



# The governance imperative: The influence of effective governance in unlocking intrapreneurial potential for sustainable public value



## Authors:

Lucy T. Chamba<sup>1,2</sup>   
Ismael Tarirai<sup>3,4</sup> 

## Affiliations:

<sup>1</sup>Department of Entrepreneurial Studies and Management, Faculty of Management Sciences, Durban University of Technology, Durban, South Africa

<sup>2</sup>Department of Commerce, Faculty of Economics, Bindura University of Science Education, Bindura, Zimbabwe

<sup>3</sup>Department of Economic Sciences, Faculty of Business Sciences, Midlands State University, Harare, Zimbabwe

<sup>4</sup>Department of Teacher Development, Faculty of Arts and Education, Zimbabwe Open University, Harare, Zimbabwe

## Corresponding author:

Lucy Chamba,  
lucyteechamba@gmail.com

## Dates:

Received: 22 May 2024

Accepted: 19 Sept. 2024

Published: 14 Feb. 2025

## How to cite this article:

Chamba, L.T. & Tarirai, I., 2025, 'The governance imperative: The influence of effective governance in unlocking intrapreneurial potential for sustainable public value', *Africa's Public Service Delivery and Performance Review* 13(1), a860. <https://doi.org/10.4102/apsdpr.v13i1.860>

## Read online:



Scan this QR code with your smart phone or mobile device to read online.

**Background:** Environmental, Social, and Governance (ESG) practices are gaining traction, with a particular focus on State-Owned Enterprises (SOEs) and their contribution to sustainability. This study looks at how governance promotes intrapreneurship, a key capability for SOEs to achieve sustainability through public value creation.

**Aim:** This study investigates the influence of effective governance on intrapreneurial activity within SOEs. We hypothesise that strong governance structures promote intrapreneurship, ultimately leading to enhanced sustainability performance.

**Setting:** The research focuses on SOEs operating in Zimbabwe.

**Methods:** A quantitative approach was employed. We surveyed 300 middle managers across various SOEs in Zimbabwe. The combined effects of the independent variable were examined using Multivariate Analysis of Covariance (MANCOVA) (governance) and dependent variables (intrapreneurship and sustainability performance) because of the presence of multiple dependent variables.

**Results:** The study reveals a statistically significant positive relationship between good governance, robust intrapreneurial activity and enhanced sustainability performance. State-Owned Enterprises with strong governance structures exhibited superior innovation, translating into greater public value through enhanced societal impact, customer satisfaction and service delivery.

**Conclusion:** Effective governance plays a critical role in nurturing intrapreneurship and achieving sustainability within SOEs. This highlights the importance of prioritising good governance practices for SOEs to contribute meaningfully to sustainable development.

**Contribution:** Through an empirical examination, this study advances the topics of sustainability and intrapreneurship in public sector companies, looking at the interrelationships between governance, intrapreneurship and sustainability in SOEs.

**Keywords:** dynamic capabilities; governance; intrapreneurship; MANCOVA; public value; sustainability; state-owned enterprises.

## Introduction

This study offers a fresh paradigm for recognising and comprehending the essential components that support and encourage intrapreneurship in business. It shows how organisational intrapreneurship, which in today's firms creates the distinctive cultural model that other firms find difficult to imitate may be impacted by best practices in governance. Nowadays, intrapreneurship is widely acknowledged as the foundation for enhanced organisational results and processes, which has a significant impact on sustainability in the 21st century.

Value creation in business has historically always been a product of the profit motive and has been quantified using financial or economic metrics such as sales, profit or return on investment (ROI). Therefore, intrapreneurship was dedicated to generating riches and economic development at the expense of social and environmental aspects (Sarango-Lalangui, Santos & Hormiga 2018). As stakeholders want to know the true value and influence of firms on society, business ecosystems have become more popular as a model for addressing sustainability challenges. These ecosystems

**Copyright:** © 2025. The Authors. Licensee: AOSIS. This work is licensed under the Creative Commons Attribution License.

provide access to critical capabilities and resources, enabling companies to scale rapidly and create competitive advantage while tackling daunting societal challenges. As a field of study, intrapreneurship holds out a lot of promise for sustainability because it produces innovations meant to enhance quality of life and service delivery. Despite the advantages that accrue from the implementation of entrepreneurial activities, there seems to be an inconclusive argument over the extent to which governance can address sustainability challenges through fostering intrapreneurship.

Intrapreneurship, which denotes entrepreneurship within existing organisations, is not just a buzzword, but a powerful tool for driving sustainable transformation. Literature points to the notion that intrapreneurship plays a crucial role in addressing sustainability challenges. It provides a platform for innovative solutions and business models that can contribute to environmental and social well-being thus, emphasising the potential for positive impact on sustainability (Aparicio, Turro & Noguera 2020). In a world grappling with the triple planetary crisis of climate change, environmental degradation and inequality, firms are scrambling for solutions. While traditional top-down approaches have their place, a potent force for sustainable transformation is bubbling from within intrapreneurship. Intrapreneurial leaders act like entrepreneurs to drive innovation and positive impact. They possess a passion for sustainability, a keen eye for inefficiencies and the resourcefulness to develop solutions within the existing framework. According to this perspective, a company's sustainability is demonstrated by the primary tasks it performs in its surroundings, impact assessments, goal accomplishment and open results communication. It also believes that firms should be focused on meeting the basic needs of people by utilising the concepts of innovation and creative destruction (Schaltegger & Wagner 2011).

The article uses a case study of Zimbabwean SOEs to analyse the relationship between governance, intrapreneurship and sustainability. The motivation of this study was the lack of effective governance, intrapreneurial activity and sustainability performance within SOEs. Therefore, there is a need for comprehensive research or understanding regarding the specific influence of governance structures on intrapreneurial activities within SOEs and their subsequent impact on sustainability performance. This gap in knowledge prompted the researchers to investigate how governance practices can either hinder or facilitate intrapreneurship within SOEs and how this, in turn, affects the sustainability outcomes of these firms. The purpose of this article is to provide light on the question of whether effective governance fosters intrapreneurship and sustainability. The study is significant because it provides empirical information on the impact of governance on intrapreneurship and, thus, sustainability in SOEs. It also contributes to the existing body of literature on the link between the three factors, which has yet to be completely studied. The study's value lies in revealing the role of good governance as a predictor of intrapreneurial activity and/or innovation and sustainability in state-owned entities.

