



# Leveraging Organisational Energy to Improve Performance

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# **Abstract**

The objective of this research was to gain insight into the key drivers of productive organisational energy and to determine whether there is a relationship between productive organisational energy and high performance in organisations. This study also aimed to identify key measures of success of organisations. Organisational energy has a critical role to play in driving both people behaviour and innovation in organisations, ultimately providing a competitive advantage.

Both a quantitative and qualitative analysis was conducted on the data collected from four case study organisations, comprising a total sample size of 47 respondents. The research consisted of three phases. Phase One, which made use of an open-ended qualitative survey, was directed at industry experts who were required to identify and recommend four small- to medium- sized high-energy information technology organisations to be considered for this research. Phase Two consisted of gaining approval to conduct research within four of the recommended case study organisations, and conducting an open-ended exploratory face-to-face interview with each Managing Director, with the objective of determining the success, energy state, key drivers, and performance measures of the organisations, as well as the factors that drive the energy of staff. Furthermore, each Managing Director completed the same self-administered questionnaire that formed the basis of Phase Three. This structured survey was used to gather the perceptions and opinions of each organisation's staff members in determining: the energy state of the organisation, the key drivers of organisational energy, and the link between organisation energy and performance. Statistical analysis techniques were used to determine whether significant relationships exist between the drivers of organisational energy and their respective rankings; and between organisational energy and organisational performance.

The study provided evidence that intrapreneurial orientation, collective identity, employee investment and leadership are the most significant drivers of productive organisational energy and confirmed the existence of a significant relationship between productive organisational energy and high performance organisations. Through this research, a model has been developed that can be utilised by leaders of organisations to leverage organisational energy in order to improve and measure organisational performance, thereby creating a sustainable competitive advantage.



# **Key Words**

Energy

High performance

Leadership

Culture

Innovation



# **Declaration**

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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# **Table of Contents**

Abstra	act		i
Key V	Vords		ii
Decla	ration		iii
Ackno	owledge	ments	iv
1. Ch	apter 1	: Problem Definition	1
1.1	The F	Research Problem	1
1.2	Rese	arch Objectives	2
1.3	Rese	arch Scope	3
1.4	Motiv	ation for the Research	4
1.5	Conc	lusion	5
2. Ch	apter 2	: Theory and Literature Review	6
2.1	Introd	luction	6
2.2	Smal	Medium Enterprises (SMEs) and Information Technology Ind	ustry (IT) 6
2	.2.1	Role of SMEs and IT	6
2.3	High	Performance Organisations	8
2	.3.1	Introduction	8
2	.3.2	Key Elements of High Performance Organisations	9
2	.3.3	Key Measurements of High Performance Organisations	11
2.4	Orga	nisational Energy	12
2	.4.1	Definition	12
2	.4.2	Energy Dynamics	12
2	.4.3	Energy Zones	14
	2.4.3.	Introduction	14
	2.4.3.2	2 Intensity and Quality of energy	14
	2.4.3.3	B Energy Types	15
	2.4.3.4	Mobilizing and Sustaining Energy	15



	.5	Outoc	mes of Organisational Energy	
2.	.6	Antec	edents of Organisational Energy	.19
	2.6	6.1	Leadership	. 19
	2.6	6.2	Culture	20
	2	2.6.2.1	Collective Identity	21
	2	2.6.2.2	Trust	22
	2.6	3.3	Employee Engagement	23
	2.6	6.4	Human Resource Development	24
	2.6	6.5	Intrapreneurial Orientation	25
	2	2.6.5.1	Innovation	25
	2	2.6.5.2	Pro-activeness and Autonomy	26
	2	2.6.5.3	Risk Taking	26
	2	2.6.5.4	Competitive Aggressiveness	26
2.	_		usion	27
	. /	Concl	usion	
			: Research Questions	
	Cha	pter 3		.29
<b>3. 0</b>	<b>Cha</b> .1	pter 3 Resea	: Research Questions	. <b>29</b>
3. <b>3</b> . 3.	<b>Cha</b> .1 .2	pter 3 Resea	: Research Questions	. <b>29</b> 29
3. <b>3</b> . 3.	Cha .1 .2 Cha	pter 3 Resea Resea pter 4	: Research Questionsarch Question 1arch Question 2arch Question 2	.29 29 29
3. <b>3</b> . 3. <b>4. 0</b>	Cha .1 .2 Cha	pter 3 Research Research Pter 4	: Research Questionsarch Question 1arch Question 2	29 29 30
3. <b>3</b> . 3. <b>4. 0</b>	Cha .1 .2 Cha .1	pter 3 Resea Resea pter 4 Phase	Research Questions	29 29 30
3. <b>3</b> . 3. <b>4. 0</b>	Cha .1 .2 Cha .1	pter 3 Resea Resea pter 4 Phase 1.1	: Research Questions  arch Question 1  arch Question 2  : Research Methodology  e One: Identify Case Study Organisations.  Research Method	29 29 30 30
3. <b>3</b> . 3. <b>4. 0</b>	Cha .1 .2 Cha .1 4.1	Research Research Phase 1.1	: Research Questions  arch Question 1  arch Question 2  : Research Methodology  e One: Identify Case Study Organisations.  Research Method  Population and Unit of Analysis	29 29 30 30 30
3. <b>3</b> . 3. <b>4. 0</b>	Cha .1 .2 Cha .1 4.1 4.1	Research Research Phase 1.1 1.2 1.3	: Research Questions  arch Question 1  arch Question 2  : Research Methodology  e One: Identify Case Study Organisations  Research Method  Population and Unit of Analysis  Interview Guide Design	29 29 30 .30 .30 .31
3. <b>3</b> . 3. <b>4. 0</b>	Cha .1 .2 Cha .1 4.1 4.1	Phase	: Research Questions  arch Question 1  arch Question 2  : Research Methodology  e One: Identify Case Study Organisations  Research Method  Population and Unit of Analysis  Interview Guide Design  Pre-test	29 30 30 30 31 31



