Corporate Entrepreneurship in the Public Sector: A South African Perspective

I Malatjie, A Garg and E Rankhumise
Tshwane University of Technology, South Africa

Abstract: Over the last three decades, organisations worldwide have used corporate entrepreneurship (CE) as a means of building new competencies, revitalizing operations, achieving renewal, and creating value for stakeholders. However, little is understood about factors triggering CE within the public sector. The aim of this paper was to collect relevant principles and concepts from existing entrepreneurship and CE literature, which could then be refined, developed and used in the public sector to foster a new entrepreneurial-orientated climate. This paper determines the entrepreneurial orientation (EO) amongst managers and what antecedents promote entrepreneurship in the public sector. It used data from managers within organisations under the Minister of Public Service and Administration (MPSA). The findings of this study can therefore be used to develop strategies that can be applied within the public sector as a whole to improve organisational performance. This paper concludes with a discussion on implications for both theory and practise.

Keywords: Corporate entrepreneurship, Entrepreneurial orientation, Social entrepreneurship

1. Introduction

Research, as mostly evidenced over the last decade, suggested that it is vital for large traditional organisations to support entrepreneurial behaviour across all hierarchical levels in order to improve performance (Ireland, Kuratko & Morris, 2006; Kuratko, 2009; Ireland, Covin & Kuratko 2009). In the works of Hisrich and Kearney (2011:45), research on corporate entrepreneurial performance has found that organisations that are more entrepreneurially orientated have a higher level of performance, making corporate entrepreneurship (CE) important for organisational success and development. In the last three decades, public sector literature has given increased attention to entrepreneurship, CE, strategy, internal organisational characteristics, performance and public value. However as with public organisations little is known about actual antecedents of entrepreneurship that make public organisations to be innovative, proactive and risk taking. Entrepreneurship within existing organisations, often referred to as CE, has been studied extensively within the private sector however the same cannot be said about the public sector (Kearney & Meynhardt, 2016:544). Over the last few decades' private sector management principles have been introduced into the public sector (Kearney, Hisrich & Roche 2010; Morris, Web & Franklin 2011; Meynhardt & Diefenhach, 2012).

Public sector organisations represent a particular context characterised by important differences from CE in private sector organisations. Public sector organisations are formed with the purpose of fulfilling a societal need, these organisations face unprecedented demands from a society that grows more complex and interdependent by the day. This sector includes organisations serving important functions such as health, education, human services, arts and culture (Boris & Steuerle, 2006; Kearney & Meynhardt, 2016). In the public sector there is no profit maximising focus, little potential for income generation and no bottom line against which performance can be measured. The majority of public sector organisations get their income from government and they have to account to several stakeholders. Public organisations generally have more formal decision-making procedures and are less flexible and more risk-averse than their private sector counterparts. Therefore, the blind transfer of concepts between the private and public sectors appears inappropriate given the substantial differences in their purpose and mission (Meynhardt & Diefenbach, 2012:761). Private organisations are mainly focused on shareholder value driven by profits, while public sector organisations are driven by progress in achieving social outcomes, a need to provide value to multiple stakeholders, and the need to generate sufficient revenues to maintain or enhance operational efficiency and effectiveness. While public sector organisations can emphasize certain commercial forms of entrepreneurship, the predominant emphasis is on serving the public interest and creating public value (Meynhardt, 2009, 2011; Moore, 2013). Despite the increased importance of entrepreneurship in the public sector, there is little empirical research on the topic. Even fewer studies have examined antecedents of entrepreneurship and managers have only recently become the focus of some (qualitative) research (Hisrich & Roche, 2008; Meynhardt & Metelmann, 2009; Meynhardt & Diefenbach, 2012).