## Objectives

The study set out to:

- Assess the extent to which effective governance promotes intrapreneurial activity.
- Analyse the impact of governance on sustainability outcomes.
- Evaluate the influence of intrapreneurial activities on sustainability efforts within organisations.

## Hypotheses

**H1:** Governance has a positive influence on intrapreneurship.

**H2:** Governance has a significant influence on sustainability.

**H3:** Intrapreneurship has a significant positive influence on sustainability.

## Literature review

### An overview of intrapreneurship

Intrapreneurship, or entrepreneurial efforts within existing firms, is an important component of organisational growth (Antoncic & Hisrich 2004; Bogatyreva, Laskovaia & Osiyevskyy 2022). It is a reaction to dynamic shifts that occur in the internal and external environments of the business. To gain a competitive edge, it involves a range of actions such as developing new goods, services or technologies, strategic reorganisation and reevaluation. According to Kuratko and Hodgets (2007), the demand for intrapreneurship stems from a number of pressing difficulties faced by large firms, such as stagnation, bad managerial practice, poor service delivery and poor organisational efficiency. Because of the failure to produce value effectively, firms are now embracing intrapreneurship. Thus, intrapreneurship is acknowledged as a means of fostering competitiveness and opening doors for enterprises to pursue innovative ideas that add value (Chamba & Chazireni 2023a). Strategic business units, enhanced business procedures and innovations are examples of how intrapreneurship appears in organisations.

### Theoretical framework

#### Dynamic capabilities view

This study, which builds on the Dynamic Capabilities View (DCV), suggests that organisations with strong governance mechanisms also have strong intrapreneurial orientations or dynamic capabilities that put the company in a better position to succeed sustainably through intrapreneurial endeavours in a rapidly changing environment. According to Breznik and Hisrich (2014), DCV highlights the organisation's capacity for ongoing proactive and reactive transformation that allows it to adapt and grow. According to Teece (2018), a capability is the capacity to construct, integrate and reorganise external and internal resources in response to changing environmental conditions. This resource flexibility allows firms to capitalise on emerging opportunities and threats, including those related to sustainability. This study posits that intrapreneurship, as a dynamic capability acts as a mediating mechanism between governance and sustainability.

The DCV, aligns with the notion that robust governance structures within SOEs can cultivate strong intrapreneurial orientations, thereby fostering dynamic capabilities crucial for sustainable success in a rapidly evolving business landscape. This adaptability enables firms to leverage emerging opportunities and effectively address challenges, particularly those pertaining to sustainability. The study posits that intrapreneurship, viewed as a dynamic capability, operates as a mediating mechanism between governance practices and sustainable performance within SOEs. By exploring this intricate relationship, the research aims to offer valuable insights that can inform strategies for enhancing the resilience and competitiveness of SOEs in the face of rapid changes and increasing market demands.

## Conceptual literature review

### Governance and intrapreneurship

The association between intrapreneurial activity and governance indicators has been the subject of several research (Amorós, Poblete & Mandakovic 2019; Debus, Gross & Kleinmann 2020; Estrin, Korosteleva & Mickiewicz 2013; Rodríguez-Gulías, De Sousa Gabriel & Rodeiro-Pazos 2018). In recent years, the concept of environmental, social and governance (ESG) standards in company management has grown exponentially. Companies' non-financial performance is being assessed using ESG criteria, and investors are supporting more firms that are preparing for a future in which sustainability and ethical impact will be crucial to survival (Aras & Crowther 2008). As sustainability and governance are essential to every business's ability to continue operating, a lot of focus has been placed on these ideas. By striking a balance between social and economic aims, corporate governance practices aim to build control mechanisms and boost shareholder value as well as the satisfaction of other stakeholders. The findings demonstrated that intrapreneurship and value creation can be impacted by governance factors either directly or indirectly (Khyareh & Amini 2021). The impact of the institutional environment through the mechanism of governance on intrapreneurial activity varies, according to literature analysis on intrapreneurship (Amorós et al. 2019; Simón-Moya, Revuelto-Taboada & Guerrero 2014). Hence, the following hypothesis:

**H1:** Governance has a positive influence on intrapreneurship.

### Governance and sustainability

The idea of governance, which includes the procedures and mechanisms used to oversee and guide firms, lies at the heart of sustainability. Effective governance is necessary to achieve sustainability because it makes decision-making easier and takes the long-term effects of actions and policies into account (Amorós et al. 2019; Debus et al. 2020). Robust corporate governance frameworks are conducive to sustainability. The organisation's aims and direction are made evident via its corporate structure. Achieving the firm's objectives, generating sustainable value and maintaining a balance between social and economic advantages are just a few of the topics that governance will cover. Furthermore, a company that practices excellent governance can reap long-term

benefits such as lower risk and increased equity, shareholder value and investor attraction. Hence the hypothesis:

**H2:** Governance has a significant influence on sustainability.

### Intrapreneurship and sustainability

Intrapreneurship has several implications for sustainability. Firstly, through innovation for the Triple Bottom Line and focusing on balancing economic, environmental and social concerns. This leads to innovations such as energy-efficient production processes, green product lines and community development initiatives. Secondly, intrapreneurship fosters agility in organisations where traditional bureaucracies can be slow to react to sustainability challenges. Intrapreneurial organisations, with their autonomy and entrepreneurial spirit, can test and pilot new ideas quickly, bringing sustainable solutions to the market faster, (Chamba & Chazireni 2023b). In organisations with a high Intrapreneurial Orientation, employees feel empowered to make a difference and are more engaged and motivated. Intrapreneurship offers them a platform to contribute their ideas and be agents of change. This fosters a culture of sustainability within the organisation, where everyone takes ownership of the impact they create. Thirdly, by diversifying revenue streams and exploring uncharted territory, intrapreneurial organisations make their firms more resilient to future sustainability challenges. Their innovations can lead to new markets, resource-efficient operations and improved social relationships, mitigating risks associated with environmental threats and social disruptions. This fosters resilience and risk mitigation.

