

## The relationship between innovation capabilities and performance of Zimbabwean listed manufacturing firms.

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**Abstract:** This study examined the effects of innovation capabilities, namely work climate and wellbeing, ideation and organising structures, participatory leadership culture, and know-how development on firm performance. The study used survey data from 45 participants randomly chosen from 7 samples of Zimbabwean listed firms manufacturing firms. The results show that four aspects of innovation capability, namely work climate and wellbeing, ideation and organising structures, participatory leadership culture, and know-how development, have a positive and statistically significant effect on overall performance of listed manufacturing firms' performance. The study's contribution is highlighting the importance of policymakers creating collaborative platforms for manufacturing firms to exchange best practices, knowledge, and accelerate innovation adoption, while also providing targeted training, funding, and resources

**Keywords:** Innovation dimension, innovation capabilities, firm performance, dynamic capabilities, Innovation management.

### 1. Introduction

The capacity to innovate has become essential in today's fast-paced and cutthroat business world for listed companies to outperform their competitors and maintain a competitive advantage. For listed companies and their stakeholders, innovation—which includes the creation and effective application of new goods, services, procedures, business structures, or organizational strategies—can generate substantial value (Kusiak, 2009). Much research Cainelli et al., (2004); Calantone et al., (2002); Jiménez-Jiménez & Sanz-Valle, (2011); Keskin, (2006) have looked at the connection between innovation and company performance and have shown innovation as a key factor in a business's success.

Zimbabwean listed companies operate in a difficult economic environment where shocks from technology, fluctuating markets, and changing consumer tastes are all present. In this situation, these companies' capacity for successful innovation may make a significant difference in the market by enabling them to adapt to shifting circumstances, seize new possibilities, and beat rivals. Zimbabwean businesses work in a fast-paced, cutthroat market where innovation is now essential to attaining long-term success. Strong innovation skills put a company in a better position to create new goods and services, adjust to changing market circumstances, and improve overall operational performance.

The purpose of this study is to look at how multidimensional innovation skills affect listed companies' performance in Zimbabwe. It will specifically look at how Zimbabwean listed companies' financial, operating, and strategic outcomes are affected by important innovation capability dimensions like individual activity, regeneration, work climate and well-being, ideation, participatory leadership, organizing structures, and know-how development. The results of this research will advance knowledge on the function of innovation in Zimbabwean business environments and provide insightful counsel to companies looking to improve their long-term viability and competitiveness.

## 1.1 Background

The years 2008 and 2009 are known as the "hyper-inflation period" in Zimbabwe because businesses there were subjected to a variety of both internal and exterior complexity issues (Awoleye et al., 2020). Businesses have been facing economic difficulties recently, including downsizing, layoffs, and company closures. Businesses use inventive strategies to address these issues and maintain their development. The current research aims to investigate the link between different innovation skills and the overall performance of businesses in Zimbabwe in light of recent company issues and diverse firms' responses to them.

For more than 20 years, the economy of Zimbabwe has been repressed, and several sectors, especially the banking sector, are in poor condition (Bonga et al., 2023). But in order to aid in the economic recovery, the government has put in place a number of policies and reforms, including changes to the stock exchange (Bonga et al., 2023)

Innovation skills are essential for businesses to successfully traverse Zimbabwe's difficult economic climate. (Mashingaidze et al., 2021). The capacity for innovation has emerged as a crucial element in ascertaining a company's triumph in the contemporary and cutthroat commercial landscape. The purpose of this research is to investigate the link that exists between company performance and essential innovation competencies (Kamasak, 2015)

According to Saunila, (2017), the elements of innovation capacity include individual activity, Ideation, regeneration, know-how development, participatory leadership, work environment and well-being, and external knowledge. These dimensions include a wide variety of elements that influence how well a company may innovate. A key component of innovation capabilities is a participative leadership culture, which creates an atmosphere in which staff members feel encouraged to share their ideas and take part in the development of innovations (Wang et al., 2022a). On the other hand, ideation provide the frameworks and procedures required for coming up with, assessing, and putting new ideas into practice (Aksoy et al., 2019). An organization's capacity for creativity is also significantly shaped by the work environment and employee well-being. Employees are inclined to be creative and add to the success of the company when they feel encouraged, inspired, and engaged (Parnell et al., 1970). Furthermore, keeping a competitive advantage requires the advancement of knowledge as well as the capacity to continually regenerate and adjust to shifting market circumstances (Jiang et al., 2024). An organization's capacity for innovation may be further increased by gaining access to and using outside information efficiently, as well as by promoting individual initiative and action (Bratianu et al., 2023)

An in-depth knowledge of the elements that influence an organization's capacity for innovation may be obtained by closely evaluating these innovation capabilities aspects. This information may help with resource allocation, strategic decision-making, and the execution of focused projects that promote an innovative and long-term growth culture (Racela, 2014).

The notion of dynamic capacities has been more central to the academic debate over the last ten years about the antecedent of business success. This is because dynamic capabilities have emerged as a critical aspect in understanding the persistent disparities in company performance. The resource-based perspective (RBV) of the company gives birth to the idea of dynamic capacities, which asserts that a corporation's capacity to develop, use, and safeguard its intangible property is a critical factor in determining its long-term performance (Teece, 2007).

By considering how valuable, uncommon, and hard-to-imitate resources may be generated and renewed in changing situations, the dynamic capability viewpoint expands upon the resource-based paradigm (Ambrosini & Bowman, 2009). Many enabling and inhibiting factors, within as well as outside the company, influence dynamic capacities. These factors include managers' attitudes and motives (Ambrosini & Bowman, 2009). Additionally, particular procedures that support the growth of dynamic capacities have been identified in the literature. Examples of these activities include identifying opportunities, grabbing them, and adjusting the firm's base of resources appropriately (Teece, 2007).

The research does, however, provide a warning that having dynamic capabilities alone does not guarantee improved performance (Ambrosini & Bowman, 2009). Rather, a number of variables, including the businesses outside environment, its strategic direction, and the effectiveness with which dynamic skills are used, influence the intricate link underlying dynamic capabilities and company performance (C. L. Wang & Ahmed, 2007)

According to Teece, (2007), the increasing popularity of the dynamic capabilities viewpoint highlights how crucial it is for a company to be able to react and adjust to changing market circumstances in order to maintain above-average profitability and provide value for stakeholders. With major ramifications for academics and practitioners alike, understanding the micro foundations and antecedent of dynamic capacities has emerged as a critical topic of strategic management study.

The study's conclusions imply that a major factor influencing innovation-based success is the complementary of resources for innovation and talents. Companies that can efficiently use their learning skills to get input from consumers and channels and modify their operational procedures and practices will be in a better position to create new goods and accelerate time-to-market (Sok et al., 2013)

According to earlier studies, innovation has a significant role on a company's performance and is essential to its competitive edge and its continued success (Kasseeah, 2013; Tian et al., 2021). It has been discovered that more innovative businesses outperform less inventive businesses financially (Nnanna, 2009). Businesses in Zimbabwe have had to adjust to quickly shifting circumstances due to the country's uncertain economic climate (Dervitsiotis, 2011). Innovative businesses have a higher chance of success in this setting (Erdilek Karabay & Çağıl, 2017).

In a number of situations, it has been discovered that innovation skills improve company performance. According to (Ibrahim et al., 2018), research conducted on manufacturing businesses in Ghana revealed that creative skills, particularly those related to product, process, and market innovation, significantly improved the performance of the firms. Innovation, as shown by technical advancement, R&D spending, and the launch of new products, was found to have a positive influence on firm performance in another research on small and medium-sized businesses in Mauritius (Kasseeah, 2013).

In a similar vein, an investigation of the administration of the University of Cape Coast discovered a favorable correlation between performance and inventive capacities (Adom et al., 2019). The resource-based perspective was used in the research, which highlights the need for firms to consistently enhance their own internal resources and skills to attain exceptional performance.

The body of existing research offers a solid starting point for investigating the connection between business performance and innovation capacities in the context of Zimbabwe. In light of Zimbabwe's economic difficulties, it's critical to comprehend how businesses might use innovation to boost productivity. By empirically examining the effect of innovation skills on the success of Zimbabwean listed enterprises, the present research seeks to further this knowledge.

Nonetheless, academic research on the relationship between innovation capacities and company performance in Sub-Saharan Africa is noticeably lacking, especially in developing market contexts (Manyati et al., 2024). Prior research, like that done by Kuye, Rose, and Kearney, which has shown a favourable correlation between financial success and innovative practices; however, these conclusions were derived within the framework of an integrated economy. Therefore, by addressing a gap in the research on the combination of innovation abilities and company performance via an emerging market context—Zimbabwe—this empirical article enhances the earlier empirical studies.