4.2	Phas	e Two: Interview with Managing Directors	32
4	1.2.1	Research Method	. 32
4	1.2.2	Population, Unit of Analysis	. 32
4	1.2.3	Questionnaire Design	. 33
	4.2.3.	1 Research Approval Guide	. 33
	4.2.3.2	2 Face-to-Face Interview Guide	. 33
4	1.2.4	Pre-Test	. 34
	4.2.4.	1 Research Approval Request	. 34
	4.2.4.2	2 Face-to-face Interview Guide	. 34
4	1.2.5	Data Collection Tool	. 35
	4.2.5.	1 Research Approval	. 35
	4.2.5.2	2 Interview with Managing Directors	. 35
4	1.2.6	Sample	. 36
4	1.2.7	Data Analysis	. 36
4.3	Phas	e Three: Quantitative data collected from Staff	36
4	1.3.1	Research Method	. 36
4	1.3.2	Population and Unit of analysis	. 36
4	1.3.3	Questionnaire Design	. 37
4	1.3.4	Pre-test	. 38
4	1.3.5	Data Collection Tool	. 38
4	1.3.6	Sample	. 39
4	1.3.7	Data Analysis	. 39
4.4	Data	Validity and Reliability	40
4.5	Pote	ntial Research Limitations	41
5. Ch	napter 5	5: Results	42
5.1	Intro	duction	42
5.2	Phas	e One: Results of Qualitative Expert Interviews	42



5.	3 Phas	se Two: Results of Qualitative Interview with Managing Directors	.43
	5.3.1	Introduction	43
	5.3.2	Case Study Organisational Information	43
	5.3.3	Organisation Success to date, Key Drivers and Measures of Success	43
	5.3.4	Qualitative Open Ended Organisational Energy State Description	45
	5.3.5	Quantitative Closed-Format Organisational Energy Zone Question	46
	5.3.6	Factors that Drive Staff Energy	46
5.	4 Phas	se Three: Results of Quantitative Survey	.47
	5.4.1	Data and Factors	47
	5.4.1.	1 Sample and Demographic Data	47
	5.4.1.	2 Frequency and Means for Indicator Variables	47
	5.4.2	Scale Reliability – Cronbach's Alpha	50
5.	5 Rese	earch Question 1	51
	5.5.1	Introduction	. 51
	5.5.2	Dependent and Independent Variables	51
	5.5.3	Company Means for Organisational Energy and Organisational	
	Perform	ance	. 51
	5.5.4	Correlation between Organisational Energy and Organisational	
	Perform	ance	. 52
	5.5.5	Kruskal-Wallis ANOVA by Ranks for Companies	52
	5.5.6	Kruskal-Wallis ANOVA by Ranks for Staff Levels	53
	5.5.7	Scatter Plot: Organisational Performance against Organisational Energ	ју -
	All Com	panies	54
	5.5.8	Scatter Plot: Organisational Performance against Organisational Energy	ју
	– Ву Со	mpany	55
5.	6 Rese	earch Question 2	.56
	561	Introduction	56



	5.	6.2	Dependent and Independent Variables	56
	5.	6.3	Company Means for Dependent and Independent Variables	56
	5.	6.4	Correlation between Independent Variables and Organisational Energy	58
	5.	6.5	Kruskal-Wallis ANOVA by Ranks for Companies	58
	5.	6.6	Kruskal-Wallis ANOVA by Ranks for Staff Levels	59
	5.	6.7	Energy Zones – Case Study Companies	60
6.	Cha	pter 6	6: Discussion of Results	.61
	6.1	Intro	duction	.61
	6.2	Case	Study Companies	.61
	6.	2.1	Energy and Performance	61
	6.	2.2	Independent Variables and Energy Output	62
	6.	2.3	Performance Measures	63
	6.3	Rese	earch Question 1	.64
	6.	3.1	Introduction	64
	6.	3.2	Statistics and Interpretation	64
	6.	3.3	Conclusion	65
	6.4	Rese	earch Question 2	.65
	6.4	4.1	Introduction	65
	6.4	4.2	Statistics and Interpretation	66
	6.4	4.3	Conclusion	67
7.	Cha	pter 7	7: Discussion of Results	.69
	7.1	Purp	ose of the Study	.69
	7.2	Main	Findings	.69
	7.3	Reco	ommendations to Management	.71
	7.4	Futur	re Research	.71
	7.	4.1	Energy Zones	71
	7.4	4.2	External Environment	72



7.4	4.3	Culture	72
7.5	Conc	clusion	73
8. Ref	erenc	e List	74
Appen	dix 1:	Research Phase One - Expert Interview Guide	79
Appen	dix 2:	Research Phase Two - Research Approval Request Guide Manag	ging
Dire	ectors		80
Appen	ıdix 3:	Research Phase Two - Interview Guide - Managing Directors	81
Appen	idix 4:	Research Phase Three – Self-Administered Questionnaire	84



# List of Figures

Figure 1: Interactive Components of High Performance Organisations	. 10
Figure 2: Energy Dynamics in Organisations	. 13
Figure 3: The Four Organisational Energy Zones	. 14
Figure 4: Scatter Plot of Organisational Performance against Organisational	
Energy (all Companies)	. 54
Figure 5: Scatter Plot of Organisational Performance against Organisational	
Energy (by company)	. 55
Figure 6: Research Question 2 - Company Means for Dependent and Independ	ent
Variables	. 57
Figure 7: Energy Zones - Case Study Companies	. 60
Figure 8: Energy Cycle	. 70



# **List of Tables**

Table 1: Sample Size Managing Directors	36
Table 2: Sample Size Management/Supervisory & Skilled/Non-supervisory.	39
Table 3: Research Phases	42
Table 4: Case Study Company Information	43
Table 5: How would you describe the organisation's success to date?	44
Table 6: What do you do to personally drive the success of the business?	44
Table 7: What measures do you use to determine the success of your busing	ness?
	45
Table 8: How would you describe the energy state of your organisation?	45
Table 9: Energy state that best represents your organisation?	46
Table 10: What factors do you believe drive the energy of your staff?	46
Table 11: Quantitative Questionnaire: Sample & Demographic Data	47
Table 12: Frequency Distribution and Means of all Indicator Items	48
Table 13: Scale Reliability	50
Table 14: Research Question 1 – Dependent and Independent Variables	51
Table 15: Company Means for Organisational Energy and Performance	51
Table 16: Correlation between Organisational Energy and Organisational	
Performance	52
Table 17: Research Question 1 - Kruskal-Wallis ANOVA by Ranks for Comp	anies
	53
Table 18: Research Question 1 - Kruskal-Wallis ANOVA by Ranks for Staff	
Levels	53
Table 19: Research Question 2 – Dependent and Independent Variables	56
Table 20: Research Question 2 - Company Means for Dependent and	
Independent Variables (DV and IV)	57