Sustainability is a multifaceted concept that assesses an organisation's success or failure using a variety of financial and non-financial performance metrics. The study uses dimensions of non-financial performance, that is, customer satisfaction and social impact as adopted by the Balanced Score Card and the Auditor General Report's (2022) expectations. A review of the literature on intrapreneurship indicates that an increased intrapreneurial activity results in an increased competitive advantage and sustainability.

Finally, research indicates that intrapreneurship enhances an organisation's economic and non-economic performance by expanding a company's area of expertise and associated opportunity set through internally developed novel resource combinations (Antoncic & Hisrich 2001; Mbo 2017). The effects of intrapreneurial activity vary depending on the organisation. Burgelman (2004) and other authors assume that the outcomes of intrapreneurship within well-established firms can be quantified in terms of financial gain, new product development, expansion, public welfare and social legitimacy. This suggests that intrapreneurship has a beneficial impact on non-financial success. Adeoti, Olawale and Asabi (2017) found that intrapreneurship significantly affects the performance of non-financial firms. Findings from their study indicate that management support for intrapreneurship, and the presence of intrapreneurial activity in an organisation result in increased sustainability.

Nonetheless, there is a reciprocal relationship between intrapreneurship and organisational effectiveness. Some academics think that intrapreneurship is influenced by an organisation's success. When an organisation has the resources at its disposal, it may innovate and change more easily than one that is struggling financially (Chamba and Chazireni (2023b). Accordingly, Heinnonen (2013) states that while success and sufficient resources encourage intrapreneurship, negative feedback and limited resources inhibit it. The following hypothesis is based on the assumption that intrapreneurship enhances a firm's sustainability, as suggested by the existing literature:

**H3:** Intrapreneurship has a significant positive influence on sustainability.

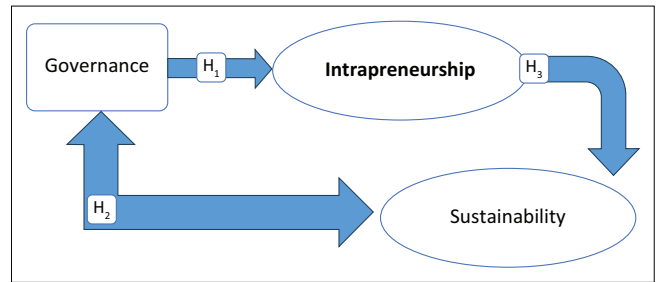
### Conceptual framework

The interplay between governance, intrapreneurship and sustainability forms a critical nexus within organisational dynamics. The hypothesis that governance exerts a positive influence on intrapreneurship suggests that well-defined governance structures and practices can foster an environment conducive to intrapreneurial activities within an organisation. The assertion that governance significantly impacts sustainability underscores the pivotal role that governance mechanisms play in shaping an organisation's long-term environmental, social and economic practices. Effective governance can drive sustainability initiatives, ensuring that the organisation operates ethically, responsibly and profitably in alignment with environmental and social objectives. The hypothesis highlighting the substantial positive influence of intrapreneurship on sustainability emphasises the transformative power of intrapreneurial activities in enhancing an organisation's sustainability performance. By fostering a culture of intrapreneurship, organisations can drive innovation, improve operational efficiency and cultivate sustainable practices that contribute to long-term success and positive societal impact. The relationship between the three hypotheses is depicted by the conceptual framework in Figure 1.

## Research methods and design

### Design and population

A cross-sectional survey was conducted based on the Auditor General Report (2022), with 107 SOEs in Zimbabwe, spread across 13 economic sectors, as the target population. The finance, human resources, operations, marketing and information and communication technology (ICT) departments of SOEs were the target audience for the questionnaires. As middle and line managers are crucial to the implementation of intrapreneurship in SOEs, the researchers focused on participants from each of these departments. Therefore, the target demographic consists of 535 workers from SOEs located throughout Zimbabwe. A total of 535 SOE middle managers and line managers made up the population from whom research participants were



H, hypothesis.

**FIGURE 1:** Conceptual framework.

chosen using a simple random sampling technique. According to Majid (2018), the sample size calculator developed by Krejcie and Morgan (1970) was used to establish the appropriate sample size and 234 participants was the goal number. This sample size aligns with research advocating for a large sample to achieve a robust and near-normal distribution (Saunders 2007). Furthermore, Thompson's (2012) recommendation to account for potential non-responses was considered by increasing the sample size by 30%. Consequently, 300 questionnaires were distributed (Sekeran & Bougie 2016). The main tool used to collect data was a self-administered questionnaire. Following Saunders, Lewis and Thornhill (2016), the questionnaire was meticulously designed to ensure relevance to research objectives, data suitability for hypothesis testing and research question exploration, and feasibility within the research context. Both hard and soft copies were distributed to participants.

### Questionnaire development

The questionnaire development process was critical, forming the backbone of data collection. As emphasised by Saunders et al. (2016, p. 439), questionnaire design significantly impacts response rates, data reliability and validity. The instrument comprised closed-ended questions yielding quantitative data suitable for analysis using statistical tools. The Corporate Entrepreneurial Assessment Instrument (CEAI), created by Hornsby, Kuratko and Zahra (2002) for the purpose of implementing and evaluating intrapreneurial initiatives, served as the foundation for the questionnaire's construction.

Additionally, Hill's (2003) instrument for measuring intrapreneurship was referenced. These instruments provided a framework of six intrapreneurial sub-indexes to assess organisational intrapreneurship levels. By integrating and modifying constructs from both instruments, the researcher developed a novel instrument specifically tailored to assess intrapreneurship within Zimbabwean SOEs. This approach demonstrates the adaptation of existing measurement scales to address the specific needs of the study.

### Reliability test

According to Hair et al. (2019), the Cronbach's alpha reliability test was found to be a more trustworthy method

of confirming the questionnaire's dependability. Expert judgement influenced the study's measures' content validity as well as face validity (also known as expert validity). The specialists were chosen from the subject of intrapreneurship study (Mooi, Sarstedt & Mooi-Reci 2018). SPSS version 25 was utilised for the analysis of data obtained from questionnaires.