Prior research has also examined the competitiveness and efficiency of small and medium-sized businesses in Zimbabwe's unorganized metal manufacturing industry. These studies have shown that these businesses are reasonably profitable, competitive, and efficient (Makate et al. 2016). Furthermore, studies on the economic sustainability of small and medium-sized businesses in Zimbabwe have shown that fiscal incentives, employee engagement, and these businesses' economic sustainability are positively correlated (Jachi and Muchongwe, 2019).

Research explicitly analyzing the relationship between listed manufacturing firms' performance in Zimbabwe and their capacity for innovation is lacking, though. The dearth of empirical data about the impact of innovation capacity on corporate success is the research issue this study attempts to solve. Although research indicates that innovation skills have a major impact on business success, the majority of this data is speculative or anecdotal and lacks a strategic perspective (Adegbesan & Ricart, 2007)

These results underline the necessity for an increased strategic awareness of the relationship between innovation capabilities and company success. Although it is widely believed that innovation boosts performance, little is known about the precise nature and degree of this link. By taking into consideration contextual elements that might increase or decrease the significance of innovation skills, this research adds to the body of literature by offering a more nuanced view on the relationship between innovation and performance. Furthermore, not much research has been done on the precise link that exists between innovation skills and the success of listed Zimbabwean companies. Comprehending this dynamic is essential, as it may provide valuable perspectives on the fundamental factors that contribute to the prosperity of Zimbabwean enterprises and educate decision-makers and industry executives on the significance of cultivating an innovative culture. In order to offer managers more practical advice on successful innovation strategies, future study should carry out an investigation into the boundary circumstances and contingencies that establish the link between innovation and performance.

## 1.2 Research Objectives

The broad objective of this study is to investigate the effects of innovation capabilities on the performance of listed manufacturing firms on Zimbabwe stock exchange and the specific objectives are.

1. To determine the effect of participatory leadership culture on the performance of listed manufacturing firm in Zimbabwe
2. To ascertain the effect of ideation and organising structure on the performance of listed manufacturing firm in Zimbabwe
3. To establish the effect of participatory leadership culture on the performance of listed manufacturing firm in Zimbabwe
4. To determine the effect of know-how development on the performance of listed manufacturing firm in Zimbabwe

## 2. Literature review

### 2.1 Innovation capability

Today's businesses must be able to think creatively and adapt in order to survive and thrive in a highly competitive and quickly changing environment (Oe & Yamaoka, 2022). According to (Lawson & Samson, 2001a), innovation capacity is a collection of steps that may be done to increase the likelihood that innovative endeavours will be successful. In a similar vein, (García-Morales et al., 2007) refer to the elements of this competence (Oe & Yamaoka, 2022) as the important success aspects of innovation processes, or "business innovation capability" (Racela, 2014).

Scholars have acknowledged for a considerable amount of time that innovation can be a complicated, diverse process that extends beyond innovations in technology. Likewise, innovation capability is not restricted to one department or function but rather calls for a holistic and synchronized approach across the company (Racela, 2014). Innovation encompasses not only new technologies but also valuable and novel products, services, techniques, and business models which can have significant effects on different elements of a business, for example customer service, worker mindset, and value creation within stakeholders (Daneshjo et al., 2022; Oe & Yamaoka, 2022).

The capacity of the company to innovate is a major element in the achievement of innovation processes, and it may be assessed using the crucial success criteria that have been discovered in previous studies (Kral & Janoskova,

2021; Oe & Yamaoka, 2022). These elements include the following: the capacity to create and execute new ideas; the accessibility of resources and backing for innovation; the culture of the organization and leadership that encourage innovation; the ability to integrate and utilize new knowledge and technologies; and the capacity to perceive and respond to customer's needs (Kral & Janoskova, 2021; Racela, 2014)

Organizations may improve their chances of carrying out innovative projects effectively and gaining an ongoing competitive advantage in the global marketplace by comprehending and improving these crucial aspects of business innovation capabilities (Kral & Janoskova, 2021; Racela, 2014)

In accordance with Saunila & Ukko, (2014a) research, innovation capacity is broken down into seven aspects in this publication. The aspects include individual activity, regeneration, external knowledge, ideation and organizing frameworks, work climate and well-being, and participatory leadership culture. Since it encompasses most of the significant aspects of innovation capacity, this definition was adopted (see Table 1). These aspects are hypothesized to exist in some capacity among highly innovative organization

## 2.2 Innovation capability and firm performance

In the fields of organizational studies and strategic management, there has been a lot of interest in the connection between a company's capacity for innovation and overall success. The capacity to innovate successfully has become more important in deciding the achievement of a company and long-term survival as the business landscape becomes more dynamic and competitive (Kamaşak, 2015).

Previous studies have investigated different facets of this connection, looking at the causes, consequences, and precursors to innovativeness (Adegbesan & Ricart, 2007). One important result (Kamasak, 2015) is that an organization's innovation performance is significantly shaped by its technical capabilities and innovation strategy. Furthermore, the link between innovation and company success may also be moderated by the organizational and cultural setting in which a business works (Singhal et al., 2022).

The assumption that innovation is a major factor in corporate success is supported by a number of studies that have looked at the link between innovation and firm performance (Cainelli et al., 2004; Calantone et al., 2002; Keskin, 2006). There exists a favourable correlation between a company's innovativeness and its economic success, as seen by better levels of productivity and economic development (Cainelli et al., 2004). Research on the relationship between organizational innovation and performance (Jiménez-Jiménez & Sanz-Valle, 2011) has also shown a general positive correlation between the two. Additionally, innovation enhances a company's success when it comes to SMEs (Keskin, 2006). Armbruster et al., (2008) demonstrate, based on prior research, that organizational innovations serve as sources of competitive edge because they enable the effective application to technological products and process improvements. According to (Steiber & Alänge, 2015) Lay et al. (2008), organizational innovation itself have an effect on lead times, quality, flexibility, and productivity in the workplace. Although there is a widespread belief that technological innovation improves business success, there is still significant disagreement in the actual data (Adegbesan & Ricart, 2007; Singhal et al., 2022). While some researches have revealed more subtle or even negative connections, others have identified a strong and favourable link.

In order to address this uncertainty, Singhal et al., (2022) conducted a recent meta-analysis with the goal of using a multivariate method to reconcile the contradictory data. The association between technical innovation and company success is, in fact, considerable and favourable, but it is tempered by institutional and cross-cultural elements, according to the authors' findings. In particular, they found that countries with a stronger inclination toward collectivism and a lesser tendency toward avoiding uncertainty likely to benefit more from innovation in terms of company performance (Singhal et al., 2022). These results emphasize how crucial it is to take into account the larger institutional and contextual factors when analyzing the relationship between innovation and performance. According to Kamasak, (2015); Singhal et al., (2022), companies that want to use their innovative skills for enhanced performance must also cautiously manoeuvre through the organizational and cultural terrain in which they function.

The body of research indicates that, although innovation capacity is a crucial aspect in determining a firm's success, its impacts depend on a variety of contextual, technical, and strategic variables. Businesses may more successfully use their capacity for innovation and create long-term competitive advantage by being aware of these subtleties. Table 2 summarizes research on the connection between performance and innovation.

**Table 1. dimension of innovation capability**

Study	Leadership practices	Employee skills and innovativeness	Process and tools for idea management	Supporting culture	External sources for information	Development of individual knowledge	Employee welfare
(Akman & Yilmaz, 2008)	+	+		+	+	+	
(Laforet, 2011)		+		+	+		
(Lawson & Samson, 2001b)		+	+	+		+	
(Martensen et al., 2007)	+	+	+		+		
(Saunila & Ukko, 2014b)	+	+	+	+	+	+	+
(Smith et al., 2008)	+	+	+	+		+	
(Subramaniam & Youndt, 2005)	+	+	+				

Source: Author's observation

**Table 2. prior studies with a positive association between innovation and performance.**

Author	Measure of innovation/innovation capability	Measure of performance	Effect
(Lartey et al., 2020)	Presence of process, product, and administrative innovation		
(Haleem et al., 2018)	Understanding requisites of product innovation management.	Higher profits, Goodwill, and brand image.	+
(Jajja et al.,	Strategic orientation towards innovation	Perceived business performance	+



2017)	and its strategic alignment with suppliers as precursors of innovation outcomes and competitiveness.		
(Piening & Salge, 2015)	The capability of firms to introduce process innovations.	Objective financial performance was measured using profit margins	+
(Tuan et al., 2016)	Effects of process, marketing, and organizational innovations	Subjective process, organizational and marketing innovative performance	+
(Zaefarian et al., 2017)	Relationship ending capabilities that enhance product innovation success	Perspective firm performance	
(Vincent et al., 2004)	Organizational capabilities and structure	Financial performance, efficiency and subjective performance	
(Bartolacci et al., 2015)	Investments in tangible and intangible fixed assets and type of innovation (product and process)	Growth, profitability and productivity on a yearly basis	+, depends on size and cluster
(Camisón & Villar-López, 2014)	Assessment of organisational innovation (OI), product innovation capability (product IC), and process innovation capability (process IC)	Objective firm performance (return on shareholders' funds, return on capital employed, and return on total assets), and subjective firm performance (mean economic profitability, mean financial profitability, and mean sales profitability)	OI, product IC +

### 2.3 Hypothesis development

#### 2.3.1 Participatory Leadership culture and firm performance

According to De Biazzzi, (2012), participatory leadership has become a vital management strategy that has a big influence on organizational performance. In recent decades, a great deal of study has been conducted on the use of participatory management techniques (Margulies & Black, 1987). Academics have acknowledged that including workers in organizational decision-making is necessary to improve competitiveness (Wang & Ahmed, 2007). According to some research, management views that involvement results in high-quality choices are positively correlated with a participatory culture (Parnell et al., 1970). Additionally, managers that use participatory tactics often report positive effects on the attitudes and performance of their staff (Gilberg, 1988).