Public sector organisations are complex, facing a turbulent external environment with eroding tax bases, greater accountability and transparency, rapidly changing technology and increasingly diverse stakeholders and clients to serve. CE can be a means to generating alternative revenues, improving internal processes and developing innovative solutions to meet social and economic needs. As the public sector is not a profit-oriented organisation, performance has to be understood as a multidimensional construct (Kearney & Meynhardt, 2016:559). The purpose of this paper is to conceptualise CE in the public sector. This study will answer the following research question: which antecedents explain department-level entrepreneurial orientation of managers in the public sector? This paper seeks to identify such antecedents, develop hypotheses and provide empirical evidence for them. The aim of this paper is to collect relevant principles and concepts from existing entrepreneurship and CE literature, which could then be refined, developed and used in the public sector to foster a new entrepreneurial climate.

2. Theoretical Framework

Research studies exploring the role of entrepreneurship in the public sector is still at the very early stages of development. The concept of public entrepreneurship has only recently appeared in the mainstream entrepreneurship literature. The recent research in public sector entrepreneurial activity makes the exploration of a public sector CE model relevant as the topic is emerging as an area of academic enquiry. Furthermore, the theoretical underpinnings of public sector CE have not been adequately researched resulting in a fundamental need for contributions to both theory and practice (Kearney, Hisrich & Roche, 2007:276).

2.1 Entrepreneurship

The term entrepreneurship has appeared in the public sector literature with increasing frequency and has been applied in various ways (Bernier & Hafsi, 2007; Luke et al., 2010; Walker et al., 2010). Entrepreneurship has been studied from a variety of perspectives by many scholars and, as a result, a definition of this concept is required in this context. Kuratko (2013:5) indicated that entrepreneurship is a dynamic process of vision, change and creation. It requires an application of energy and passion towards the creation and implementation of new ideas and creative solutions. Essential ingredients include the willingness to take calculated risks in terms of time, equity or career; the ability to formulate an effective venture team; the creative skills to marshal needed resources; the fundamental skill of building a solid business plan and finally the vision to recognise opportunity where others see chaos, contradiction and confusion. Entrepreneurship research and its related topics have led scholars to advance numerous variants, such as international entrepreneurship, not-for-profit entrepreneurship, social entrepreneurship, CE and public sector entrepreneurship.

2.2 Corporate Entrepreneurship (CE)

CE is a concept related to entrepreneurial orientation within an organisation. It is more than just new product development; it includes innovation in services, networks and so forth. The organisation will create added value through new innovations in accordance with functions and activities within existing businesses (Wolcott & Lippitz, 2007:74). In this article CE is defined as the process whereby an individual or group of individuals, in association with an existing organisation, create a new organisation or instigate renewal or innovation within that organisation (Meynhardt & Diefenbach, 2012:764). Public sector CE, in the most basic form is defined as the process that exists within the public sector organisation and results in innovative activities such as: the development of new and existing services, technologies, administrative techniques, new improved strategies, risk taking and pro-activity. Empirical evidence in various studies supports the statement that CE improves organisational performance by increasing the organisation's pro-activeness and willingness to take risks and by pioneering the development of new products, processes and services (Covin & Zahra, 1998; Kearney, Hisrich & Roche, 2007; Kearney & Meynhardt, 2016).

CE in the public sector has been explored as a deliberate search for innovative change, the generation of new sources of revenue, the provision of enhanced services through the involvement of citizens and continuous innovation to enhance efficiency and effectiveness. CE has increasingly been recognised as one method to achieve high levels of organisational performance (Kearney, Hisrich & Roche, 2010; Morris, Kuratko & Covin, 2011). Researchers have suggested that the pursuit of CE requires established organisations to strike a delicate balance between engaging activities that use what they already know, while at the same time challenging themselves to embark upon new activities and opportunities to rejuvenate themselves (Zahra & Covin, 1995; Manimala, Jose & Thomas, 2006).