## Model specification

In order to examine the impacts of the independent variables while controlling for the effects of the covariates, the study used the MANCOVA model, which incorporates both the dependent variables and covariates. As there are several dependent variables, the Multivariate Analysis of Covariance (MANCOVA) model was employed in order to investigate the combined effects of independent variables while accounting for the effects of covariates. Multiple dependent variables can be analysed at once using MANCOVA (Statistics Solutions 2013). In order to provide a more thorough knowledge of the links between the independent variables and the result variables, the correlations between the dependent variables are taken into consideration. This assisted in decreasing Type I error, which is the possibility of Type I error (false positives) resulting from multiple hypothesis testing when performing several independent regression analyses for each dependent variable. Multivariate Analysis of Covariance, on the other hand, considers the multivariate nature of the data and can provide more reliable tests of significance.

The Equation 1 for a MANCOVA model can be stated as follows:

$$Y = X\beta + Z\gamma + \varepsilon \quad [\text{Eqn 1}]$$

Where:

Y represents the dependent variables (a vector of observed values)

X is the design matrix for the fixed factors (including intercept and categorical predictor variables)

$\beta$  represents the vector of fixed factor coefficients

Z is the design matrix for the covariates (continuous predictor variables)

$\gamma$  represents the vector of covariate coefficients

$\varepsilon$  represents the vector of residual errors

The model was adapted to include the variables in the study as follows:

**H1:** Governance has a positive influence on intrapreneurship:

$$\text{Intra} = \beta_0 + \beta_1 \text{Gov} + \varepsilon$$

**H2:** Governance has a significant influence on sustainability.

**H3:** Intrapreneurship has a significant positive influence on sustainability:

$$\text{Sus} = \beta_0 + \beta_1 \text{Gov} + \beta_2 \text{Intra} + \varepsilon$$

Where:

Gov is Governance

Intra is Intrapreneurship

Sus is Sustainability

$\varepsilon$  is the Error Term

## Ethical considerations

The investigation was conducted in accordance with Durban University of Technology's ethical guidelines. Permission to conduct research in state-owned companies and parastatals in Zimbabwe was granted by the Ministry in charge of these entities. Furthermore, the researcher obtained ethical clearance from the institution to guarantee that all research protocols followed its guidelines (Ethical clearance no.: 21304680). All phases of the research, including obtaining access and gathering data, processing and storing data, analysing data and writing to adhere to the beneficence and non-maleficence principles of causing more harm than good, were conducted with respect to research ethics. As stated in the cover letter, respondents' consent was acquired and their anonymity was preserved. By upholding anonymity and secrecy, the researcher further insured that the study would guarantee that workers and their respective organisations would not be damaged by the research's conclusions. This is reaffirmed by Devlin (2018), who states that strict ethical standards must be followed in research and that any deviations from these standards must be justified. As a result, ethical considerations are a crucial component of the legitimacy, validity and dependability of this research.

## Data analysis

The study collected 250 valid questionnaires from survey participants. According to Tennent (2013) and Saunders et al. (2016), a sample size of 30 is the minimum needed for statistical analysis; however, Singh and Prasad (2018) claim that tests such as multiple regression and analysis of covariance require a sample size of 200–500. The gathered surveys can therefore be subjected to statistical analysis. The study's response rate of 82% complies with the recommendations made by Ramayah et al. (2018), who suggest a response rate of 30%. While accounting for the impacts of the covariates, the MANCOVA technique was created to assess the overall significance of the combined effects of the independent variables (fixed factors) on the dependent variables. According to Gudmund (2004), this is commonly performed by comparing the Wilks' Lambda statistic or Pillai's trace statistic to the equivalent F-distribution with degrees of freedom.

## Tests for normality

The dependent variable is significant in all test parameters, as shown by Table 1's Pillai's Trace, Wilks' Lambda, Hotelling's Trace and Roy's Largest Root, suggesting that the results can be trusted. As a result, the combined effects of the independent variables are statistically significant, as indicated by Pillai's Trace (0.000). According to Wilks' Lambda (0.000), the combined effects of the independent factors on the dependent variables differ significantly from one another. The combined effects of the independent

variables are statistically significant in terms of their influence on the dependent variables, as indicated by Hotelling's Trace (0.000). According to Roy's Largest Root (0.000), there appears to be a noteworthy correlation between the independent and dependent variables.

### Test for reliability

To determine the reliability of the study tool, a questionnaire, the researcher employed Cronbach's alpha index. When determining whether or not to do more complex tests using the data, the Cronbach's alpha test provides guidance (Sekeran & Bougie 2016; Saunders et al. 2016). Furthermore, in order to verify the study's reliability, Wellman, Nation and Davis (2007) assert that Cronbach's alpha determines the extent to which a research instrument's items measure the same characteristics.

According to Sekeran and Bougie (2016), all of the Cronbach's alpha values in Table 2 were above 0.715, 0.731 and 0.777, all of which were above 0.7, indicating adequate reliability. Consequently, the researcher argues that these results support the high reliability and validity of the study, the validity of the study's conclusions and the possibility of conducting more in-depth analyses using the data.

### Multicollinearity test

Multicollinearity tests were carried out using the Spearman's rank correlation analysis (see Table 3). It measures the extent to which multicollinearity exists (Hair et al. 2019:11).

The correlations (0.658, 0.467 and 0.577) indicate that there is no potential risk of multi-collinearity as the values are below 0.8 hence no need to use variance inflation factors (VIF) or examining other diagnostic measures, to determine the impact and consequences on the analysis.

**TABLE 1:** Tests for normality.

Effect	Multivariate tests	Value	F	Hypothesis (df)	Error (df)	Sig.
Intercept	Pillai's Trace	0.927	1525.492 <sup>b</sup>	2.000	241.000	0.000
	Wilks' Lambda	0.073	1525.492 <sup>b</sup>	2.000	241.000	0.000
	Hotelling's Trace	12.660	1525.492 <sup>b</sup>	2.000	241.000	0.000
	Roy's Largest Root	12.660	1525.492 <sup>b</sup>	2.000	241.000	0.000
Gov	Pillai's Trace	0.562	23.618	8.000	484.000	0.000
	Wilks' Lambda	0.452	29.373 <sup>b</sup>	8.000	482.000	0.000
	Hotelling's Trace	1.183	35.487	8.000	480.000	0.000
	Roy's Largest Root	1.157	70.006 <sup>c</sup>	4.000	242.000	0.000

Note: <sup>a</sup>Design: Intercept + Gov; <sup>b</sup>Exact statistic; <sup>c</sup>The significance level's lower bound is derived from the statistic, which is an upper bound on F.

df, degrees of freedom; Gov, governance; Intra, intrapreneurship; Sus, sustainability; Sig., significance.