Table 21:	Research Question 2 - Correlation between Independent Variable	es and
Organisat	tional Energy	58
Table 22:	Research Question 2 - Kruskal-Wallis ANOVA by Ranks for Com	npanies
		58
Table 23:	Research Question 2 - Kruskal-Wallis ANOVA by Ranks for Staff	f
Levels		59



## 1. Chapter 1: Problem Definition

#### 1.1 The Research Problem

According to Bruch and Ghoshal (2003), in the process of creating a sense of urgency to take action, leaders unleash and channel productive organisational energy causing organisations to radically improve productivity, innovation and growth in pursuit of key organisational strategic goals and high performance. Leadership is responsible for mobilising and focussing organisational energy by ensuring the organisations' vision and strategy captures the emotional excitement and intellectual capabilities of its people. Whilst literature suggests organisational energy drives organisational performance there is a lack of empirical evidence to support this. Central to this dissertation is an attempt to determine whether there is a relationship between productive organisational energy and high performance organisations. Furthermore, the development of a framework of the key independent drivers of productive organisational energy will provide leaders with the ability to take proactive steps and implement actions to increase energy levels and improve the performance of an organisation to better achieve its strategic objectives and full potential.

Cross, Baker, and Parker (2003) suggest energy networks, representing relationships and day-to-day interactions within a social network of colleagues, affects the energy of an individual, group or entire organisation. Fostering energising behaviour and promoting key managerial issues such as team performance, innovation, employee motivation, job design and job satisfaction elevates positive energy levels, translating into improved performance and learning in organisations. Energising interactions in the form of behaviour and conversations in social networks mentally engage, enthuse and willingly encourage employee efforts into action and progress in pursuit of organisational goals.

Schiuma, Mason, and Kennerly (2007) furthermore state that an employee's energy is an important factor in their own performance and subsequent contribution to an organisation, and that an organisation's energy level is dynamic in nature and more than the sum of individuals, and also involves the interactions of teams and the organisation as a whole. The key challenge for leadership is to motivate and ensure individuals and teams are engaged in achieving the organisation's strategic objectives within the existing energy state or desired energy state of the organisation. This study hopes to provide leadership with the necessary insights and tools to ensure individuals are energised and focused in delivering superior performance.



Bruch and Ghoshal (2003) argue "Organisational energy is related but not identical to the sum of the energy of individuals" (p. 45) and differs in both intensity and quality by creating the necessary mix of cognitive, emotional and action-taking capabilities to achieve organisation objectives. It is broadly assumed within literature that productive organisational energy improves performance, which this study wishes to validate.

This dissertation asserts that the ability of small to medium size businesses (SMEs) to leverage organisational energy, which typically lack the resourcing and capacity of large organisations, may be the differentiator between success and failure in a highly competitive global environment. Jacobs and Kruger (2001) suggest intrapreneurial behaviour by individuals is a process by which individuals pursue opportunities without regard to the resources they control, encouraging an intrapreneurial orientation of autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness. Promoting a creative culture is a key determinant in fostering intrapreneurial activity within an organisation, where a social orientation initiates change and allows for an effective implementation of strategy in an ever changing environment. SMEs are the life blood of most thriving business communities and the opportunity exists to improve the competitiveness of these businesses by leveraging productive organisational energy, thus reducing the failure rate of start-ups.

In a global village where high performance organisations are more likely to achieve a sustainable competitive advantage in a rapidly changing environment, the ability to leverage productive organisational energy to improve and sustain high performance is critical. Leaders, who are able to implement proactive actions to manage energy and increase performance, will be at an advantage in respect to other organisations. Cole, Bruch, and Vogel (2005) characterised organisational energy as the fuel that makes great organisations perform, as demonstrated in an individual's positive emotional arousal to act for the benefit of both the individual and organisation.

## 1.2 Research Objectives

The objective of this research is to draw on theory and gather empirical evidence from respondents in four case study organisations in order to determine whether there is a relationship between high performance organisations and their respective energy levels and to establish and rank the key drivers of productive organisational energy. This study also aims to identify the key measurements of success of the case study organisations.



The intent is to develop a framework that can be used by managers and owners of organisations to leverage productive organisational energy to improve performance and ensure business success. This research seeks to identify those key attributes that intensify energy levels within an organisation and to examine the relationship of organisational energy to the performance of the organisation as a whole.

This research does not attempt to provide evidence of direct causality between productive organisational energy and organisational performance. It seeks to assess the relative strength of the relationship between productive organisational energy and organisational performance.

## 1.3 Research Scope

This study expands on the research conducted by Lamberti (2010), Sriruttan (2011) and Louw (2010). The study was conducted in three phases and limited to four case study organisations represented by high energy information technology organisations.

The research method for this study included a combination of a quantitative and qualitative survey, based on theoretical constructs contained within literature and on feedback from respondents. A cross-section of staff within each case study organisation was the subject of the research.

- Phase One was conducted by issuing a qualitative survey to industry experts with the objective of identifying a total of four information technology organisations that demonstrate high levels of productive organisation energy to form the basis of this research. As part of this study, the aim is to determine if there is a relationship between the level of energy within an organisation and its relative performance. Cole et al. (2005) argue that high energy organisations result in high performance organisations.
- The aim of Phase Two, directed at the Managing Directors of the case study organisations, was to identify the key drivers of productive organisation energy and to identify the key measures of organisational success. A qualitative survey in the form of a face-to-face interview was conducted to identify the key measures of organisational success, whilst a quantitative survey in the form of a structured self-administered questionnaire (also used in Phase three) formed the basis for identifying and ranking the key independent drivers of productive organisation energy and the state of organisational energy within their respective organisation.



The aim during Phase three was to gather insights from a cross-section of staff in the context of their own organisations, being representative of a typical organisation at different levels, regarding the key independent drivers of productive organisational energy and the state of energy. Schiuma *et al.* (2007) suggest team and individual energy dynamics drive productive organisational energy.

The data gathered in the above phases was interrogated to determine the relationship between productive organisational energy and organisational performance, to identify the key independent drivers of productive organisational energy and their respective ranking, and to determine the key measures of organisational success.