However, research also indicates that there may be difficulties in properly implementing participatory management techniques and that they are not always effective (Margulies & Black, 1987). Due to perceived inconsistencies with the corporate culture, poor execution, or a lack of dedication, some firms have even completely abandoned participatory techniques (González et al., 2022).

A number of organizational and individual-level elements that might facilitate the adoption of participative leadership have been found in earlier study. Participatory approaches are likely to be encouraged at the corporate level by a culture which promotes employee empowerment and engagement (González et al., 2022; Q. Wang et al., 2022b). Participatory leadership is also supported by organizational structures that provide employees chances for input and decentralize decision-making (Q. Wang et al., 2022b). Managers' attitudes and views on participatory management are very important on an individual basis. Participatory techniques are more inclined to be adopted by managers who see the advantages of employee engagement, such as increased performance and work satisfaction (Gilberg, 1988).

According to the research currently in publication, participatory leadership may improve a number of organizational outcomes. By using staff members' expertise, abilities, and dedication to decision-making, participatory leadership may improve company performance (Parnell et al., 1970; Q. Wang et al., 2022b). The use

of participatory techniques has the potential to enhance employee empowerment, job happiness, and buy-in, hence augmenting organizational success.

Building on these insights, the following hypothesis is proposed:

Hypothesis 1: The higher the firm's participatory leadership culture, the greater the firm's overall performance.

### 2.3.2 Ideation and organising structure and firm performance

Bessant, (2003) emphasizes the significance of being able to transfer inventive activity across organizational borders and to establish coherence between innovation ideals and behaviour and the organizational environment (structures, processes, etc.). Enhancing communication inside the organization is also greatly aided by a supportive framework (Dixit & Nanda, 2011). Additionally, there is evidence to support the favourable impact of organizational structures on business performance. (Varadarajan, 2009), for instance, recommends that businesses work to foster organizational circumstances that are favourable to greater performance in the area of incremental innovations. These variables include organizational atmosphere, procedures, policies, structure, and systems. According to research by (Jiménez-Jiménez & Sanz-Valle, 2011), a company's ability to age helps it establish organizational patterns that improve performance by facilitating the execution of its operations more effectively. As a result, the following hypothesis may be established:

Hypothesis 2: The higher the firm's ideation and organizing structures, the greater the firm's overall performance

### 2.3.3 Work Climate and Well-being and firm performance

The management literature has been increasingly interested in the link between work atmosphere, employee well-being, and business success (De & Borges, 2009). According to research, cultivating a happy workplace and supporting employee wellbeing may have a big influence on a lot of firm-level outcomes including profitability, productivity, and overall performance of the business (Krekel et al., 2019)

The importance of management and leadership styles is one of the major variables in this connection. Research has shown that the well-being of employees and, therefore, the performance of the company may be greatly impacted by paternalistic leadership, which is defined as a blend of authoritarianism and kindness (Tharikh & Hamzah, 2020). Higher levels of commitment to the organization, job fulfilment, and general work atmosphere have been connected to effective leadership that offers direct guidance, support, and a caring feeling for workers (Yáñez-Araque et al., 2021).

Furthermore, Yáñez-Araque et al., (2021) have highlighted the significance of variables like job satisfaction and organizational commitment in moderating the correlation between work atmosphere and business performance. Workers are more inclined to be productive, engaged, and help contribute to the overall achievement of the company if they feel devoted to the company and content in their roles (Krekel et al., 2019).

Building on these insights, we propose the following hypotheses:

Hypothesis 3: The higher the firm's work climate and wellbeing, the greater the firm's overall performance.

### 2.3.4 Know-how Development and firm performance

It is often acknowledged that a company's capacity to grow and use its knowledge and expertise is a major factor in its competitive advantage and improved performance. Organizations must constantly innovate and evolve to thrive in the increasingly complicated and competitive business environment (Pedro Filho et al., 2013). Thus, knowledge-driven organizational transformation has become a crucial area of research in the field of management (Korot & Tovstiga, 2001)



According to Halid et al., (2018), the knowledge-based perspective of the business, a company's knowledge resources—including the explicit and tacit information held by its employees—are the main source of long-term competitive advantage. Firms may develop creative skills and gain a durable competitive advantage by using effective knowledge management strategies, such as knowledge application and sharing (Arsawan et al., 2021). Building on these insights, we propose the following hypotheses:

Hypothesis 4: The higher the firm’s know-how development, the greater the firm’s overall performance.

### 2.3.5 Conceptual framework

The study framework shown in Figure 1 is the result of the theoretical examination previously addressed. As previously said, the purpose of this research is to investigate the connection between company performance and innovation capabilities. The factors that affect an organization's capacity to manage innovation have been used to define innovation capability. Participatory leadership, ideation and organizing frameworks, work environment and well-being, knowledge growth, regeneration, outside knowledge, and individual action are some of these elements. The framework's basic tenet is that, in order to improve overall performance, a company must focus on cultivating its seven components of innovation capacity. As previously said, seven hypotheses were constructed in order to achieve the study goal.

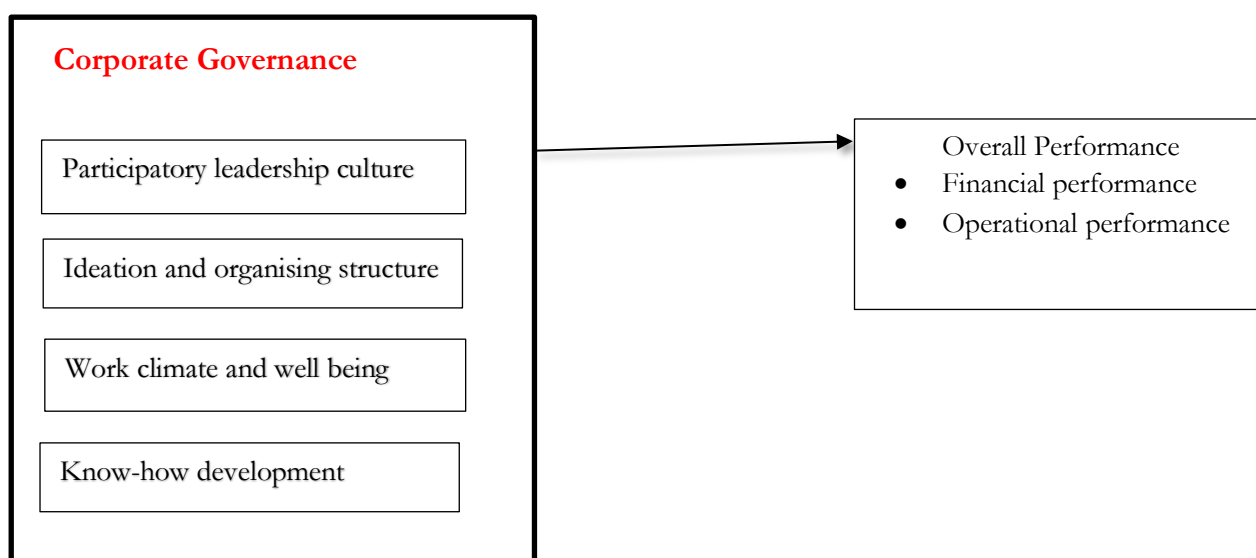


Figure 1: Conceptual framework of the study

### 3. Methodology

Hassani, (2017) define research methodology as an organized, methodical approach whose theories and models should complement each other and each facet of a specific research endeavour. Based on its goals, the study used a quantitative research design. Quantitative research is the methodical study of phenomena using numerical data collection and computer, statistical, or mathematical techniques (Waston, 2014). The positivist paradigm, which underpins statistical breakdown-based approaches and includes supplementary methods like inference statistics, testing hypothesis, structured procedures, and survey questionnaires with a limited range of prearranged responses, is the cornerstone of quantitative research. The researcher was able to get uniform data via the use of questionnaires, making comparison and explanation simpler. Furthermore, surveys provide the researcher with some level of control process. The target demographic consisted of 51 respondents (managers and shop floor personnel) from the seven listed enterprises' manufacturing sectors on the Zimbabwe stock market that were easily chosen in Zimbabwe. A comparable sample size was used by (Simuka, 2024) to examine the performance of SMEs in Zimbabwe. Since most manufacturing listed enterprises have their headquarters in Harare, that city was