2.3 Entrepreneurial Orientation (EO)

EO refers to an organisation's level of entrepreneurship which will be characterised by innovativeness, risk taking and pro-activeness. According to Rauch, Wiklund, Lumpkin and Frese (2009:763), EO represents one of the areas of entrepreneurship research in which a cumulative body of knowledge is developing. EO has become a central concept in the domain of entrepreneurship that has received a substantial theoretical and empirical attention. Since the emergence of the concept of EO nearly three decades ago, many researchers have devoted their studies to the antecedents and consequences of EO to better understand the role played by EO in organisation's development and success (Covin, Slevin & Heeley, 2000; Wiklund & Shepherd, 2003, 2005; Covin & Wales, 2012). Research on EO has focused on three underlying dimensions: innovativeness, risk taking and pro-activeness. Recent developments in public sector management have recognised the need for public sector organisations to understand how EO can be achieved. EO's dimensionality within the public and non-profit sector can be expected to mirror its dimensionality in the private sector. However, differences between the public and private sector suggest modifications to the dimensions (Morris, Webb & Franklin, 2011; Meynhardt & Diefenbach, 2012). EO in a public sector organisation is demonstrated by the extent to which top managers are inclined to favour change and innovation for the organisation (innovation dimension), to take business related risks (risk taking dimension) and to take proactive strategic action (pro-activeness dimension) in order

to achieve goals and objectives for the greater good of society at large (Kearney & Meynhardt, 2016:553).

2.4 Public Entrepreneurship

Public entrepreneurship is defined as a process of introducing innovation to public sector practice, and of identifying and pursuing opportunities by groups or individuals. These opportunities can be characterised by innovativeness, pro-activeness and risk-taking (Diefenbach, 2011:37). Luke, Verreynne and Kearins (2010:139), refer to public sector entrepreneurship as deliberate search for innovative change, generation of new revenue sources, provision of enhanced services through the involvement of citizens, and ongoing innovation to achieve increased efficiency and effectiveness. For the purpose of this study public sector entrepreneurship is defined as an individual or group of individuals, who undertakes desired activity to initiate change within an organisation, adapt, innovate and facilitate risk. Personal goals and objectives are less important than the generation of good results for the public sector (Kearney et al., 2007:279). The strategy in the public sector is not about achieving competitive advantage or attracting profitable customers but instead, represents a means for improving public services. CE strategy within the public sector is a distinct organisational strategy through which public sector organisations adopt a strategic approach that allows them to successfully determine how and when to initiate entrepreneurial activities (Kearney & Meynhardt, 2016:545).

Public sector entrepreneurship is manifested in a variety of activities, including changing the organisational environment or rules of the game, establishing new public organisations, creating and managing new public resources, and taking advantage of spill overs from private action for the wider good (Klein, Mahoney, McGahan & Pitelis, 2010). Therefore, public sector managers are increasingly expected to prescribe strategies for overcoming external threats and internal constraints while at the same time improving performance and enhancing public value (Kearney & Morris, 2015; Moore, 2013; Meier & O'Toole, 2009). Managers in public organisations face constraints that arise from limitations imposed by their external environment, from transitional expectations and from required features of their organisational processes that influence how they must make strategic decisions. Rules prescribe the types of decisions to be made, therefore those in decision making positions tend to create more rules when situations arise for which there are no precedents. Basically autonomy and flexibility is lower in public organisations (Kearney *et al.*, 2007:289).

3. Discussion

Knowledge of entrepreneurship has advanced over the past few decades, however much still needs to be done on entrepreneurship, CE and EO in the public sector. This article provides an integrative model of antecedents, components and outcomes of CE in the public sector. The paper seeks to determine factors that trigger CE, antecedents that promote entrepreneurship and EO amongst managers in the public sector. For this reason, the research exploratory model was developed as indicated in Figure 1.

The researcher developed a reflective exploratory model. The adoption of this model provided an analytical framework for quantifying the impact of EO on perceived organisational performance. The exploratory model consisted of an inner/structural model as well as an outer/measurement model. The inner model displays the expected relationships between the latent variables deducted from the theory, while the outer model assesses the relationship between indicators and their respective latent variables. For the purpose of this research the latent

variables included in the model were operationally defined as:

Management support: The extent to which the management structure itself encourages employees to believe that innovation is in fact part of their responsibilities. Some of the specific conditions reflecting management support would be quick adoption of employee ideas, recognition of people who bring ideas forward, and support for small experimental projects to get them off the ground. In this paper management support is defined as the extent to which one perceives that superior managers support, facilitate and promote entrepreneurial behaviour (Hornsby, Kuratko, Shepherd & Bott, 2009:238). In the public sector, managers are more likely to behave entrepreneurially when they perceive support of such behaviour. In contrast managers are less likely to behave less entrepreneurially when superior managers discourage innovative, proactive and risk taking behaviour. Therefore:

 H1: Management support is positively related to EO in the public sector

Autonomy: Workers have discretion to the extent that they are able to make decisions about performing their own work in the way that they believe is most effective. Businesses should allow employees to make decisions about their work process,

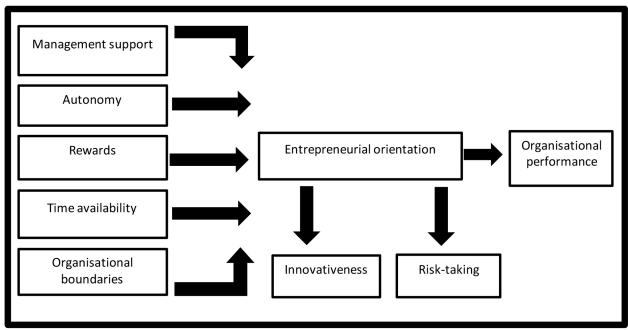


Figure 1: Exploratory Model Specification

Source: (Malatjie, 2016:64)

and should avoid criticising employees for making mistakes when being innovative. Managers who are encouraged to decide how to achieve goals will find more creative ways of doing so. They are more likely to experiment and innovate when fewer strict rules and procedures are in place (Meynhardt & Diefenbach, 2012:768). Therefore:

H2: Autonomy is positively related to EO in the public sector

Rewards/reinforcement: Rewards and reinforcement enhance the motivation of individuals to engage in innovative behaviour. Businesses must be characterised by providing rewards based on performance, providing career challenges and increasing responsibility. Developing and using systems that reward based on performance, highlight significant achievements and encourage pursuit of challenging work (Hornsby *et al.*, 2002; 2013). Therefore:

H3: Rewards are positively related to EO in the public sector

Time availability: The fostering of new and innovative ideas requires that individuals have time to incubate these ideas. Businesses must moderate the workload of people, avoid putting time constraints on all aspects of a person's job and allow people to work with others on long-term problem solving. Evaluating workloads to ensure that individuals and groups have the time needed to pursue innovation and that their jobs are structured in ways that support efforts to achieve short- and long-term organisational goals (Hornsby *et al.*, 2002, 2013). Therefore:

H4: Time availability is positively related to EO in the public sector

Organisational boundaries: These are boundaries, both real and imagined, that prevent people from looking at problems outside their own jobs. People must be encouraged to look at the business from a broad perspective. Businesses should avoid having standard operating procedures for all major parts of jobs, and should reduce dependence on narrow job descriptions and rigid standards of performance. Precise explanations of outcomes expected from organisational work and development of mechanisms for evaluating, selecting and using innovation (Hornsby *et al.*, 2002, 2013). Therefore:

 H5: Organisational boundaries are positively related to EO in the public sector

Innovation: Wickham (2006:221) mentions that innovation goes beyond just invention, it means doing something in a way that is new, different and better. Innovation is a key ingredient in the entrepreneurial process, putting into practice new ideas, a central characteristic of the entrepreneurial endeavour. Therefore:

 H6: Innovativeness is positively related to EO in the public sector

Risk-taking: Involves taking bold actions by venturing into the unknown, committing significant resources to ventures in uncertain environments. These types of risks are inherent to entrepreneurs, as starting a new venture entails some level of personal financial and psychological risk (Gcaza, 2013:21). Therefore:

H7: Risk-taking is positively related to EO in the public sector

Entrepreneurial orientation: EO refers to an organisation's strategic orientation, capturing specific entrepreneurial aspects of innovativeness, proactiveness and risk-taking. Prior theory and research highlights EO as an important constituent for various dimensions of organisational success (Rauch et al., 2009:763). Therefore:

• **H8:** EO in the public sector is positively related to perceived organisational performance.