#### 1.4 Motivation for the Research

According to Bruch and Ghoshal (2003), organisational strategy is not only based on external factors but also on more significant factors such as senior management style, the organisation's existing energy state and traditions. The motivation for this research is to determine and understand the factors that will either enable or inhibit productive organisational energy and how these factors can be utilised to create a sustainable competitive advantage by improving performance.

Cross, Linder and Parker (2007) assert that energising and de-energising employees has an important role to play in organisational performance. Underlying this research is the ability to understand the factors and processes that enable productive organisational energy to drive the performance of individuals and teams. In an everchanging internal and external environment, it is critical that leadership creates a culture that leverages the existing energy state of an organisation or initiates the change of the existing energy state of the organisation to improve performance. If, in a focussed and controlled manner, enabling factors can be intensified and inhibiting factors can be reduced to energise employees, the energy levels of individuals and teams can be managed, with a consequent increase in organisational performance. An increase in productive organisational energy should therefore enable organisations to compete more effectively and outperform competitors.

Fard, Rostamy, and Taghiloo (2009) suggest a learning culture characterised by high environmental adaptation and high internal integration leads to innovation and an improved organisation. Jamrog, Vickers, Overholt, and Morrison (2008) argue high performance organisations need to adapt to a continually changing marketplace in



order to have a sustainable business that outperforms competitors. Organisational values and the ability to execute efficiently and effectively are largely dependent on workforce engagement and their productive energy levels. By being able to demonstrate a relationship between high productive organisational energy and high performance, organisations will be encouraged to leverage productive organisational energy in the pursuit of high performance to achieve their strategic goals and be successful.

The intended outcome of this study will be to add to the existing body of knowledge and to develop a framework to be used by leadership to energise an organisation and achieve improved performance.

#### 1.5 Conclusion

Organisations that are able to proactively harness productive organisational energy are at a competitive advantage and more than likely to succeed in an ever-changing business environment. Leaders who are able to diagnose and remedy energy levels within an organisation will be able to leverage productive organisational energy in pursuit of a high performance organisation that achieves the strategic goals of the business.

By understanding the drivers and predictors of productive organisational energy and the relationship between them, businesses will be able to actively drive organisational competitiveness and performance.



## 2. Chapter 2: Theory and Literature Review

#### 2.1 Introduction

Literature broadly asserts that organisational energy is closely linked to organisational performance. The aim of this research project is to provide empirical evidence and rank the key drivers of productive organisational energy and to determine their relative impact on improving organisational performance. This study will investigate the assumption that highly energised individuals lead to a climate of high organisational energy, which in turn leads to improved organisational performance. According to Cross *et al.* (2003), by taking action and changing behaviour to increase energy, organisations enhance performance, morale, innovation and learning, by creating a culture that leverages productive organisational energy in the pursuit of important organisational initiatives.

Bruch and Ghoshal (2003) recognise that at any given moment in time an organisation is in a particular energy state, with the key challenge to unleashing productive organisational energy being the ability to link people's emotions to an organisation's strategic goals.

Dutton (2003) asserts "Energy is the fuel that makes great organisations run" (p.7), suggesting productive organisational energy is the difference between exceptional, mediocre or poor organisational performance.

# 2.2 Small Medium Enterprises (SMEs) and Information Technology Industry (IT)

#### 2.2.1 Role of SMEs and IT

Liberman-Yaconi, Hooper, and Hutchings (2010) view the small business sector as essential for entrepreneurship, innovation, job creation and industry dynamics in local, national and international economies due to their prevalence in most markets and the fact they account for a significant portion of total businesses. Although small businesses contribute less gross domestic product than large organisations, they are a major source of income (primary and secondary) and employment in developing and developed countries. Whereas small businesses are independently owned and operated and primarily focused on stability and the personal goals of the owner, entrepreneurial organisations are focused on growth and wealth creation through innovation and creativity.



Baldacchino (2005) stated SMEs contribute vigorously to economic growth and sustainable employment in an era of structural unemployment, whilst large organisations are typically characterised by massive layoffs due to drives in efficiency and cost-saving in order to maximize profits. Furthermore, SMEs typically respond and adapt rapidly to structural and customer demand changes due to their flexibility and innovation capabilities.

Montazemi (2006) notes information technology plays a critical role in SMEs being agile in global competitive markets typified by rapid change, high performance and customer-configured products and services. Information technology enhances the competitive effectiveness and productivity of organisations by guiding decision making, improving operations and facilitating the introduction of new products and services, resulting in improved organisational performance. SMEs furthermore make significant contributions to the gross domestic product (GDP), employment base and job creation in countries where cross border trading results in the exchange and dissemination of advanced technologies, managerial knowledge and operational experience.

Theis and Horn (2003) found information technology – comprising processing, storage and communication – has grown rapidly to become a major part of the world economy through productivity gains and innovation. Rozanova (2010) states the significance of information technology is steadily growing, accounting for approximately 20 to 40 per cent of GDP growth during the mid-2000's in developed countries, and 70 to 80 per cent of improvements in aggregate productivity, with organisations spending upward of nine to ten per cent of their revenues and five per cent of capital, on information technology. World information technology spending increases five to six per cent annually and is the driving force of market economies responsible for complex production solutions, transparency in the flow of money, managed personnel costs and optimisation of supplier interrelations.

Chuan and Wen-Jung (2005) noted that in the era of the knowledge economy, where high-tech industries have short lifespans, information technology organisations must innovate to increase long-term competitiveness by way of internal marketing and knowledge management. Internal marketing satisfies the needs of internal customers by creating satisfied employees who in turn increase customer satisfaction and maintain client relationships, whilst knowledge management through organisational learning, assists organisations in obtaining technology, competitive knowledge and information related to the market, allowing them to innovate.



Forsman and Temel (2011) regard small business to be the engine of economic growth, and in an environment of global competition, innovation is critical to improving performance, sustaining a competitive advantage and for survival in international competitive markets.

Parida, Westerberg, and Frishammar (2012) suggest due to the "liability of smallness" SMEs have limited financial resources, typically lack a multidisciplinary skills base and use unstructured innovation approaches, restricting their ability to innovate and be competitive in comparison to large organisations with vast resources. However, since SMEs are less bureaucratic, inclined to take risks, possess specialised knowledge and react faster to market demands, collaborating with network partners allows SMEs to take advantage of a wider range of market opportunities and develop new technological combinations that result in improved innovation. Gronum, Verreynne, and Kastelle (2012) recognise SMEs improve organisational performance by unlocking the social capital of networks, allowing them to obtain the advantages of a larger size through access to resources, complementary skills, capabilities and knowledge that are not internally available.