chosen as the target population. The manufacturing sector was chosen because of its extensive use of technology, significant GDP contribution, export income, and employment (ZIMSTAT, 2018). As inferential research is the main goal of quantitative research designs, sampling strategies and sample sizes are essential elements of every quantitative investigation. The sample size for this research was determined using the well-respected and often used Krejcie and Morgan formula. This formula is used to select samples so that the population proportions may be calculated with a certain probability and degree of accuracy.

The sample has been computed using the sample size determination table developed by Krejcie and Morgan. The majority of the data utilized in this study came from primary sources. Information that has been obtained directly from its initial source is referred to as primary data. The research respondents in the quantitatively selected samples served as the primary sources of data. Since primary data is more recent and specifically answers the study's topics, the researcher chose it over secondary data. Ajayi described it as "real time data." Closed-ended questions from the questionnaire were used to gather primary data. Journal papers and other secondary data sources were also used in this study by the researcher. The secondary information was useful since it gave the research the essential context and directions. Research gaps were identified and previous empirical research on the effect of innovation on company success were evaluated.

Instrument construction is one of the most important tasks in research to guarantee proper data collecting. The quantitative data was gathered via a questionnaire that the researcher created. Closed-ended questions were used in the questionnaire's development in order to gather quantitative data. A five-point Likert scale, ranging from strongly agree to disagree, neutral to agree, and strongly disagree, was used in the development of the questionnaire. The questionnaire was designed to be as short as possible in order to impede the growth of the respondents and lower the probability of their withdrawal. While part B of the questionnaire concentrated on the study's research aims, section A of the survey included the respondents' basic demographic data.

The survey was sent out via WhatsApp and email in an effort to boost response rates. This was an attempt to increase response rates by making things simpler. When the questionnaire was distributed, prior communication was conducted to enlighten each chosen responder and get their informed permission. Electronic data processing was used, and SPSS was quickly accessed with the data. Cronbach's Alpha was used to verify the instrument's dependability; a reliability criterion of 0.6+ was deemed acceptable. Only structures that satisfied the reliability test were considered into account while creating the index (Rahman et al., 2016). Construct validity, external validity, and internal reliability were evaluated using factor analysis in SPSS. Analyses of measurable data were conducted using hypothesis testing. The study's findings were also described in a way that was consistent with previous research.

### 3.1 Validity and Reliability

A pilot study was conducted to evaluate the reliability and validity of the research. A pilot study was carried out as a preliminary study. The investigator may evaluate the reliability of their instrument using a pilot study. Among other benefits, the researcher may evaluate the research concept and data collection methods after conducting a pilot study. With all of these benefits, the researcher carried out a pilot study to assess the methodology and research design's efficacy in an actual research context. For the pilot research, five (5) subjects were selected. The researcher revised the questionnaire and spoke with experts in innovation to improve its face validity and substance. The pilot study improved the study's flow and decreased process errors in the research.

The researcher used the Cronbach's Alpha coefficient for Likert scales that is most often recommended. (Tomaszewski et al., 2020) state that the researcher disregarded constructs with lower scores and required coefficients of 0.6 and higher. According to (David Creswell, n.d.), every study also has to address validity concerns. Validity is the degree to which the information gathered adequately addresses the study topic. It ensures that the data required for the particular research endeavour is gathered by the researcher. According to Kumar, validity is an important consideration while evaluating the calibre and reliability of research.

#### 4. Results and discussion

##### Response Rate

51 questionnaires were provided to participants, and 45 replies in total were submitted. The researcher attributes the high response rate to the respondents of the survey and frequent visits for data collection. A questionnaire survey that receives more than 60% of responses is considered to be a decent representation of the whole population, based on (Saunders et al., 2019). This study's response rate exceeded the minimal amount recommended. The response rate estimations are detailed in Table 3 below.

**Table 3. response rate**

Category of respondents	Total sample	Return	% return
Listed firms	51	45	88%

##### Respondent Demographics

The research provides the respondents' personal information in this area, including their gender, age range, and duration of service with the seven manufacturing firms that were chosen

##### Gender, age and length of service of Respondents

Demographic information on the respondents' gender was gathered for the research. Table 4 below displays the respondents' gender breakdown.

**Table 4. gender**

		Frequency	Percent	Valid %	Cumulative %
Valid	Male	27	60	60	60
	Female	18	40	40	100
	Total	45	100	100	

Based on Table 4 above, males make up more than 60% of replies, while women make up around 40%. This supports a (Simuka, 2024) study that indicated males make up a higher share of the manufacturing sector than women, meaning the study's conclusions are relevant and suitable for utilization in scientific studies.

The research gathered demographic information regarding the age groups of those who participated in order to provide findings that were acceptable, as shown in figure 2 below.

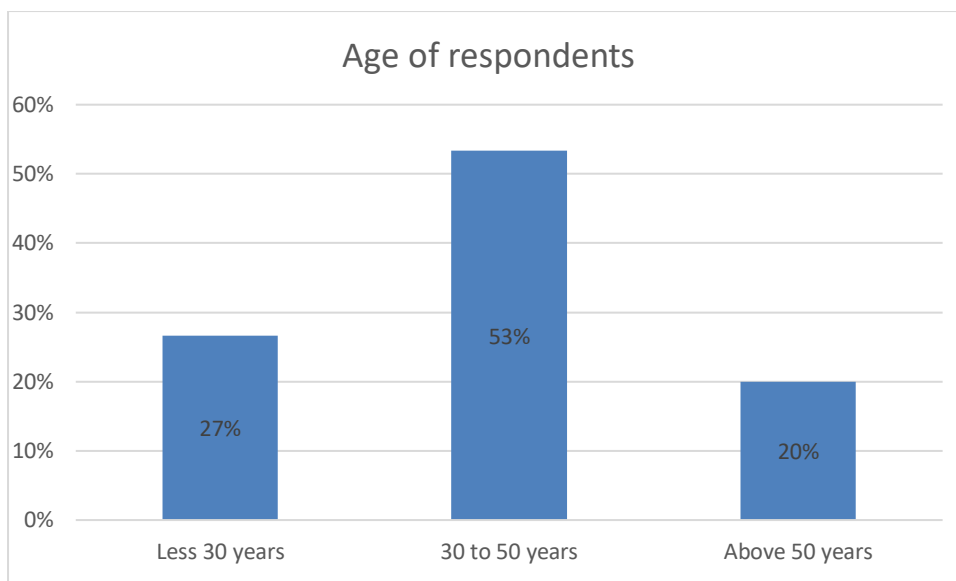


Figure 2. Age of respondents in percentage

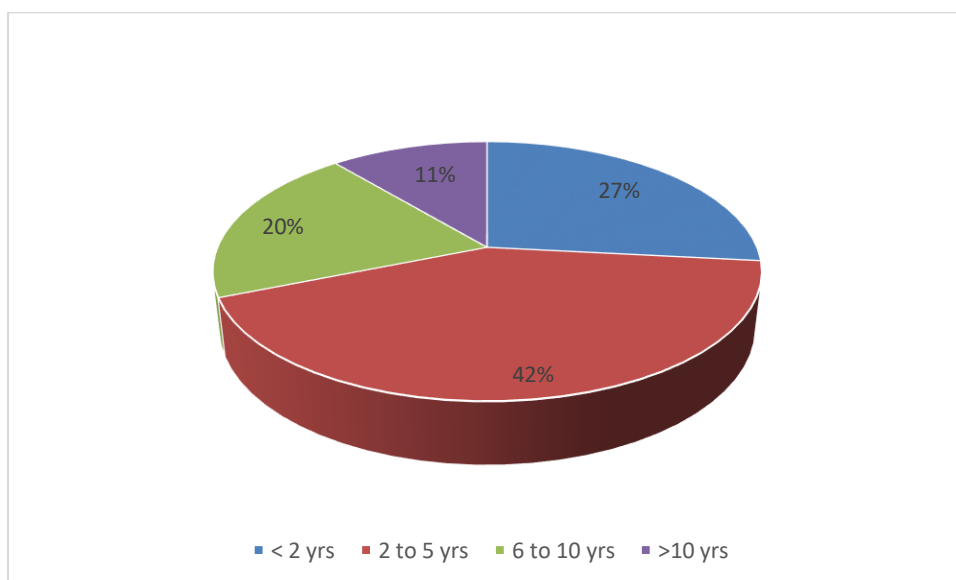


Figure 3. Length of service

The age distribution seen in Figure 2 above is normal, with the majority of the population being between the ages of 33 and 50 (53%), followed by the comparatively younger generation of people under 30 (27%), and the elder generation of those over 50 (20%). According to this profile, the bulk of the responders were between the ages of thirty and fifty.