Perceived organisational performance (PO): Can be defined as employee perceptions regarding their organisation's overall performance. Perceived organisational performance is related to human resource management practices and directly affects employees' attitudes within an organisation (Allen & Helms, 2002; cited in Mullins, 2010).

4. Research Methodology

To evaluate the formulated hypotheses, department level data collected during a larger research project was used. The target population was all the managers in selected public organisations under the leadership of the Minister of Public Service and Administration (MPSA). The selected organisations were the Centre for Public Service

Innovation (CPSI), Department of Public Service and Administration (DPSA) and the National School of Government (NSG). The total population is 231 (managers) broken down as follows: CPSI – 13, DPSA – 113 and NSG – 105. The managers in this regard were all employees between level 9 (junior/supervisory) and level 16 (executive management).

4.1 Data Collection

For the purpose of this paper, the Corporate Entrepreneurial Assessment Instrument (CEAI), as adapted for the public sector, was utilised to collect data. The questionnaire was sent on line to all departmental managers. A number of tactics were used to increase key respondent participation, including a letter from the researcher and a reminder email.

The online medium was chosen for three reasons. First, managers usually participate in online surveys administered by NSG or National Treasury, and are thus familiar with this method. Second, the NSG e-Learning Department using a tool called Lime-survey, which administered the survey, was able to ensure anonymity and provided important demographical data at the same time. Thirdly, the online survey offered quite a number of benefits over traditional paper-based surveys, such as costand time-efficiency and flexibility.

The CEAI consisted of five dimensions that measure CE in an organisation (management support, autonomy, rewards, time availability, and organisational boundaries). Over and above these five dimensions, four more were added to make the questionnaire more suitable for the public sector (innovativeness, risk taking, perceived organisational performance and entrepreneurial orientation).

The questionnaire was thus initially prepared and pre-tested by looking for valuable inputs from eminent practitioners, students and corporate experts in the same field. Some of the significant suggestions received are summarised as follows: The language used must be simple; conversational; as specific as possible; avoiding loaded, leading, double-barrelled, and burdensome questions; without ambiguity and acronyms. Some questions should generate variance (Zikmund *et al.*, 2013:341-46; Leedy & Ormrod [1], 2010:192).

5. Reflections

5.1 Management Support

Top management support is the extent to which one perceives that top managers support, facilitate and promote entrepreneurial behaviour, including the championing of innovative ideas and providing the necessary resources to take entrepreneurial action and has been found to have a positive relationship with an organisation's entrepreneurial outcomes (Antoncic & Hisrich, 2001; Hornsby et al., 2002,2009; Goodale, et al., 2011). Public sector managers are challenged by bureaucratic procedures in the development of their strategic vision. Therefore, top management needs to engage in shaping the organisation to achieve its strategic vision by ensuring it has appropriate systems in place to generate success in the various entrepreneurial activities undertaken (Kearney, Hisrich & Roche, 2010). The strategic vision of top managers towards entrepreneurship is the foundation of CE. Public sector managers are increasingly expected to prescribe strategies for overcoming external threats and internal constraints, while at the same time improving performance (Meier & O'Toole, 2009). This statement is supported by the findings of this study that indicated management support to be the best predictor for entrepreneurial action that will lead to improved organisational performance. Therefore, H1: Management support is positively related to EO in the public sector and is accepted. In agreeing with the findings of this study, it is fundamental that top managers develop and support an entrepreneurial strategic vision. Top managers are recognised as the purveyors of vision and shapers of corporate purpose. In the public sector, the notion of vision is bounded by the legislative framework and policymaking, which requires sense making and interpretation to find ways to better and more efficiently fulfil the mandate (Meynhardt & Metelmann, 2009). Top management support is important when innovative entrepreneurial projects are to be integrated into the regular organisation. Therefore, management must create an organisational culture that supports and helps sustain effective entrepreneurship that enhances performance.