Tan and Leewongcharoen (2005) highlight that information technology is critical to a country's development, in particular for leapfrogging developing economies onto a path of sustainable development. Information technology impacts the daily lives of organisations and individuals through its use and availability. Countries utilize information technology to drive economic growth and improve the quality of life of its citizens in an information technology era.

There is a need to gather more empirical evidence on how to create productive organisational energy in small and medium enterprises that are the target research organisations of this study.

# 2.3 High Performance Organisations

#### 2.3.1 Introduction

An organisation's long-term success depends on its ability to consistently outperform its competitors by way of leadership striving to improve and sustain high performance over an extended period of time. The challenge for leadership is to understand and apply the key drivers of high performance organisations to their respective unique, dynamic organisations in order to gain a sustainable competitive advantage (Jamrog *et al.*, 2008).



## 2.3.2 Key Elements of High Performance Organisations

Kaliprasad (2006) suggests for a high performance organisation to be sustainable it needs to respond and adapt to external marketplace expectations by aligning and integrating internal elements such us organisational culture, structures, processes and leadership, to the larger environment or system within which it operates. Furthermore, sustaining people behaviours to meet customer and market requirements and at the same time ensuring the people who make up the organisation are successful themselves, are critical factors in sustaining a high performance organisation.

Cross *et al.* (2007) assert that the ability of high performance organisations to innovate stems not only from superior management and organisational structures that bring new ideas to the market, but from energy which drives an intense passion and enthusiasm in leadership and teams to overcome obstacles in the innovation process.

Jamrog et al (2008) argue high performance organisations gain a competitive advantage by executing strategy through the use of a unique blend of multi-dimensional processes and interactive components consisting of strategy, leadership, customer approach, processes and structures, and values and beliefs, as seen in Figure 1. Organisations are dynamic systems with no single secret to organisational success. However, high performance organisations are typically superior to their low performing counterparts in the following six key areas:

- 1. Strategies are consistent, clear and well thought out;
- 2. Leadership is relatively clear, fair and talent–orientated;
- 3. Going beyond customer expectations is the norm;
- 4. Existence of superior performance measures, the training and enabling of employees to do their jobs and collaborate;
- 5. Employees thinking the organisation is a good place to work; and
- 6. Employees creating unique customer experiences by utilizing their skills, knowledge and experience.

Goodridge (2009) concluded that successful high performance organisations are innovative about how they retain talent during turbulent business cycles – they create an energising environment to gain a competitive advantage and maximize opportunities in the market place.

Organisations need to ask themselves what needs to be accomplished from an external point of view and how this can best be achieved, as well as be able to solve



the daily problems of working and living together in order to integrate internally. Behaviours and attitudes that contribute to high performance should be monitored, recognised and rewarded to encourage action-taking that delivers success. Measuring the softer issues of a high performance culture enables traditional quantitative measures, including the financial success of an organisation, to improve (Kaliprasad, 2006).

Organisations that continually aim to improve and "work on their games" (p. 30), build sustainable and high performance organisations (Jamrog *et al.*, 2008). Each of the components in Figure 1 below interacts and influences the other, creating a dynamic, whole system.

Customer
Approach

Processes &
Stucture

Strategic
Approach

Leadership
Approach

Values & Beliefs

Figure 1: Interactive Components of High Performance Organisations

Source: Jamrog, Vickers, Overholt, Morrison, 2008

According to Jamrog *et al.* (2008) the above model centres on five major characteristics of high performance organisations:

- A consistent Strategic approach whereby the organisation "walks the talk" by communicating clear visions supported by flexible and achievable strategic plans and where leaders and employees behave in a manner consistent with the organisation's strategic plan and philosophy;
- 2. A customer approach that focuses on knowing and meeting customer needs;



- 3. A leadership approach that defines the behaviours employees must exhibit in order to achieve organisational strategies by setting clear goals and guiding performance;
- 4. Processes and structures that create an environment of focus and teamwork designed to support and execute strategy by pulling everyone together, setting clear measurable outcomes and sharing information; and
- 5. Values and beliefs based on the highest ethical standards. Clarifying well-established values and expected behaviour drives employee behaviour to achieve the organisation's strategy treating employees well so that they in turn treat the organisation well.

## 2.3.3 Key Measurements of High Performance Organisations

In order to achieve a high performance organisation it is critical for leadership to establish a performance metrics that aligns with the organisation's strategies and values. This, in turn, must be supported by effective and efficient implementation and execution through processes, structures and strong leadership. It is furthermore stated that the internal environment of high performance organisations should be aligned to customers' expectations and shifting social attitudes (external environment) (Jamrog et al. 2008).

Ming-Hon and Hsin (2007) observed that in order to maintain long-term competitiveness in a globalised environment, organisations are required to engage in overall strategic planning and performance evaluation. A management tool for translating strategy into action, known as a balanced scorecard (BSC), is designed to balance and evaluate an organisation's performance from four perspectives, namely financial, customer, internal processes, and learning and growth. This allows organisations to monitor progress on key goals and take corrective action where required to ensure strategy execution is achieved. Deem, Barnes, Huizenga, Segal, and Preziosi (2010) state the BSC balances "long and short term objectives, financial and non financial measures, leading and lagging indicators, and external and internal performance perspectives" (p.31), thus combining a multitude of performance measures relating to various strategic objectives. It's also suggested that culture be monitored and actions be taken to ensure people's core values are aligned in order to successfully execute strategy.



Yusuf (2010) argues the most common performance measures used by entrepreneurial businesses relate to growth, profitability and survival. Measures for growth typically include changes in sales, employees and cashflow; profitability includes return on sales/investment, net profit, and return on assets; and survival involves the sense of operating versus discontinuance.

Forsman and Temel (2011) measured business performance relating to operating earnings (profit), return on investments (ROI), growth rate in sales, and growth rate of sales per employee.