**TABLE 2:** Reliability test.

Item-total statistics	Scale mean	Scale variance	Corrected item-total correlation	Cronbach's alpha
Gov	5.50	5.316	0.725	0.715
Intra	6.44	4.248	0.636	0.731
Sus	5.24	6.250	0.564	0.777

Gov, governance; Intra, intrapreneurship; Sus, sustainability.

## Multivariate analysis of covariance analysis results

The purpose of the study was to look into how governance affected intrapreneurship and sustainability in Zimbabwean SOEs. These are the findings from the hypothesis testing.

### Hypothesis 1 and 2 findings and interpretations

Table 4 shows the summary of MANCOVA results for hypothesis 1 and 2.

### Testing the relationship between governance and intrapreneurship

The relationship between intrapreneurship and governance in SOEs is examined in this study. According to the results, there is a statistically significant correlation between governance and intrapreneurial activities, indicating that SOEs with strong governance frameworks have higher intrapreneurial activity rates. A significant positive finding suggests that intrapreneurial activity is increased by an organisation's governance framework. The findings demonstrate that governance significantly positively affects intrapreneurship ( $p = 0.000$ ,  $r = 0.68$ ). The coefficient of determination from 0.658 is ( $R$ -squared) of 0.433 and suggests that governance explains 43.3% of the variation in intrapreneurship. This is a strong explanatory power, indicating that governance is a major driver of intrapreneurial activity in SOEs. These results are in line with earlier studies that have demonstrated the importance of governance as an antecedent of intrapreneurship. Schachetebeck et al. (2018) discovered, for instance, that intrapreneurship in firms of all sizes is positively impacted by governance. In a similar vein, Rauch et al. (2009) contend that governance is the set of rules and procedures that serve as the foundation for intrapreneurial choices and actions, directly influencing intrapreneurship. This study extends this research by focusing on SOEs, which are often seen as being less innovative than their private-sector counterparts. These findings suggest that SOEs with a strong governance can be just as intrapreneurial as private-sector firms.

### Testing the relationship between governance and sustainability

The study's findings provide robust evidence for a significant positive influence of governance on sustainability with

**TABLE 3:** Correlation matrix.

Correlations matrix	Gov	Intra	Sus	
Gov	Spearman's rank correlation	1	0.658*	0.577*
	Sig. (2-tailed)	-	0.000	0.000
	N	250	248	249
Intra	Spearman's rank correlation	0.658*	1	0.467*
	Sig. (2-tailed)	0.000	-	0.000
	N	248	248	247
Sus	Spearman's rank correlation	0.577*	0.467*	1
	Sig. (2-tailed)	0.000	0.000	-
	N	249	247	249

Gov, governance; Intra, intrapreneurship; Sus, sustainability.

\*, Correlation is significant at the 0.01 level (2-tailed).

$p = 0.000$ ,  $r = 0.577$ . The coefficient of determination ( $R^2 = 0.333$ ) indicates a strong explanatory power, with governance accounting for 33.3% of the variance in sustainability. This strongly confirms the research hypothesis. Existing literature supports the link between governance and sustainability as seen by results of a study by Khyareh and Amini (2021) that good governance leads to sustainability in SOEs. Istocescu (2003) highlights how governance fosters more efficient resource utilisation, leading to improved financial and non-financial outcomes. The present research delineated the precise relationship between governance and non-financial firm performance, evincing a discernible impact on sustainability measures.

### Hypothesis 3: Findings and interpretations

Table 5 shows the summary of MANCOVA results for hypothesis three

### Testing the relationship between intrapreneurship and sustainability

The results show that intrapreneurship and sustainability in SOEs are significantly positively correlated ( $p = 0.00$ ,  $r = 0.467$ ). According to the model, entrepreneurial activity has a good explanatory power of 22% on sustainability ( $R^2 = 0.2181$ ). The findings support the idea that non-financial performance in SOEs is determined by intrapreneurship. The outcomes are in line with the most current research by Aslam et al. (2020),

which emphasises the value of intrapreneurship in raising and improving SOEs' overall sustainability. The results of this study highlight the vital role that intrapreneurial characteristics and practices play in the survival and expansion of firms (Semrau, Ambos & Kraus 2016). State-owned enterprises with higher intrapreneurial alertness demonstrated enhanced sustainability compared to their less agile and proactive counterparts. These results corroborate Van de Walle (2018) and Schachtebeck, Groenewald and Nieuwenhuizen (2018), who argue that a favourable predisposition towards intrapreneurial activity empowers firms to adapt to business environment challenges, ultimately leading to improved sustainability. This finding aligns with Taylor's (2018) work, which emphasises the connection between intrapreneurship and organisational sustainability. Encouraging intrapreneurship within SOEs yields multiple benefits, as the study confirms. Rankumise (2018) describes positive outcomes such as improved service delivery, reduced turnaround times, enhanced customer satisfaction and greater social impact. These findings further echo observations by Kearney, Hisrich and Roche (2009) who associate intrapreneurship in SOEs with 'superior organisational performance', and Kim (2010) who views it as a systematic mechanism for boosting customer satisfaction and social impact. The study also demonstrates that proactive behaviours increase the capacity for sustainability-oriented innovation, which facilitates better stakeholder connections and boosts organisational dynamics and innovation even more.