5.2 Autonomy/Rewards/Time Availability/ Organisational Boundaries

In previous studies (Meynhardt & Diefenbach, 2012; Hornsby *et al.*, 2009) it was noted that public sector

managers are more likely to behave entrepreneurially when they perceive discretion in their work, however that was not the case in this study. Reward systems that encourage risk taking and innovation have been shown to have a strong effect on individual's tendencies to behave entrepreneurially. Therefore, for entrepreneurial activity to develop in the public sector there is a need for positive rewards that recognize the contribution of individuals and groups within the organisation (Kearney et al., 2009). The results of this study did not support this statement, therefore one can say that the results of the findings will vary from one organisation to the other. Time availability for managers is an important resource for generating entrepreneurial outcomes. The availability of free time can enable potential corporate entrepreneurs to consider opportunities for innovation that may be precluded by their required work schedules (Hornsby et al., 2009; Shepherd, McMullen & Jennings, 2007). Organisational boundaries can ensure the productive use of innovation enabling resources. Therefore, greater flexibility and adaptability are necessary for entrepreneurial activity to flourish in the public sector as high levels of rigidity and red tape are in conflict with entrepreneurial development (Kearney et al., 2009). Autonomy/Rewards/Time availability/ Organisational boundaries all these constructs are an appropriate conceptualisation of the entrepreneurial conditions of a public sector organisation however in this study these constructs did not have a positive relationship with EO. Therefore, hypotheses 2, 3, 4 and 5 were rejected.

5.3 Risk-Taking

The issue of risk is a central component to the study of entrepreneurial behaviour. Public sector organisations are known to be bureaucratic and their risk taking propensity is very low if not non-existent. Bureaucracy is the classical organisation of government, these are formalised organisation structures that are characterised by explicitly articulated and written policies, job descriptions, organisations charts, strategic/operational plans and objective setting systems (Baum & Wally, 2003; Kearney, Hisrich & Roche, 2007; Mabala, 2012; Kearney & Morris, 2014). Research has shown that risk aversion impedes entrepreneurial behaviour. Although risk taking decisions are not always desirable in the public sector, public organisations need to encourage at least some risk taking behaviour since their policy environment is never entirely predictable and stable (Kearney et al. 2007:283). In this research the

hypothesised relationship between risk taking and EO was supported and risk taking was found to be a high predictor of EO. Risk taking had a statistically significant relationship with EO and in turn EO had a positive relationship with perceived organisational performance. Therefore, it is quite evident from this study that public sector organisations need to embrace an element of risk in their operations if they want to be entrepreneurial which will assist them in delivering effective and efficient services that will in-turn improve organisational performance.

5.4 Perceived Organisational Performance

Public sector organisations have been significantly influenced by practices in the private sector. However, in many respects performance management in the sector is relatively more complicated due to the absence of the single overriding goal which ultimately dominates private sector companies. That is, the motivation to make profits and provide satisfactory financial returns to shareholder interests (Boland & Fowler, 2000:440). EO is receiving increased empirical attention among entrepreneurship scholars, however studies linking EO to organisational performance have been somewhat limited. Recent research has raised concerns about a direct relationship between EO and organisational performance, suggesting that this relationship may be moderated by characteristics such as the nature of the environment or other organisational factors (Arbaugh, Cox & Camp, 2009:14).

In this study, the results indicated that EO has a strong relationship with PO, therefore EO is statistically significant to PO. These findings support what is indicated in literature by various researchers, namely that EO has a positive impact on the performance of an organisation. The findings of this study seem to suggest that for the purpose of achieving EO, organisations wishing to embrace CE should not think of establishing the climate for entrepreneurship on a partial basis, but should do it in totality in order for the organisational antecedents to have a positive impact on PO.

Results of this study further indicate that CE within the public sector produces improved organisational performance. However, the challenge that managers might be faced with is to identify entrepreneurial processes that lead to various forms of CE and to verify the forms that produce the best performance results for their organisation.

6. Implications for Scholars: Practice and Future Research

It is evident that the public sector is faced with structures, rules, regulations and procedures that may act as barriers to both reforms and entrepreneurship including goal ambiguities, political inferences and limited political autonomy, disincentives to risk taking and rigid personal practices (Kearney *et al.*, 2007:292). However, the public sector could significantly benefit from entrepreneurship if it is to meet the ever-changing needs, wants and expectations of their clients and adapt to the rapidly changing environment.