The length of service distribution shown in Figure 5 above is normal, with the dominant length being 6 to 10 years old (42%), followed by less than 2 years (27%).

Table 5. Cronbach’s Alpha test, Composite Reliability and Average Variance Extracted (AVE)

Latent variable	Cronbach’s Alpha	Composite Reliability	Average Variance extracted	N of items
Organizational performance	0.878	0.627	0.627	45
Participatory leadership	0.842	0.943	0.848	
Ideation and organizing structures	0.936	0.899	0.817	
Work climate and well being	0.939	0.865	0.762	
Know-how development	0.859	0.618	0.627	

**Cronbach Alpha Reliability Test**

The reliability test Cronbach's Alpha was used by the researcher to assess the validity of the study's conclusions. Alpha's value might range from 0 to 1. It demonstrates that when the scale approaches 1, its internal coherence increases. According to (Bouty & Drucker-Godard, 2019) values of not less than 0.7 are generally considered acceptable. The Cronbach's Alpha test results showed that the Likert scale factors had a high degree of internal reliability and consistency, with scores ranging from 0.842 to 0.936 for all components.

**Composite reliability**

According to (Hair et al., 2017) high values when measuring composite reliability basically reflect high levels of dependability. This means that in exploratory research, levels of reliability leve within 0.6 and 0.7 are considered "acceptable," and values between 0.70 and 0.90 are considered "satisfactory to good." Most of the values in this research fall into the good and satisfactory categories, which enhances the study's validity and reliability.

**Convergent Validity**

The AVE tests proved to have convergent validity. The capacity of a model to account for the variation of the indicators is known as convergent validity. A signal with convergent validity possesses an AVE threshold of 0.5, Table 4 above illustrates the good levels of convergent validity for all four reflecting constructs. (Hair et al., 2017) state that "this means the construct explains roughly 50% the overall variance of its items."

**Participatory leadership culture and the Performance of ZSE listed manufacturing firms**

Table 6. effect of participatory leadership culture on organisational performance

	N	Mean	Std. Deviation
Encourage initiatives	45	4.13	0.694
Give positive feedback	45	4.04	0.638
Managers pass employee ides to higher levels	45	4.00	0.564
Managers participate in ideation and development	45	3.71	0.920



There are practices for transferring tacit knowledge	45	3.91	1.041
Employees appreciated for their work	45	3.42	0.723
<b>Valid N (likewise)</b>	<b>45</b>	<b>3.87</b>	<b>0.584</b>

One objective of the study was to find out the effect of participatory leadership culture on the performance of manufacturing sector in Zimbabwe listed on ZSE. The findings are presented as shown in the tables below.

From table 6 above, it shows how participatory leadership culture affect organizational performance of ZSE listed manufacturing firms. From the survey results, encouraging initiatives was rated high with a mean of 4.13, followed by giving feedback rated at 4.04, and passing of employee ideas to higher levels in the organisation rated at 4.00, and the appreciation of employees for their work was rated lowest at 3.42. The overall mean score of 3.87 indicate that a strong participatory leadership culture in the ZSE listed manufacturing firms, fostering employee initiative, feedback, and idea sharing, which can enhance organizational performance. However, the lower rating for employee appreciation suggests this may be an area overlooked, despite its importance for motivation and engagement.

The results are consistent with (Saunila, 2017) conclusion that a participative leadership culture was necessary for a business to function well. In a similar vein, (Chen et al., 2017) research also found that one of the main factors influencing increased company success is leadership. On the other hand, earlier research has shown that innovation requires a collaborative management style (Wan et al., 2005).

**Table 7. effect of ideation and organising cultures on organisational performance**

	N	Mean	Std. Deviation
Clear way of processing and developing ideas	45	3.91	0.668
Employees get feed of their ideas	45	4.07	0.939
Reward system encourages ideating	45	3.87	0.842
There are instructions and responsible persons for work orientation	45	4.02	0.812
Number of working tasks is suitable	45	4.04	0.767
Quality, demands and responsibility of task are suitable	45	4.24	0.435
<b>Valid N (likewise)</b>	<b>45</b>	<b>4.02</b>	<b>0.662</b>

Table 7 reveals how ideation influence the performance of listed manufacturing firms. The findings reveal that the suitability of quality, demands and responsibility of task is rated high with a mean of 4.24, followed by employee getting feedback, number of working tasks being suitable and having instructions and responsible persons for work orientation all highly rated with a mean of 4.07, 4.04, 4.02 respectively. Reward system encourages ideation and having clear ways to process ideas were ranked lowly at 3.81 and 3.91 respectively. The overall mean of 4.02 indicate that task suitability, feedback, and work orientation show a supportive environment for ideation, which is crucial for fostering innovation. However, the lower ratings for rewards and idea processing suggest areas for improvement manufacturing SME.

These findings are consistent with a substantial body of research that examines the link between worker well-being and company performance, and the majority of the data points to a favourable relationship between the two (Krekel et al., 2019). According to research, companies with high employee well-being levels often outperform their competitors in terms of profitability, productivity, and client satisfaction (Krekel et al., 2019). This association has several different underlying processes. Happier and more engaged workers are more likely to be imaginative, dedicated, and productive, all of which improve organizational results (Jiménez-Jiménez & Sanz-Valle, 2011). Furthermore, turnover, absenteeism, and overall organizational productivity may all be positively impacted by employee well-being (Miller, 2016).

**Table 8. effect of work climate and well-being on organisational performance**

	N	Mean	Std. Deviation
Cooperation works well in our organisation	45	3.93	0.889
Employees have the courage to disagree	45	3.67	0.477
Employees are encouraged to be multi-skilled	45	4.09	0.793
Employees prosper in our organisation	45	2.98	0.583
Employees are treated equally	45	3.44	0.841
<b>Valid N (likewise)</b>	<b>45</b>	<b>3.62</b>	<b>0.658</b>

Table 8 reveals how work climate influences the performance of listed manufacturing firms. The findings reveal that the encouraging employees to be multitasking is rated high with a mean of 4.09, followed by employees viewing cooperation as important to the organisation, employees having the courage to disagree, and employees being treated equally all moderately rated with a mean of 3.93, 3.67, 3.44 respectively. Prospering of employees was ranked lowly at 2.98. The overall mean of 3.62 work climate and wellbeing moderately influence performance of listed manicuring firms in Zimbabwe.

These findings are consistent with 2016 research by (Saunila, 2016, 2017) that found ideation and organizational structures had a favourable relationship with business success. Research by supported this further by showing that organizational routines aid businesses in conducting their operations more effectively and, as a result, achieving higher performance. But according to (Saunila, 2016, 2017), ideation and organizational frameworks only really made a difference from a management standpoint. The staff didn't think they were powerful.

**Table 9. effect of know-how development on organisational performance**

	N	Mean	Std. Deviation
Employees have a possibility for education	45	3.71	0.815
Voluntary learning and development of expertise is encouraged	45	3.96	0.928
Organisational learning is an investment not an expense	45	4.02	0.621
<b>Valid N (likewise)</b>	<b>45</b>	<b>4.14</b>	<b>0.515</b>

Table 9 demonstrated that the participants agreed that all the variables were important predictors of performance of listed manufacturing firms in Zimbabwe with employees being given a possibility for education being rated at 3.71, voluntary learning and development of expertise and organisational learning is not an expense but an investment being rated at 3.96 and 4.02 respectively. The average score of 4.14 suggested that the effect of knowledge is highly rated in influencing the performance of listed manufacturers listed on the Zimbabwe stock market.

This is consistent with research by (Saunila, 2016, 2017) that shows a favorable relationship between overall performance and the development of know-how. Only from the viewpoint of the workers was this beneficial connection determined to be noteworthy. The management did not see the link to be very significant. Furthermore, learning and performance are positively correlated, according to earlier research by (Aragón-Correa et al., 2007). The study's findings also provide credence to the notion that, in order to achieve high performance, organizations should help workers expand their knowledge base so they can adapt to the quickly changing environment.