**TABLE 4:** Multivariate analysis of covariance analysis results for hypothesis 1 and 2.

Source	Dependent variable	Type III sum of squares	df	Mean Ssquare	F	Sig.
Corrected model	Intra	257.230 <sup>a</sup>	4	64.308	46.562	0.000
	Sus	113.726 <sup>b</sup>	4	28.431	34.345	0.000
Intercept	Intra	898.475	1	898.475	650.549	0.000
	Sus	2254.558	1	2254.558	2723.508	0.000
Gov	Intra	257.230	4	64.308	46.562	0.000
	Sus	113.726	4	28.431	34.345	0.000
Error	Intra	334.227	242	1.381	-	-
	Sus	200.331	242	0.828	-	-
Total	Intra	1733.000	247	-	-	-
	Sus	3083.000	247	-	-	-
Corrected total	Intra	591.457	246	-	-	-
	Sus	314.057	246	-	-	-

Note: The Table above displays tests of between-subjects effects.

df, degrees of freedom; Gov, governance; Intra, intrapreneurship; Sus, sustainability; Sig., significance.

<sup>a</sup>R Squared = 0.435 (Adjusted R Squared = 0.426); <sup>b</sup>R Squared = 0.362 (Adjusted R Squared = 0.352).

**TABLE 5:** Multivariate analysis of covariance analysis results for hypothesis 3.

Source	Type III sum of squares	df	Mean square	F	Sig.
Corrected model	83.932 <sup>a</sup>	5	16.786	17.580	0.000
Intercept	2673.011	1	2673.011	2799.329	0.000
Intra	83.932	5	16.786	17.580	0.000
Error	230.125	241	0.955	-	-
Total	3083.000	247	-	-	-
Corrected total	314.057	246	-	-	-

Note: The above Table displays tests of between-subjects effects. Dependent variable: Sus.

df, degrees of freedom; Gov, governance; Intra, intrapreneurship; Sus, sustainability; Sig., significance.

<sup>a</sup>R Squared = 0.267 (Adjusted R Squared = 0.252).

## Challenges and opportunities for state-owned enterprises

However, the research also highlights the challenges faced by many SOEs. A significant portion remain attached to traditional value-creation methods, failing to fully utilise opportunities for innovation and improved service delivery. This often stems from poor governance mechanisms. Consequently, these SOEs struggle to deliver efficient and effective services, ultimately hindering their ability to fulfil their societal mandate and contribute to economic growth.

## Recommendations for future-proofing state-owned enterprises

The study concludes by emphasising the crucial role of investing in intrapreneurship as a strategic imperative for future-proofing SOEs. By fostering innovation, SOEs can unlock the potential of intrapreneurship to drive improved value creation, sustainability and overall organisational performance. This necessitates a shift from adherence to traditional methods towards actively exploring the benefits of intrapreneurship, ultimately ensuring the long-term viability and relevance of SOEs in a dynamic and competitive landscape.

## Contributions to theory

Expanding the knowledge base: By experimentally analysing the links between governance, intrapreneurship, and

sustainability in SOEs, this study advances the subject of intrapreneurship and sustainability in public sector firms. This extends the existing knowledge base by providing crucial insights into the specific mechanisms through which governance fosters intrapreneurial activities and ultimately leads to improved performance within the context of SOEs.

**Governance and Intrapreneurship:** The study sheds light on the under-studied link between governance and intrapreneurship within SOEs. It highlights the critical role of effective governance mechanisms as enablers of intrapreneurial behaviour and innovation within these firms. This insight can inform strategies for developing organisational capabilities that nurture a culture of intrapreneurship and drive sustainability in SOEs.

**Implications for SOEs:** It can be very beneficial to SOEs to comprehend how governance structures affect their sustainability performance and intrapreneurial operations. State-owned enterprises can modify their governance procedures to support and promote intrapreneurial endeavours by realising the role that governance plays in promoting intrapreneurship. This can therefore result in these firms having more long-term sustainability, adaptability and innovation. Furthermore, through the application of intrapreneurship to connect governance to sustainability outcomes, this study provides a mechanism for SOEs to improve their overall resilience and performance in a market that is competitive and changing quickly.

### Limitations of the study

**Generalisability:** This study's focus on SOEs in Zimbabwe, a specific context within Southern Africa, limits the generalisability of its findings to other regions. Structural and environmental factors can vary significantly across different African countries, potentially impacting the applicability of the results. Further research in diverse contexts is necessary to solidify generalisable conclusions about intrapreneurship in SOEs.

**External Environment:** The study primarily focused on internal factors influencing governance, intrapreneurship and sustainability. However, as Aina and Solikin (2020) suggest, the relationship between governance and intrapreneurship can be influenced by external environmental conditions. To have a more thorough knowledge of the influence of internal and external factors on intrapreneurial success within SOEs, future study ought to examine how these aspects interact.

### Conclusion and recommendations

The present research endeavours to examine the correlation between intrapreneurship and governance in SOEs. The findings provide robust evidence that SOEs with effective governance mechanisms exhibit higher levels of intrapreneurship. These firms are better equipped to exploit opportunities in dynamic environments and generate social innovations that benefit citizens, such as new public services, improved delivery methods and innovative administrative

techniques. The study also shows that intrapreneurship and sustainability have a strong beneficial link. On the one hand, state owned enterprises that actively engage in intrapreneurial activities to create social innovations tend to achieve higher customer satisfaction and social impact. Intrapreneurship in SOEs manifests in various ways, including organisational system changes, establishing new administrative techniques and creating and managing novel public services. Additionally, the study offers factual support for how governance affects sustainability.

Non the less, there are dangers and difficulties associated with the connection between intrapreneurship and organisational success. Intrapreneurial endeavours frequently necessitate significant resources, such as monetary outlays and committed staff, which, if not handled well, may put a burden on already limited resources. Furthermore, intrapreneurial concepts may not be successfully implemented in traditional organisational structures because of reluctance to change, which can cause internal strife and impair productivity. Moreover, not all intrapreneurial endeavours are successful, and the inherent risk of innovation can lead to setbacks that negatively affect both financial results and staff morale. Achieving equilibrium between taking calculated risks and making wise choices is crucial for overcoming these obstacles and reaping the rewards of intrapreneurship for long-term company success.

### Acknowledgements

The authors acknowledge Dr Bobo Chazireni from Durban University of Technology who was my doctoral supervisor. This article is partially based on the author's thesis entitled 'The influence of intrapreneurship in public sector organisations: A Case of parastatals in Zimbabwe' towards the degree of Doctor of Philosophy: Business Administration (Entrepreneurship) in the Faculty of Management Sciences, Department of Entrepreneurial Studies and Management, Durban University of Technology, South Africa, on 26 November 2021 with Supervisor Dr Bobo Chazireni. It is available here: <https://hdl.handle.net/10321/4280>.

### Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

### Authors' contributions

L.T.C. was responsible for the conceptualisation, methodology, formal analysis, investigation, writing the original draft, visualisation and project administration. I.T. was responsible for the methodology, software, validation, data curation and writing, reviewing and editing of article.

### Funding information

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.



## Data availability

The data presented in this study are available on request from the corresponding author. The data are not publicly available because of restrictions.

## Disclaimer

The views and opinions expressed in this article are those of the authors and are the product of professional research. It does not necessarily reflect the official policy or position of any affiliated institution, funder, agency or that of the publisher. The authors are responsible for this article's results, findings and content.

## References

- Adeoti, J.O., Olawale, Y.A. & Asabi, O., 2017, 'Impact of Intrapreneurship on the Corporate Goal Achievement of Selected Food and Beverage Firms in Lagos State, Nigeria', *NIU Journal of Social Sciences* 2(2), 193–192.
- Aina, Q. & Solikin, I., 2020, 'Entrepreneurship and intrapreneurship: How supporting corporate performance', *Review of Integrative Business and Economics Research* 9(Suppl. 1), 761–792.
- Amorós, J.E., Poblete, C. & Mandakovic, V., 2019, 'R&D transfer, policy and innovative ambitious entrepreneurship: Evidence from Latin American countries', *The Journal of Technology Transfer* 44, 1396–1415. <https://doi.org/10.1007/s10961-019-09728-x>
- Antoncic, B. & Hisrich, R.D., 2001, 'Intrapreneurship: Construct refinement and cross-cultural validation', *Journal of Business Venturing* 16(5), 495–527. [https://doi.org/10.1016/S0883-9026\(99\)00054-3](https://doi.org/10.1016/S0883-9026(99)00054-3)
- Antoncic, B. & Hisrich, R.D., 2004, 'Corporate entrepreneurship contingencies and organizational wealth creation', *Journal of Management Development* 23(6), 518–550.
- Aparicio, S., Turro, A. & Noguera, M., 2020, 'Entrepreneurship and intrapreneurship in social, sustainable, and economic development: Opportunities and challenges for future research', *Sustainability* 12(21), 8958. <https://doi.org/10.3390/su12218958>
- Aras, G. & Crowther, D., 2008, 'Governance and sustainability: An investigation into the relationship between corporate governance and corporate sustainability', *Management Decision* 46(3), 433–448. <https://doi.org/10.1108/00251740810863870>
- Aslam, H.D., Zafar, J.M., Ahmad, N. & Ayub, A., 2020, 'Determining the performance of small and medium enterprises influenced by total quality management practices and organizational learning: Mediating role of organizational excellence among furniture industry of Pakistan', *HamdardIslamicus* 43(1), 282–294.
- Auditor General Report, 2022, *The Office of the Auditor – General report on state-owned enterprises and Parastatals*, Zimbabwe, viewed 03 February 2024, from <http://www.auditorgeneral.gov.zw>.
- Bogatyreva, K., Laskovaia, A. & Osiyevskyy, O., 2022, 'Entrepreneurial activity, intrapreneurship, and conducive institutions: Is there a connection?', *Journal of Business Research* 146, 45–56. <https://doi.org/10.1016/j.jbusres.2022.03.062>
- Breznik, L. & Hisrich, R., 2014, 'Dynamic capabilities vs. innovation capability: Are they related?', *Journal of Small Business and Enterprise Development* 21(3), 368–384. <https://doi.org/10.1108/JSBED-02-2014-0018>
- Burgelman, R.A., 2004, 'Exploring strategic entrepreneurship in the public sector', *Qualitative Research in Accounting & Management* 3, 149–163.
- Chamba, L.T. & Chazireni, B., 2023a, 'Investing in intrapreneurial capabilities for improved performance in state-owned enterprises', *Africa's Public Service Delivery and Performance Review* 11(1), 663. <https://doi.org/10.4102/apsdpr.v11i1.663>
- Chamba, L.T. & Chazireni, B., 2023b, 'Intrapreneurship as a means of achieving efficacy in state-owned enterprises: The case of parastatals in Zimbabwe', *Africa's Public Service Delivery and Performance Review* 11(1), 611. <https://doi.org/10.4102/apsdpr.v11i1.611>
- Debus, M.E., Gross, C. & Kleinmann, M., 2020, 'The power of doing: How job crafting transmits the beneficial impact of autonomy among overqualified employees', *Journal of Business and Psychology* 35(3), 317–331. <https://doi.org/10.1007/s10869-019-09625-y>
- Deloitte Digital, 2015, *Five insight into intrapreneurship*, viewed 30 March 2019, from [www.deloitte.com/UeberUns](http://www.deloitte.com/UeberUns).
- Estrin, S., Korosteleva, J. & Mickiewicz, T., 2013, 'Which institutions encourage entrepreneurial growth aspirations?', *Journal of Business Venturing* 28(4), 564–580. <https://doi.org/10.1016/j.jbusvent.2012.05.001>
- Gudmund I.R., 2004, 'Multivariate analysis of variance and covariance (Manova and Mancova)', *The SAGE Encyclopedia Of Social Science Research Methods* 2, 702–703.
- Hair, J.F., Risher, J.J., Sarstedt, M. & Ringle, C.M., 2019, 'When to use and how to report the results of PLS-SEM', *European Business Review* 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Heinonen, J., 2013, 'Heroic and humane entrepreneurs: Identity work in entrepreneurship education', *Education+ Training* 55(8/9), 886–898. <https://doi.org/10.1108/ET-06-2013-0086>
- Hill, M.E., 2003, 'The development of an instrument to measure intrapreneurship', *Organisational Research Methods* 13(1), 85.
- Hornsby, J.S., Kuratko, D.F. & Zahra, S.A., 2002, 'Middle managers' perception of the internal environment for corporate entrepreneurship: Assessing a measurement scale', *Journal of business Venturing* 17(3), 253–273. [https://doi.org/10.1016/S0883-9026\(00\)00059-8](https://doi.org/10.1016/S0883-9026(00)00059-8)
