterized by seeking of unusual, novel solutions by senior government official to problems via the use of “idea people” brainstorming etc.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. Our municipality is characterized by a top management philosophy that emphasizes services, and prioritizing service delivery</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. Our municipality is characterized by a charismatic leader at the top</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. At our municipality, top level decision-making is characterized by: cautious, pragmatic, step-at-a-time adjustment to problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. Our municipality is characterized by active search for big opportunities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. Our municipality is characterized by large, bold decisions despite uncertainties of the outcomes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. Our municipality is characterized by compromises among the conflicting demands of office bearers, government, management, customers, employees,</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
16. Our municipality is characterized by steady growth and stability as primary concerns
17. Our municipal structure is flat to facilitate the fluid flow of communication;
18. Our reporting structure does not hinder the ease and speed with which we approve new projects and exploit market opportunities
19. Our structure is process-based and cuts across all silos in order to maximize our chances at opportunity identification and exploitation
20. Communication in our reporting structure is both top-down and down-up
21. Our municipal structure enhances genuine employee empowerment;
22. The empowering environment encourages employee creativity and innovativeness
23. The culture of our municipality is one that encourages the entrepreneurial seed in “seed” in employees to blossom
24. Our municipal culture is built upon the cornerstone of clearly defined values and ethics
25. Our municipal values are clearly understood and practiced by our employees;
26. Our municipality is never complacent about our successes in the province/district. We guard against “we are indispensable” mindset;
27. The ultimate goal of our municipal culture is to have entrepreneurship as the life-blood of our municipality
28. My manager helps me get my work done by removing obstacles
29. The rewards I receive are dependent upon my work on the job.
30. My supervisor will increase my job responsibilities if I am performing well in my job.
31. My supervisor will give me special recognition if my work performance is especially good
32. My manager would tell his/her superior if my work was outstanding
33. There are lot of challenges in my job.
### APPENDIX C

#### CONSISTENCY MATRIX

<table>
<thead>
<tr>
<th>Sub problem</th>
<th>Literature review</th>
<th>Hypotheses / Proposition</th>
<th>Sources of data</th>
<th>Type of data</th>
<th>Analysis</th>
</tr>
</thead>
</table>
There are levels of innovation in the municipalities of South Africa  
**Proposition 2**
There are levels of risk taking in the municipalities.  
**Proposition 3**
There are levels of proactiveness in the municipalities of South | Questionnaire | Online/Hand delivered responses | Statistical analysis |
| To measure the level of the municipality’s structure | Africa | Slevin & Covin 1990; Cornwall & Perlman, 1990; Jennings, 2004 cited in Malik & Mahmood, 2012 | Hypotheses | There is a positive relationship between elements of entrepreneurial orientation (innovation, risk taking and proactiveness) and organisational structures of municipalities in South Africa | Questionnaire | Online/Hand delivered responses | Statistical Analysis |
| To measure the relationship between organisational structure and elements of entrepreneurial orientation | | Kuratko et al, 2009 | | Baum & Wally, 2003 cited in Kearney et al, 2009 | | | |
| | | Slevin & Covin, 1990 cited in Malik and Mahmood, 2012 | | | | | |
| To measure the level of entrepreneurial culture within the municipalities in the Republic of South Africa; and the relationship between entrepreneurial culture and elements of EO in the respective municipalities in South Africa | Zahra 1993, Moon 1999 cited in Nayyar & Mahmood, 2014
Ramamurti 1986 cited in Morris et al, 2011
Morris et al, 2011
Anderson et al, 2014 | There is a positive relationship between organisational culture and elements of entrepreneurial orientation (innovation, risk taking and proactiveness) within municipalities in South Africa. | Questionnaire
Online/ Hand delivered responses | Statistical Analysis |
To measure the level of reward systems and the relationship between reward systems and EO in the municipalities

<table>
<thead>
<tr>
<th>Source</th>
<th>Reward Systems and Entrepreneurial Orientation (EO) in Municipalities of South Africa.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zampetakis &amp; Moustakis, 2010</td>
<td>Rewards are positively related to elements of entrepreneurial orientation (innovation, risk taking and proactiveness) for municipalities of South Africa.</td>
</tr>
<tr>
<td>Kuratko et al., 2009</td>
<td></td>
</tr>
</tbody>
</table>

| Method | Questionnaire | Online/ Hand delivered responses | Statistical Analysis |