**Table 10. means, standard deviations, and intercorrelations**

	Mean	SD	1	2	3	4	5
Participatory leadership culture	3.87	0.584	1				

Ideation	4.03	0.662	.685**	1			
Work climate and well being	3.62	0.658	.656**	.974**	1		
Know-how development	4.14	0.515	.566**	.963**	.930**	1	
Performance	3.89	0.745	.741**	.958**	.946**	.900**	1

\*\* . Correlation is significant at the 0.01 level (1-tailed).

Table 10 presents the means, standard deviations (SD) and intercorrelations of the variables used in this study. Person product correlation of participatory leadership culture and firm performance was found to high positive and statistically significant ( $r=.741, p<.001$ ). Hence, H1 was supported. This shows that an increase in participatory leadership culture would lead to higher firm performance in listed manufacturing firms in Zimbabwe. Similarly, Person product correlation of ideation and organising structure ( $r=.958, p<.001$ ), work climate and well-being ( $r=.946, p<.001$ ) and know-how development ( $r=.900, p<.001$ ) and firm performance was found to very high positive and statistically significant Hence, H2, H3 and H4 was supported. This shows that an increase in ideation and organising structure, work climate and well-being and know-how development would lead to higher firm performance in listed manufacturing firms in Zimbabwe. These results are in line with a study done by (Saunila, 2017) which found that firm performance had a significant and positive correlation with two aspects of innovation capability, ideation and organising structures and know-how development. This implies that a company's capacity to create new concepts, structure its innovation procedures, and acquire pertinent expertise might result in enhanced financial outcomes, including higher sales.

### 5. Conclusion

The study draws conclusions that follow as guided by the research objectives. This study sought to determine the effect of innovation capabilities on performance of manufacturing firms listed on the Zimbabwe stock market.

With regards to effect of innovative dimensions on the performance of listed manufacturing firms in Zimbabwe, this study has revealed that participatory leadership culture, ideation and organising structure, work climate and well-being and know-how development had an impact on performance of listed manufacturing firms that was positive and statistically significant.

It became clear that the following factors significantly and favourably impacted company performance: know-how growth, work atmosphere and well-being, ideation and organizing frameworks, and participative leadership. Participatory leadership encourages information exchange, organizational flexibility, and employee involvement. Effective idea creation and execution are made possible by organization and ideation. Positive work environments foster innovation and employee well-being. The growth of know-how boosts a company's capacity for innovation. When these creative elements are combined, they create a collaborative, agile, and ongoing learning culture that gives businesses a competitive edge and enhances their operational and financial performance.

### 6. Recommendations

In line with the study objectives, the following recommendations are made out of this study:

The following suggestions are drawn from this research in accordance with the goals of the investigation

- The government and management of the firms must create an environment that encourages innovation, entrepreneurship, and enterprise creation and provides innovative firms with the chance to expand their innovative capabilities if listed manufacturing firms are to achieve high levels of participatory leadership, ideation, work environment and well-being, and know-how development.

- Legislators and oversight organizations want to think about creating guidelines and financial incentives that motivate manufacturing companies to make investments in and use new features.
- Through partnerships, the government must encourage the establishment and continuous operation of creative firms.
- Zimbabwean Intellectual Property Offices and the Zimbabwe Stock Exchange need to communicate more in order for the government to better inform listed businesses on all aspects of the intellectual property system. Increasing knowledge of intellectual property helps businesses innovate.
- Listed manufacturing companies that want to increase their capacity for innovation must focus more on strengthening their core strengths.
- It is essential for manufacturing enterprises that are listed to create cooperative platforms and networks that enable the sharing of information and sharing of best practices among themselves.
- Access to financing, training, and other resources is a need for regulatory bodies in order to facilitate the creation and use of innovative skills
- Create cooperative networks and platforms that help manufacturing companies share information and best practices with one another.

### Implications for future research

The study recommends the following

Future studies should

- To comprehend the long-term durability of the links between inventive characteristics and business success, use a longitudinal approach.
- Comparative study of industries that may highlight subtleties unique to a certain industry.
- Looking into possible mediators and moderators that can shed further light on the underlying processes.
- Use qualitative research to provide contextual insight in addition to quantitative facts. Lastly, assessing training programs and capacity-building projects that may pinpoint the most effective interventions to spur innovation and performance gains in the industry.

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### References

1. Adegbesan, T., & Ricart, J. E. (2007). *WHAT DO WE REALLY KNOW ABOUT WHEN TECHNOLOGICAL INNOVATION IMPROVES PERFORMANCE (AND WHEN IT DOES NOT)?* <http://ssrn.com/abstract=982335>Tel.:
2. Adom, A. Y., Boateng, L., Gnankob, R., & Adom, A. (2019). *Africa's Public Service Delivery and Performance Review*. <https://doi.org/10.4102/apdpr>
3. Akman, G., & Yilmaz, C. (2008). INNOVATIVE CAPABILITY, INNOVATION STRATEGY AND MARKET ORIENTATION: AN EMPIRICAL ANALYSIS IN TURKISH SOFTWARE INDUSTRY. In *International Journal of Innovation Management* (Vol. 12, Issue 1). [www.worldscientific.com](http://www.worldscientific.com)
4. Aksoy, L., Alkire (née Nasr), L., Choi, S., Kim, P. B., & Zhang, L. (2019). Social innovation in service: a conceptual framework and research agenda. *Journal of Service Management*, 30(3), 429–448. <https://doi.org/10.1108/JOSM-11-2018-0376>
5. Ambrosini, V., & Bowman, C. (2009). What are dynamic capabilities and are they a useful construct in strategic management? *International Journal of Management Reviews*, 11(1), 29–49. <https://doi.org/10.1111/j.1468-2370.2008.00251.x>

6. Aragón-Correa, J. A., García-Morales, V. J., & Cordón-Pozo, E. (2007). Leadership and organizational learning's role on innovation and performance: Lessons from Spain. *Industrial Marketing Management*, 36(3), 349–359. <https://doi.org/10.1016/j.indmarman.2005.09.006>
7. Armbruster, H., Bikfalvi, A., Kinkel, S., & Lay, G. (2008). Organizational innovation: The challenge of measuring non-technical innovation in large-scale surveys. *Technovation*, 28(10), 644–657. <https://doi.org/10.1016/j.technovation.2008.03.003>
8. Arsawan, W. E., Prayustika, P. A., Gede, G. K., Kariati, N. M., Wijaya Sunu, P., & Indrayana, N. E. (2021). *Leveraging Knowledge Sharing and Innovation Towards Resilient Competitive Advantage: Insight from the Leaders*.
9. Awoloye, O. M., Ilori, O. M., & Oyebisi, T. O. (2020). SOURCES of INNOVATION CAPABILITY and PERFORMANCE of ICT AGGLOMERATED MSMEs in NIGERIA. *International Journal of Innovation Management*, 24(4). <https://doi.org/10.1142/S1363919620500322>
10. Bartolacci, F., Castellano, N. G., & Cerqueti, R. (2015). *The impact of innovation on companies performance during crisis: an entropy-based analysis of the STAR Market Segment of the Italian Stock Exchange*.
11. Bessant, J. R. . (2003). *High-involvement innovation : building and sustaining competitive advantage through continuous change*. J. Wiley.
12. Ibrahim, R. A., Abasiti, V. A., & Amin, W. A. (2018). Evaluation of Small and Medium Sized Enterprise Innovation Performance Growth in Malaysia. *International Journal of Business and Management*, 13(10), 161. <https://doi.org/10.5539/ijbm.v13n10p161>
13. Bouty, I., & Drucker-Godard, C. (2019). Managerial work and coordination: A practice-based approach onboard a racing sailboat. *Human Relations*, 72(3), 565–587. <https://doi.org/10.1177/0018726718773854>
14. Bratianu, C., Handzic, M., & Bolisani, E. (2023). *The Future of Knowledge Management*.
15. Cainelli, G., Evangelista, R., & Savona, M. (2004). The impact of innovation on economic performance in services. *Service Industries Journal*, 24(1), 116–130. <https://doi.org/10.1080/02642060412331301162>
16. Calantone, R. J., Tamer Cavusgil, S., & Zhao, Y. (2002). *Learning orientation, firm innovation capability, and firm performance*.
17. Camisón, C., & Villar-López, A. (2014). Organizational innovation as an enabler of technological innovation capabilities and firm performance. *Journal of Business Research*, 67(1), 2891–2902. <https://doi.org/10.1016/j.jbusres.2012.06.004>
18. Chen, J., Zhu, Z., & Zhang, Y. (2017). A study of factors influencing disruptive innovation in Chinese SMEs. *Asian Journal of Technology Innovation*, 25(1), 140–157. <https://doi.org/10.1080/19761597.2017.1302552>
19. Daneshjo, N., Sabadka, D., Malega, P., Dzuro, M., & Jankovič, M. (2022). Creation of More Efficient Work Environment through the New Design of the Automatic Robotic Assembly Station. *Advances in Science and Technology Research Journal*, 16(4), 74–84. <https://doi.org/10.12913/22998624/151547>
20. David Creswell, J. (2023). *Research Design, Quantitative, Qualitative and Mixed Methods*.
21. De Biazzi, F. (2012). *Intellectual Capital and Organizational Renewal: Building Dynamic Capabilities through People*. <http://www.anpad.org.br/bar>
22. De, L., & Borges, O. (2009). O AMBIENTE DE TRABALHO NO SETOR BANCÁRIO E O BEM-ESTAR 1 Cynthia Suennia Damasceno Lucena de Paiva THE WORK ENVIRONMENT IN BANKS AND THE WELL-BEING. In *Psicologia em Estudo* (Issue 1).
23. Dervitsiotis, K. N. (2011). The challenge of adaptation through innovation based on the quality of the innovation process. *Total Quality Management and Business Excellence*, 22(5), 553–566. <https://doi.org/10.1080/14783363.2011.568256>
24. Dixit, G. K., & Nanda, T. (2011). *Strategic Alignment of Organisational Culture and Climate for Stimulating Innovation In SMEs*.
25. Erdilek Karabay, M., & Çağıl, G. (2017). Examining financial innovation and performance in financial sector: A comprehensive review of emerging markets. In *Contributions to Management Science* (pp. 353–369). Springer. [https://doi.org/10.1007/978-3-319-44591-5\\_24](https://doi.org/10.1007/978-3-319-44591-5_24)
26. García-Morales, V. J., Lloréns-Montes, F. J., & Verdú-Jover, A. J. (2007). Influence of personal mastery on organizational performance through organizational learning and innovation in large firms and SMEs. *Technovation*, 27(9), 547–568. <https://doi.org/10.1016/j.technovation.2007.02.013>
27. Garikai Bonga, W., Chimwai, L., & Choga, I. (2023). Evaluation of Weak-Form Efficient Market Hypothesis in Zimbabwe Stock Exchange during Pandemic Period. *Sumerian Journal of Economics and Finance*, 62, 26–36. <https://doi.org/10.47752/sjef.62.26.36>