# 2.4 Organisational Energy

#### 2.4.1 Definition

Schiuma *et al.* (2007) define energy as "simply the capacity to do work" (p. 70) together with "the capacity for vigorous activity, liveliness or vitality" (p. 70), suggesting that both the quality and intensity of energy contributes to individuals realising organisational goals. Cole *et al.* (2005) assert organisation energy represents "the level of spirit, morale, enthusiasm, motivation, pace and performance capturing the vitality and stamina of the organisation" (p. 1).

Bruch and Vogel (2011) note organisational energy belongs to the intangible, soft factors of human potential, and represents the force with which organisations work in pursuit of their goals.

### 2.4.2 Energy Dynamics

Schiuma *et al.* (2007) state organisational energy is a multi-level process of individual energy, team energy and organisational energy, continuously changing over time through a process of creation, depletion and renewal. These energy types are driven by individual behaviour, social interaction and organisational infrastructure dynamics respectively (Schiuma *et al.*, 2007), as shown in Figure 2.

Fard *et al.* (2009) suggest organisational energy is more than the sum of individuals' energy dynamics but includes energy as a consequence of the interaction and dynamics of teams and the organisation as a whole.



**Driven by Social** Energy Individual Interactions Individual Team Energy Energy Dynamics Energy Stimulus/ Influence Team Engergy Individual Engergy driving driving Organisation Organisation Engergy Engergy Platform Platform

Organisational Energy Dynamics

Figure 2: Energy Dynamics in Organisations

Source: Schiuma, Mason, Kennerley, 2007

Driven by Organisational Infrastucture

The figure above illustrates that individual behaviour drives individual energy dynamics through physical, emotional and cognitive capacity. In contrast, team energy is driven by social interactions, whilst organisational infrastructure, which includes tangible (facilities and equipment) and intangible (HR recruitment and retention practices, organisational culture and performance measurement systems) dimensions, drive both individuals and teams (Schiuma *et al.*, 2007). Bruch and Ghoshal (2003) further highlight that a leader's energy also affects organisational energy.

Alford (2000) observed that the rejuvenation of an organisation in order to achieve a sustainable competitive advantage is a process of continuous recreation and renewal of the essence of a business. Institutionalising open learning systems and committing to an organisation's human resource knowledge and potential regenerates organisational energy, consequently reflected in the vitality and spirit of an organisation. Organisational regeneration is achieved by removing ineffective restrictions to change, whilst setting expectations about how things should be done and changing the rules of the game.

Information used by leadership and management regarding threats and opportunities in the external environment to set strategy, may also affect employee energy levels depending on the organisational culture and how management communicates this information to staff (Schiuma et al. 2007).



# 2.4.3 Energy Zones

#### 2.4.3.1 Introduction

According to Bruch and Ghoshal (2003) the energy state, or zone, of an organisation is dependent on a combination of the intensity (strength: high or low) and quality (positive or negative) of energy in the organisation. Organisation energy may fall into one of four zones – resignation, comfort, aggression or passion – as seen in Figure 3. Schiuma *et al.* (2007) suggest that an energy state represents emotional excitement, alertness, creativity, engagement of intellectual capabilities, sharing of a sense of urgency to take action, enthusiasm and satisfaction, amongst others.

# 2.4.3.2 Intensity and Quality of energy

Bruch and Vogel (2011) assert the intensity of organisational energy reflects the level of emotional tension, interaction and communication present in an organisation and distinguish between high and low levels of emotional involvement, mental activation and engagement.

The quality of organisational energy represents how the organisation uses its energy to achieve its goals, where positive organizational energy (enthusiasm, joy, satisfaction) represents the constructive use of an organisation's potential, whilst negative organizational energy (fear, frustration, sorrow) demonstrates a lack of common orientation towards organisational goals. All individuals within an organisation have a role to play in energising and keeping energy flowing in the workplace (Bruch and Vogel, 2011).

High Aggression Passion Zone Zone Intensity of Organisational Energy Resignation Comfort Zone Zone Low Negative Quality of Positive Organisational Energy

Figure 3: The Four Organisational Energy Zones

Source: Bruch and Ghoshal, 2003



# 2.4.3.3 Energy Types

According to (Bruch and Vogel, 2011; Bruch and Ghoshal, 2003) organisations with:

- high positive energy (passion/productive energy zone) demonstrate high emotional involvement and mental alertness along with high activity levels, speed, stamina and productivity i.e. the organisation thrives on strong positive emotions of joy and pride where enthusiasm and excitement direct attention to shared organisational priorities.
- low positive energy (comfort/comfortable energy zone) demonstrate high shared satisfaction and identification coupled with low activity levels and organisational inertia i.e. the organisation has weak but positive emotions of calm and contentedness and lacks the vitality, alertness and emotional tension necessary to initiate bold new strategic thrusts or significant change, and is happy with the status quo.
- low negative energy (resignation/resigned inertia zone) demonstrate high levels
  of frustration, mental withdrawal and cynicism and low collective engagement
  i.e. people lack excitement or hope and suffer from lethargy, and are
  emotionally distant from organisational goals.
- high negative energy (aggression/corrosive energy zone) demonstrate collective aggression and destructive behaviour, for example, internal politics, resistance to change, maximizing individual benefits i.e. strong negative emotions drive an intense competitive spirit with high levels of activity and alertness focussed on achieving company goals.

# 2.4.3.4 Mobilizing and Sustaining Energy

Bruch and Vogel (2011) suggest two proven strategies to mobilize productive organisational energy: identifying and overcoming a major threat (slaying the dragon), or identifying and taking advantage of an opportunity (winning the princess). In both, a higher level of energy is leveraged. The challenge for leadership is to involve people across the organisation, pay close attention to people emotions, effectively communicate and make the threat or opportunity a key part of people's work.

Bruch and Vogel (2011) argue that it is imperative for leadership to proactively manage and sustain productive organisational energy and avoid a yo-yo type scenario where



energy traps are the order of the day. Leadership may drive organisations beyond their capabilities which may lead to organisational burnout (acceleration trap) or to periods of prolonged success or failure which weaken an organisation's ability to leverage resources, resulting in complacency (inertia trap), or to an environment where people focus their energy on internal fights and don't work together (corrosion trap).

High energy organisations that enhance productivity are characterised by a sense of urgency, adaptability and larger-than-life shared goals. Low energy organisations are characterised by standardisation, institutionalisation, risk aversion, conflicting goals and lack of collaboration (Bruch and Ghoshal, 2003). Schiuma *et al.* (2007) conclude energy states indicate how much effort an individual or team is willing and able to invest in pursuing organisational goals.