- Istocescu, A., 2003, *Strategia si managementul strategic al firmei*, Editura ASE, București.
- Kearney, C., Hisrich, R. & Roche, F., 2009, 'Public and private sector entrepreneurship: Similarities, differences or a combination?', *Journal of Small Business and Enterprise Development* 16(1), 26–46. <https://doi.org/10.1108/14626000910932863>
- Khyareh, M.M. & Amini, H., 2021, 'Governance quality, entrepreneurship and economic growth', *Journal of Competitiveness* 13(2), 41–64. <https://doi.org/10.7441/joc.2021.02.03>
- Kim, Y., 2010, 'Improving performance in U.S. state governments: Risk-taking, innovativeness, and proactiveness practices', *Public Performance & Management Review* 34(1), 104–129.
- Krejcie, R.V. & Morgan, D.W., 1970, 'Determining sample size for research activities', *Educational and Psychological Measurement (1970)* 30, 607–610. <https://doi.org/10.1177%2F001316447003000308>
- Kuratko, D. & Hodgets, V., 2007, 'Developing an intrapreneurial assessment instrument for an effective corporate environment', *Strategic Management* 11(Summer Special Issue), 49–58.
- Majid, U., 2018, 'Research fundamentals: Study design, population, and sample size', *URNST Journal* 2(1–2), 16. <https://doi.org/10.26685/urnst.16>
- Mbo, M., 2017, 'Drivers of organisational performance: A state-owned enterprise perspective', *International Journal of Productivity and Performance Management* 66(3) 405–420.
- Mooi, E., Sarstedt, M. & Mooi-Reci, I., 2018, *Regression analysis*, Springer, New York.
- Ramayah, T.J.F.H., Cheah, J., Chuah, F., Ting, H. & Memon, M.A., 2018, *Partial least squares structural equation modeling (PLS-SEM) using smartPLS 3.0. An updated guide and practical guide to statistical analysis*, pp. 967–978, Pearson, London.
- Rankumise, E., 2018, 'Corporate entrepreneurship in the public sector: A South African perspective', Conference Paper: The 2nd Annual International Conference on Public Administration and Development Alternatives, 26–28 July 2017, Tlotlo Hotel, Gaborone, Botswana.
- 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), 761–787. <https://doi.org/10.1111/j.1540-6520.2009.00308.x>
- Rodríguez-Gulías, M.J., De Sousa Gabriel, V.M. & Rodeiro-Pazos, D., 2018, 'Effects of governance on entrepreneurship: European Union vs non-European Union', *Competitiveness Review: An International Business Journal* 28(1), 43–57. <https://doi.org/10.1108/CR-06-2016-0035>
- Sarango-Lalangui, P., Santos, J.L.S. & Hormiga, E., 2018, 'The development of innovative entrepreneurship research field', *Sustainability* 10(6), 2005. <https://doi.org/10.3390/su10062005>
- Saunders, M., Lewis, P. & Thornhill, A., 2016, *Research methods for business students*, 7th edn., Pearson Education Limited, Edinburgh Gate.
- Saunders, S.C., 2007, *Reliability, life testing and the prediction of service lives: For engineers and scientists*, Springer.
- Schachtebeck, C., Groenewald, D. & Nieuwenhuizen, C., 2018, 'Assessment of entrepreneurial and intrapreneurial orientation constructs: An analysis of past research', *Journal of Business and Retail Management Research* 13(2). <https://doi.org/10.24052/JBRMR/V13IS02/ART-24>
- Schaltegger, S. & Wagner, M., 2011, 'Sustainable entrepreneurship and sustainability innovation: Categories and interactions', *Business Strategy and the Environment* 20(4), 222–237. <https://doi.org/10.1002/bse.682>
- Sekaran, U. & Bougie, R., 2016, *Research methods for business: A skill building approach*, John Wiley and Sons, West Sussex.
- Semrau, T., Ambos, T. & Kraus, S., 2016, 'Entrepreneurial orientation and SME performance across societal cultures: An international study', *Journal of Business Research* 69(5), 1928–1932. <https://doi.org/10.1016/j.jbusres.2015.10.082>
- Simón-Moya, V., Revuelto-Taboada, L. & Guerrero, R.F., 2014, 'Institutional and economic drivers of entrepreneurship: An international perspective', *Journal of Business Research* 67(5), 715–721. <https://doi.org/10.1016/j.jbusres.2013.11.033>
- Singh, I. & Prasad, T., 2018, 'Application of PLS-SEM in modelling the significance of social valuation in the determination of entrepreneurial intention of business management students', *The IUP Journal of Entrepreneurship Development* 8, 3.
- Statistics Solutions, 2013, *Data analysis plan: One Way MANCOVA* [WWW Document], viewed 03 January 2024, from <http://www.statisticssolutions.com/academic-solutions/member-resources/memberprofile/data-analysis-plan-templates/data-analysis-plan-one-way-mancova-2/>.
- Taylor, A., 2018, *Where public servants dare: Developing archetypes for public sector intrapreneurship*, Australia, Torrens University.
- Teece, D.J., 2018, 'Business models and dynamic capabilities', *Long Range Planning* 51(1), 40–49. <https://doi.org/10.1016/j.lrp.2017.06.007>
- Tennent, K., 2013, 'Management and the free-standing company: The New Zealand and Australia land company c. 1866–1900', *The Journal of Imperial and Commonwealth History* 41(1), 81–97. <https://doi.org/10.1080/03086534.2013.762158>
- Thompson, S.K., 2012, *Sampling*, vol. 755, John Wiley & Sons, West Sussex.
- Van de Walle, S., 2018, 'Explaining citizen satisfaction and dissatisfaction with public services', in E. Ongaro & S. Van Thiel (eds.), *The Palgrave handbook of public administration and management in Europe*, pp. 227–241, Palgrave Macmillan, London.
- Wellman, P.J., Naton, J.R. & Davis, K.W., 2007, 'Impairment of acquisition of cocaine self-administration in rats maintained on a high-fat diet', *Pharmacology Biochemistry and Behavior* 88(1), 89–93. <https://doi.org/10.1016/j.pbb.2007.07.008>