28. Gilberg, J. (1988). Managerial Attitudes Toward Participative Management Programs: Myths and Reality. In *Public Personnel Management* (Vol. 17, Issue 2).
29. González, F., Val, M. P. Del, & Cano, A. R. (2022). Systematic literature review of interpretative positions and potential sources of resistance to change in organizations. *Intangible Capital*, 16(2), 145–165. <https://doi.org/10.3926/ic.1806>
30. Hair, J. F., Babin, B. J., & Krey, N. (2017). Corrigendum to: Covariance-Based Structural Equation Modeling in the Journal of Advertising : Review and Recommendations (Journal of Advertising, (2017), 46, 1, (163-177), 10.1080/00913367.2017.1281777). In *Journal of Advertising* (Vol. 46, Issue 3, p. 454). Routledge. <https://doi.org/10.1080/00913367.2017.1329496>
31. Haleem, A., Kumar, S., & Luthra, S. (2018). Flexible System Approach for Understanding Requisites of Product Innovation Management. *Global Journal of Flexible Systems Management*, 19(1), 19–37. <https://doi.org/10.1007/s40171-017-0171-7>
32. Halid, S., Choo, H. C., & Salleh, K. (2018). Intellectual Capital Management: Pathways to Sustainable Competitive Advantage. *International Journal of Academic Research in Business and Social Sciences*, 8(4). <https://doi.org/10.6007/ijarbss/v8-i4/4147>
33. Hassani, H. (2017). *Research Methods in Computer Science: The Challenges and Issues*. <http://arxiv.org/abs/1703.04080>
34. Jajja, M. S. S., Kannan, V. R., Brah, S. A., & Hassan, S. Z. (2017). Linkages between firm innovation strategy, suppliers, product innovation, and business performance: Insights from resource dependence theory. *International Journal of Operations and Production Management*, 37(8), 1054–1075. <https://doi.org/10.1108/IJOPM-09-2014-0424>
35. Jiang, Z., Huo, M. L., Jones, J., Cheng, Z., Manoharan, A., & Spoehr, J. (2024). Thriving in future work: knowledge management and innovation perspectives. In *Knowledge Management Research and Practice*. Taylor and Francis Ltd. <https://doi.org/10.1080/14778238.2024.2344347>
36. Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation, organizational learning, and performance. *Journal of Business Research*, 64(4), 408–417. <https://doi.org/10.1016/j.jbusres.2010.09.010>
37. Kamasak, R. (2015). Determinants of innovation Performance: A Resource-based Study. *Procedia - Social and Behavioral Sciences*, 195, 1330–1337. <https://doi.org/10.1016/j.sbspro.2015.06.311>
38. Kasseeah, H. (2013). Innovation and performance in small- and medium-sized enterprises: evidence from Mauritius. *Innovation and Development*, 3(2), 259–275. <https://doi.org/10.1080/2157930x.2013.825069>
39. Keskin, H. (2006). Market orientation, learning orientation, and innovation capabilities in SMEs: An extended model. *European Journal of Innovation Management*, 9(4), 396–417. <https://doi.org/10.1108/14601060610707849>
40. Korot, L., & Tovstiga, G. (2001). Knowledge-driven organizational change: a framework. In *Int. J. Entrepreneurship and Innovation Management* (Vol. 1, Issue 1).
41. Kral, P., & Janoskova, K. (2021). Key attributes of successful innovation strategy in the global market. *SHS Web of Conferences*, 92, 04016. <https://doi.org/10.1051/shsconf/20219204016>
42. Krekel, C., Ward, G., & De Neve, J.-E. (2019). *Employee Wellbeing, Productivity, and Firm Performance*. <https://ssrn.com/abstract=3356581>
43. Kusiak, A. (2009). Innovation: A data-driven approach. *International Journal of Production Economics*, 122(1), 440–448. <https://doi.org/10.1016/j.ijpe.2009.06.025>
44. Laforet, S. (2011). A framework of organisational innovation and outcomes in SMEs. *International Journal of Entrepreneurial Behaviour and Research*, 17(4), 380–408. <https://doi.org/10.1108/13552551111139638>
45. Lartey, J., Meng, X., Wang, X., & Osei-Mireku, G. (2020). The Link between Innovation, Market Orientation and Performance; and the Mediating Role of Innovation: A Study of Telecommunication Companies in Ghana. *Open Journal of Business and Management*, 08(04), 1704–1733. <https://doi.org/10.4236/ojbm.2020.84108>
46. Lawson, B., & Samson, D. (2001a). DEVELOPING INNOVATION CAPABILITY IN ORGANISATIONS: A DYNAMIC CAPABILITIES APPROACH. In *International Journal of Innovation Management* (Vol. 5, Issue 3). [www.worldscientific.com](http://www.worldscientific.com)
47. Lawson, B., & Samson, D. (2001b). DEVELOPING INNOVATION CAPABILITY IN ORGANISATIONS: A DYNAMIC CAPABILITIES APPROACH. In *International Journal of Innovation Management* (Vol. 5, Issue 3). [www.worldscientific.com](http://www.worldscientific.com)
48. Manyati, T. K., Kalima, B. G., Owolabi, T., & Mutsau, M. (2024). *Exploring the potential for enhancing green skills training, innovation and sustainable livelihoods in informal spaces of Harare, Zimbabwe: identifying gaps and opportunities*.