# 2.5 Outcomes of Organisational Energy

Goodridge (2009) asserts positive energy is the powerhouse of a successful organisation, where the ability to boost energy at individual or team level provides a significant competitive advantage by helping to retain and motivate staff. Bruch and Ghoshal (2003) argue energy drives the intensity, pace and endurance of a company's work, change and innovation processes.

Cross *et al.* (2003) argue that by mapping relationships in social networks, organisations are able to monitor and change their human resource practices in order to inspire energising behaviour more broadly within the organisation, which leads to actions that improve organisational performance and foster learning.

According to Klann (2004), in an organisation that has positive energy, productivity and creativity are high and relationships are strong, resulting in efficient, cooperative and loyal teams. The generation of positive energy by building morale, pride and spirit, meets the social needs of people. This leads to an organisation being regarded as a fun place to work where people have a can-do attitude and a willingness to do whatever it takes to accomplish the organisation's goals.

Cole *et al.* (2005) suggest organisation energy drives behaviour and innovation in the achievement of the organisation's goals. Kruger (2003) found that, if their work satisfies their own needs for growth and development, people are empowered to feel that they have the chance to personally change the world.



Energy impacts an individual's performance and commitment to an organisation by sustaining behaviour over time and creating a reinforcing loop between motivational force (amount of effort to perform a task) and organisational performance. Sustaining behaviour through enhanced motivation, team power and creativity, provides a competitive advantage where the more energy an individual has, the more they will put into their work (Schiuma *et al.* 2007).

Cross et al. (2007) noted that organisational energy has a significant role to play in innovative organisations. By leadership managing and focusing on daily interactions that either energise or de-energise employees, it is able to drive intense passion, commitment and enthusiasm to overcome obstacles to innovate. Energising interactions foster collaboration, information sharing and learning which enables innovation by means of getting things done and making things happen. Management should monitor and reward energising behaviour to create a culture of energised interactions characterised by values of playfulness, trust and realistic optimism.

Organisational culture, performance measurement systems, human recruitment and retention practices represent opportunities to focus individual and team behaviour as a means to bundle and channel energy to drive overall organisational performance (Schiuma *et al.* 2007). Bruch and Vogel (2011) state productive organisational energy enables organisations to achieve ambitious performance goals.

Cross et al. (2007) argue both formal and informal leaders are a high leverage point of energy and help individuals and teams energise to improve performance and maintain momentum. Furthermore, leadership is able to leverage productive organisational energy to compete more effectively and outperform competitors.

Cross *et al.* (2003) assert energisers create energy within organisations by hitting the "sweet spot" through avoiding extreme behaviour, in the following interactions which are also dependent on the character, behaviour and relationships of the individuals involved:

- A compelling vision is created that focuses on realistic possibilities that are not overwhelming, and inspire people to give of their time and effort to take part in building something, instead of focusing on current or past problems.
- Opportunities are created for people to contribute meaningfully by entering into conversations or problem solving sessions that make them feel heard by viewing their perspectives.



- 3. By fully engaging people through listening, learning and reacting meaningfully during conversations.
- 4. Progress in goals is marked by openness and flexibility in the means to achieve them, rather than exclusively focusing on problems and favoured solutions.
- 5. Where hope (based on truth and integrity) focuses people's attention on what is possible and not the pitfalls causing them to believe the objective is worthy and attainable.

Dutton (2003) found high-quality connections that energise people are characterised by mutual respect, trust and active engagement. Positive energy enhances both the psychological and physical health of individuals and improves task engagement and learning by individuals. Organisations benefit from productive organisational energy through: improved cooperation and effective coordination within and across business units; increased employee retention; strengthened organisational culture and employee loyalty and commitment; enhanced organisation learning due to improved dialogue and deliberation; and, an improved capacity for the organisation to adapt and change to its environment as a result of creativity, productivity and innovation.

Bruch and Ghoshal (2004) state that, by getting things done, organisational energy drives persistent collective action to effectively execute strategy, and lies at the heart of business excellence.

In conclusion, based on the literature review above, the key proposed outcomes of productive organisational energy are as follows:

- Improved organisational performance;
- A competitive advantage;
- The achievement of organisational goals by driving staff behaviour;
- · Passionate and motivated staff;
- A creative and innovative organisation;
- Improved collaboration, relationships and strong teams;
- · Sustained energising behaviour by staff;
- Improved communication, information sharing and learning;
- Improved staff retention;
- Healthier staff;
- A culture of mutual respect and trust;
- Committed and loyal staff;



- An organisation that adapts to change and gets thing done;
- Outperformance of competitors; and
- An organisation that is a fun place at which to work.

# 2.6 Antecedents of Organisational Energy

This study considered the drivers of organisational energy as identified by Lamberti (2010) and Sriruttan (2011) by retaining and expanding on many of these variables. Based on this literature review, new constructs have also been included as key drivers of organisational energy. The following drivers of productive organisational energy are considered the most important independent variables:

# 2.6.1 Leadership

Goleman, Boyatzis, and McKee (2009) argue a great leader not only talks about strategy, vision and powerful ideas, but uses emotional intelligence to inspire, arouse passion and enthusiasm to ensure people are committed and motivated. Effective leaders need to drive the emotions and manage the meaning of those they lead by understanding how to conduct themselves and build relationships. The "soft side" of leadership is distinguished by behaviours of self-awareness, self-regulation, motivation, empathy and social skills, which have been found to deliver measureable organisational results. Making people feel good about themselves causes them to be optimistic about their ability to achieve goals whilst enhancing creativity, decision-making and collaboration. This demonstrates that effective leadership styles drive the organisational climate, resulting in heightened energy and improved organisational performance.

Goleman (2004) suggests the most important ingredient for organisational performance is that leadership has emotional intelligence over and above intellectual intelligence (IQ) and technical ability. According to Goodridge (2009), building emotional intelligence and interpersonal skills to influence behaviour within an organisation helps bring out the best in people by stretching high performers and challenging poor performers. It follows that strong leadership with high level emotional intelligence, leads to productive organisational energy and is a key driver of outstanding performance.