Adapting and encouraging entrepreneurship in the public sector could bring benefits which include improved service delivery, better internal processes, improved turn-around time, more appropriate reward systems, improved communication and better management-employee relationships. Therefore, for entrepreneurship to be engendered within the public sector there is a need for greater flexibility, adaptability and decentralised decision making, as high levels of rigidity and red tape are in conflict with the development of entrepreneurial culture. While this paper develops a model that seeks to determine factors that trigger CE, antecedents that promote entrepreneurship and EO amongst managers in the public sector, there are limitations to this proposed model. First, despite its generic orientation, the model may not be applicable to all organisations as it was only tested in the departments that are within the MPSA. Second, the public sector is still very bureaucratic and governed by a lot of policies, rules and regulations and these impede entrepreneurship. Therefore, management must create, to the extent possible an organisational climate and context that supports and helps promote effective entrepreneurship that will eventually enhance performance.

The proposed model establishes an appropriate framework by depicting entrepreneurship and its antecedents and the effect of these on performance of public sector organisations. Future research into the topic should proceed along a number of important paths. Measures of innovation, risk taking and EO must be tailored to reflect the distinct types of opportunities that exist in public sector organisations. Research should establish the norms for entrepreneurial performance in different types of public sector organisations, such norms would be

beneficial for goal setting and performance benchmarking. In practise CE should be included when formulating organisational strategies and annual performance plans. Finally, the proposed model presents numerous avenues of research that can be explored by adding or removing some of the constructs that are sector specific.

The field of CE in the public sector is fairly new (Shepherd & Patzelt, 2011) and would therefore require more conceptual work for further refinement of the measurement tools used for predicting CE, EO and perceived organisational performance. Such scholarly efforts will then result in further refinement and validation of constructs used to measure EO and perceived organisational performance; enhanced operational definitions of constructs will add value to the field and benefit public sector entrepreneurship training.

7. Conclusion

In conclusion, this study provides initial insights into what determines department level EO in a public sector organisation. Although further work is required to strengthen the findings, they confirm established private sector CE research on organisational antecedents. For decades, researchers and policymakers have investigated the significant role entrepreneurship plays in job creation, new business ventures and the commercialisation of new technologies that promote economic growth and development. With the success of entrepreneurship in transforming economies, industries and societies, little attention has been given to understand its role in transforming the public sector. This study also contributes to private sector research by questioning aspects of established concepts. While further data will be required to base knowledge on even stronger empirical evidence, this study hopes to provide indications on how public sector organisations can help their managers engage in entrepreneurial behaviour and improve organisational performance. The public sector can be transformed through CE strategies and thereby contribute to a well-functioning society. Therefore, managers in the public sector have an opportunity to generate reform and change; that will lead to economic recovery and growth as well as social cohesion by adapting some of the principles that have been so effective in the private sector, while also recognising the uniqueness of the public sector.

Finally, for entrepreneurship to succeed in the Public Sector, managers need to change the way they do things within their organisations. They need to change the mind-set of other employees. This can be achieved through training, drafting new policies, including CE in the organisation's strategy, creating an environment that encourages innovation and by rewarding employees for coming up with ideas that can assist to improve the efficiency of organisations. Entrepreneurship should not only be a lip-service, but it should form part of the culture of public sector organisations and it should be encouraged and supported by top management. This will lead to improved performance of organisations and better service delivery. The public sector is faced with shrinking budgets and increased demands for service, therefore, CE is seen as a vehicle towards alleviating these constraints.