49. Margulies, N., & Black, S. (1987). *Perspectives on the Implementation of Participative Approaches*. L. Newton, M. Margulies, and Stewart Black.
50. Martensen, A., Dahlgaard, J. J., Park-Dahlgaard, S. M., & Grønholdt, L. (2007). Measuring and diagnosing innovation excellence - Simple contra advanced approaches: A Danish study. *Measuring Business Excellence*, 11(4), 51–65. <https://doi.org/10.1108/13683040710837928>
51. Mashingaidze, M., Phiri, M. A., & Chinakidzwa, M. (2021). Macro-environmental scanning practices of small and medium manufacturing enterprises: Evidence from emerging markets. *Journal of Governance and Regulation*, 10(4 Special issue), 282–292. <https://doi.org/10.22495/JGRV10I4SIART8>
52. Miller, J. (2016). The well-being and productivity link: a significant opportunity for research-into-practice. *Journal of Organizational Effectiveness*, 3(3), 289–311. <https://doi.org/10.1108/JOEPP-07-2016-0042>
53. Nnanna, U. J. (2009). Managing Innovation: An Empirical study of Innovation and Change in Public and Private Companies. In *Journal of Management Research* (Vol. 1, Issue 2). [www.macrothink.org/jmrwww.macrothink.org/jmr](http://www.macrothink.org/jmrwww.macrothink.org/jmr)
54. Oe, H., & Yamaoka, Y. (2022). *How to Sustain Businesses in the Post-COVID-19 Era: A Focus on Innovation, Sustainability and Leadership*. [https://doi.org/10.21272/bel.6\(4\).5-13.2022](https://doi.org/10.21272/bel.6(4).5-13.2022)
55. Parnell, J. A., Carraher, S., & Holt, K. (1970). PARTICIPATIVE MANAGEMENT'S INFLUENCE ON EFFECTIVE STRATEGIC DIFFUSION.
56. Pedro Filho, F. de S., Shatouri, R. M., Omar, R., & Igusa, K. (2013). EMBRACING GREEN TECHNOLOGY INNOVATION THROUGH STRATEGIC HUMAN RESOURCE MANAGEMENT: A CASE OF AN AUTOMOTIVE COMPANY. *American Journal of Economics and Business Administration*, 5(2), 65–73. <https://doi.org/10.3844/ajebasp.2013.65.73>
57. Piening, E. P., & Salge, T. O. (2015). Understanding the antecedents, contingencies, and performance implications of process innovation: A dynamic capabilities perspective. In *Journal of Product Innovation Management* (Vol. 32, Issue 1, pp. 80–97). Blackwell Publishing Ltd. <https://doi.org/10.1111/jpim.12225>
58. Racela, O. C. (2014). Customer Orientation, Innovation Competencies, and Firm Performance: A Proposed Conceptual Model. *Procedia - Social and Behavioral Sciences*, 148, 16–23. <https://doi.org/10.1016/j.sbspro.2014.07.010>
59. Rahman, N. A., Yaacob, Z., & Radzi, R. M. (2016). An Overview of Technological Innovation on SME Survival: A Conceptual Paper. *Procedia - Social and Behavioral Sciences*, 224, 508–515. <https://doi.org/10.1016/j.sbspro.2016.05.427>
60. Saunders, M. N., Philip, L., & Thornhill, A. (2019). *Research Methods For Business Students*. [www.pearson.com/uk](http://www.pearson.com/uk)
61. Saunila, M. (2016). Performance measurement approach for innovation capability in SMEs. *International Journal of Productivity and Performance Management*, 65(2), 162–176. <https://doi.org/10.1108/IJPPM-08-2014-0123>
62. Saunila, M. (2017). Innovation capability in achieving higher performance: perspectives of management and employees. *Technology Analysis and Strategic Management*, 29(8), 903–916. <https://doi.org/10.1080/09537325.2016.1259469>
63. Saunila, M., & Ukko, J. (2014a). Intangible aspects of innovation capability in SMEs: Impacts of size and industry. *Journal of Engineering and Technology Management - JET-M*, 33, 32–46. <https://doi.org/10.1016/j.jengtecman.2014.02.002>
64. Saunila, M., & Ukko, J. (2014b). Intangible aspects of innovation capability in SMEs: Impacts of size and industry. *Journal of Engineering and Technology Management - JET-M*, 33, 32–46. <https://doi.org/10.1016/j.jengtecman.2014.02.002>
65. Simuka, J. (2024). The Effect of Innovation on the Performance of SMEs in Zimbabwe: A Case Study of Manufacturing Companies in Harare. *Journal of Business and Econometrics Studies*, 1–11. <https://doi.org/10.61440/JBES.2024.v1.03>
66. Singhal, C., Mahto, R. V., & Kraus, S. (2022). Technological Innovation, Firm Performance, and Institutional Context: A Meta-Analysis. *IEEE Transactions on Engineering Management*, 69(6), 2976–2986. <https://doi.org/10.1109/TEM.2020.3021378>
67. Smith, M., Busi, M., Ball, P., & Van Der Meer, R. (2008). FACTORS INFLUENCING AN ORGANISATION'S ABILITY TO MANAGE INNOVATION: A STRUCTURED LITERATURE REVIEW AND CONCEPTUAL MODEL. In *International Journal of Innovation Management* (Vol. 12, Issue 4). [www.worldscientific.com](http://www.worldscientific.com)

68. Sok, P., O’Cass, A., & Sok, K. M. (2013). Achieving superior SME performance: Overarching role of marketing, innovation, and learning capabilities. *Australasian Marketing Journal*, 21(3), 161–167. <https://doi.org/10.1016/j.ausmj.2013.04.001>
69. Steiber, A., & Alänge, S. (2015). Organizational innovation: a comprehensive model for catalyzing organizational development and change in a rapidly changing world. *Triple Helix*, 2(1). <https://doi.org/10.1186/s40604-015-0021-6>
70. Subramaniam, M., & Youndt, M. A. (2005). *THE INFLUENCE OF INTELLECTUAL CAPITAL ON THE TYPES OF INNOVATIVE CAPABILITIES*.
71. Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>
72. Tharikh, S. M., & Hamzah, S. R. (2020). The Importance of Paternalistic Leadership Style and the Employee Wellbeing Among Air Traffic Controllers in Peninsular Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 10(5). <https://doi.org/10.6007/ijarbss/v10-i5/7324>
73. Tian, X., Lo, V. I., & Zhai, X. (2021). Combining efficiency and innovation to enhance performance: Evidence from firms in emerging economies. *Journal of Management and Organization*, 27(2), 295–311. <https://doi.org/10.1017/jmo.2018.75>
74. Tomaszewski, L. E., Zarestky, J., & Gonzalez, E. (2020). Planning Qualitative Research: Design and Decision Making for New Researchers. *International Journal of Qualitative Methods*, 19. <https://doi.org/10.1177/1609406920967174>
75. Tuan, N., Nhan, N., Giang, P., & Ngoc, N. (2016). The effects of innovation on firm performance of supporting industries in Hanoi – Vietnam. *Journal of Industrial Engineering and Management*, 9(2), 413–431. <https://doi.org/10.3926/jiem.1564>
76. Varadarajan, R. (2009). Fortune at the bottom of the innovation pyramid: The strategic logic of incremental innovations. *Business Horizons*, 52(1), 21–29. <https://doi.org/10.1016/j.bushor.2008.03.011>
77. Vincent, L. H., Bharadwaj, S. G., Goizueta, R. C., & Challagalla, G. N. (2004). *Does Innovation Mediate Firm Performance? A Meta-Analysis of Determinants and Consequences of Organizational Innovation*.
78. Wan, D., Ong, C. H., & Lee, F. (2005). Determinants of firm innovation in Singapore. *Technovation*, 25(3), 261–268. [https://doi.org/10.1016/S0166-4972\(03\)00096-8](https://doi.org/10.1016/S0166-4972(03)00096-8)
79. Wang, C. L., & Ahmed, P. K. (2007). Dynamic capabilities: A review and research agenda. In *International Journal of Management Reviews* (Vol. 9, Issue 1, pp. 31–51). <https://doi.org/10.1111/j.1468-2370.2007.00201.x>
80. Wang, Q., Hou, H., & Li, Z. (2022a). Participative Leadership: A Literature Review and Prospects for Future Research. In *Frontiers in Psychology* (Vol. 13). Frontiers Media S.A. <https://doi.org/10.3389/fpsyg.2022.924357>
81. Wang, Q., Hou, H., & Li, Z. (2022b). Participative Leadership: A Literature Review and Prospects for Future Research. In *Frontiers in Psychology* (Vol. 13). Frontiers Media S.A. <https://doi.org/10.3389/fpsyg.2022.924357>
82. Waston, R. (2014). Quantitative research. *Arts and Science Research*, 29, 44–48.
83. Yáñez-Araque, B., Gómez-Cantarino, S., Gutiérrez-Broncano, S., & López-Ruiz, V. R. (2021). Examining the determinants of healthcare workers’ performance: a configurational analysis during covid-19 times. *International Journal of Environmental Research and Public Health*, 18(11). <https://doi.org/10.3390/ijerph18115671>
84. Zaefarian, G., Forkmann, S., Mitrega, M., & Henneberg, S. C. (2017). A Capability Perspective on Relationship Ending and Its Impact on Product Innovation Success and Firm Performance. *Long Range Planning*, 50(2), 184–199. <https://doi.org/10.1016/j.lrp.2015.12.023>
85. ZIMSTAT. (2018). *QUARTERLY DIGEST OF STATISTICS*.