References

- Arbaugh, J.B., Cox, L.W. & Camp, S.M. 2009. Is entrepreneurial orientation a global construct? A multi country study of entrepreneurial orientation, growth strategy, and performance. *The Journal of Business Inquiry*, 8(1):12-25.
- Boland, T. & Fowler, A. 2000. A systems perspectives of performance management in public sector organisations. International Journal of Public Sector Management, 13(5):
- Diefenbach, F.E. 2011. Entrepreneurial orientation in the public sector. Unpublished Doctoral dissertation. University of St. Gallen: Gallen.
- Gcaza, W. 2013. Corporate entrepreneurship strategies in the South African mining industry. Unpublished Masters dissertation. Wits University: Johannesburg.
- Hisrich, R.D. & Kearney, C. 2011. Corporate Entrepreneurship: How to create a thriving entrepreneurial spirit throughout your company. New York: McGraw-Hill.
- Hornsby, J.S., Kuratko, D.F., Shepherd, D.A. & Bott, J.P. 2009. Managers Corporate Entrepreneurial Actions: Examining Perception and Position. *Journal of Business Venturing*, 24(3):236-247.
- Hornsby, J.S., Kuratko, D.F., Holt, D.T. & Wales, W.J. 2013. Assessing a measurement of organisational preparedness for corporate entrepreneurship. *Journal of Product Innovation Management*, 30(5):937-955.
- Kearney, C., Hisrich, R. & Roche, F. 2007. Facilitating Public Sector Corporate Entrepreneurship Process: A conceptual model. *Journal of Enterprising Culture*, 4:295-313.

- Kearney, C. & Meynhardt, T. 2016. Directing Corporate Entrepreneurship strategy in the Public Sector to Public Value: Antecedents, Components and Outcomes. *International Public Management Journal*, 19(4):543-572.
- Kearney, C. & Morris, M.H. 2015. Strategic renewal as a mediator of environmental effects of public sector performance. *Small Business Economy Journal*, (45):425-445.
- Klein, P.G., Mahoney, J.T., McGahan, A.M. & Pitelis C.N. 2010. Toward a Theory of Public Entrepreneurship. *European Management Review*, 7:1-15.
- Kuratko, D.F. 2009. Entrepreneurship: Theory, Process and Practice. 9th edition. South-Western: Cengage Learning.
- Kuratko, D.F. & Audretsch, D.B. 2013. Clarifying the domains of corporate entrepreneurship. *International Entrepreneurship and Management Journal*, 9(3):323-335.
- Luke, B., Verreynne, M. & Kearins, K. 2010. Innovative and entrepreneurial activity in the public sector: The changing face of public sector institutions. *Innovation, Management, Policy and Practice*, 12(2):138-153.
- Mabala, M.J. 2012. Corporate entrepreneurship within the Department of Correctional Services. Unpublished Masters dissertation. University of Johannesburg: Johannesburg
- Malatjie, L.I. 2016. Entrepreneurial Orientation in the public sector: A case of selected public sector organisations in South Africa. Unpublished Doctoral dissertation. Tshwane University of Technology: Pretoria.
- Meier, K.J. & O'Toole, L.J, Jr. 2009. The dogs that didn't bark: How public managers handle environmental shocks. *Public Administration*, 87(3):485-502.
- Meynhardt, T. & Metelmann, J. 2009. Pushing the envelope: Creating Public Value in the Labour Market: An empirical study on the role of middle managers. *International Journal of Public Administration*, 32(3-4):273-311.
- Meynhardt, T. & Diefenbach, F.E. 2012. What drives Entrepreneurial Orientation in the Public Sector? Evidence from Germany's Federal Labour Agency. *Journal of Public Administration Research and Theory*, 22(4):761-792.
- Rauch, A., Wiklund, J., Lumpkin G.T. & Frese, M. 2009. Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. Entrepreneurship Theory and Practice, 33(3):761-788.
- Shepherd, D.A. & Patzelt, H. 2011. The new field of sustainable entrepreneurship: studying entrepreneurship linking "what is to be sustained" with "what is to be developed". Entrepreneurship Theory and Practice, 35(1):137-163.
- Wickham, P.A. 2006. *Strategic Entrepreneurship*. Pearson Education Limited: London.
- Wolcott, R.C. & Lippitz, M.J. 2007. The four models of corporate entrepreneurship. *MIT Sloan Management Review*, 49:75-82.