Bruch and Ghoshal (2003) argue leadership needs to take into consideration an organisation's existing energy state, management style and history when making



strategic choices. Productive organisational energy can be unleashed by leadership focussing people's attention, emotions and efforts using a strategy based on an existing threat or opportunity, to improve organisational performance. Cummings and Worley (2009) observed that to achieve strategic objectives, the key role of leadership is to create a clear and credible vision, energise the organisation, and enable change, by providing resources and rewarding new behaviours. Kotter (1996) argues a clear vision aligns decision-making and people's actions, thereby avoiding a conflict situation that would sap energy and morale.

De Jager, Minnie, de Jager, Welgemoed, Bessant, and Francis (2004) suggest a common goal, buy-in and alignment of management behaviour forms the driving force to change employees' perceptions and create the necessary urgency and energy for change. Goodridge (2009) noted that leadership energy levels influence employee energy levels, which significantly impacts absenteeism, turnover and customer satisfaction. This, in turn, affects productivity and bottom-line performance. Organisations should define, develop, select, retain and reward energising behaviours that enhance business activity by putting in place energetic, entrepreneurial and opportunity-seeking leaders who energise the organisation and increase organisational performance.

# 2.6.2 Culture

Organisational culture is defined as a common set of assumptions held by members of an organisation; "It refers to inner values, beliefs, rituals, operating style, ethical standards, key policies and procedures, style with which things get done, traditions, people's attitudes and feelings, stories that are frequently told and vibrations which surround the work environment" (Kruger, 2003, p.70). Cummings and Worley, (2009) argue culture is a pattern of basic assumptions, values, norms and artefacts shared by members of an organisation, influencing how they perceive, think and behave at work. Organisational culture is characterised by stable and coherent beliefs about the organisation and its environment

Deem et al. (2010) highlight Schein's definition of culture as being "(a) A pattern of basic assumptions, (b) invented, discovered, or developed by a given group, (c) as it learns to cope with its problem of external adaptation and internal integration, (d) that has worked well enough to be considered valid and, therefore (e) is taught to new members as the (f) correct way to perceive, think, and feel in relation to those problems" (p.32), linking culture to an organisation's performance. Cross et al. (2007)



assert that cultural values of playfulness, trust and realistic optimism have a powerful impact on energy and need to be nurtured to build an energy-friendly culture of energising interactions. Energising interactions lead to improved performance and the attainment of organisational goals.

Bruch and Vogel (2011) argue organisations that actively work towards a culture of engagement and initiative, sustain productive organisational energy over longer periods of time. Organisational culture is the make-or-break factor in nurturing and orchestrating energy and provides the context and climate within which an organisation operates and performs. Fard *et al.* (2009) suggest that culture can be used to shape and control beliefs, understandings and behaviour of individuals in reaching organisational goals.

# 2.6.2.1 Collective Identity

According to Klann (2004), an essential part of building strong teams is to set clear goals, operating rules, performance standards and values, and create shared experiences which are catalysts for emotional connections that make people feel part of something that is greater than themselves, resulting in positive energy in the process. Being appreciated, recognised and treated with respect, trust, dignity and fairness within a team, motivates and inspires people, providing the necessary validation to draw people to other people, situations or organisations. Collective experiences in a social context, although counter-intuitive, improve communication, understanding and relationships amongst team members and strengthen the team's identity and sense of community. These factors result in cooperation and loyalty, resulting in enhanced organisational performance.

Boyd and Sutherland (2006) argue organisational culture must be kept relevant and actively managed to maintain employee commitment. Organisations with strong brands elicit positive employee behaviours and values that align with the organisation's values, ultimately affecting the bottom line. Employers of choice outperform their competition through their ability to attract, develop and retain talented people. Central to the aligning of culture with the core values of the organisation, is the hiring of people with the right attitudes, combined with subsequent training and development. To 'live the brand' an employee must behave in a manner that is congruent with the organisation's brand, values and culture, often referred to as "the way people think about things around here" (Boyd and Sutherland, 2006, p.11).



According to Kaliprasad (2006), a high performance culture can be achieved either through applying a humanistic approach whereby the organisation values trust, empowerment of people, collaboration and connecting effectively with the wider community external to the organisation, or through a rational process whereby the organisation is able to foresee, and have the necessary flexibility to react to, changing market demands or conditions whilst still maintaining its core values. Strong organisational cultures typically demonstrate concern for individuals rather than rules, policies, procedures and the adherence to job duties, by creating a common identity. Informal rules and expectations recognise the actions and behaviours of individuals who share the same philosophy and concerns of the organisation. Organisational culture reflects the collective beliefs and experiences that drive the behaviour of the organisation's members.

Organisational culture reflects "the collective programming of the mind which distinguishes the members of one organisation from the other" (Hofstede, 1998, p.478) and affects organisational performance to the extent that it may be the critical factor in the success or failure of an organisation.

Cross et al. (2003) suggest that social "energy" networks within an organisation play a significant role in the performance and innovation of an organisation. Energisers and de-energisers exhibit behaviours that either promote or defray from the achievement of strategic organisational initiatives, and ultimately impact on organisational performance.

## 2.6.2.2 Trust

Thomas, Zolin, and Hartman (2009) state that trust improves individual, group and organisational performance. Dutton (2003) asserts trust involves acting on positive expectations regarding other people's behaviour and intentions based on the beliefs of integrity, dependability and benevolence. Acts of trust build on themselves in a reinforcing loop of words and actions, and create high-quality connections between people by allowing relationships to develop and energy to flow in the workplace.

According to Goodridge (2009), trust plays a key role in enabling organisations to harness people power; the benefits to organisations include higher levels of commitment, organisational cooperation, job satisfaction, staff retention and satisfaction with the quality of leadership. This ultimately leads employees to work towards making the organisation a success in uncertain, changing times. The greater



the change required, the more challenging it is to get staff on board and engaged in achieving organisational goals. When organisations demonstrate respect for individuals and communicate effectively, trust is built. The result is that employees are more likely to trust the motives of the organisation and believe it will continue to behave in good faith.

Bruch and Vogel (2011) argue that a culture of integrity (consistency between thought and behaviour) is characterised by employees and managers acting honestly, "walking the talk" and following the collective mind-set. Kruger (2003) stated participative management, characterised by open communication and feedback, where trust and respect dominate across all levels of the organisation, allows employees to directly and indirectly participate in management decision-making.

## 2.6.3 Employee Engagement

According to Bakker, Schaufeli, Leiter, and Taris (2008), worker engagement represents a positive, fulfilling, affective-motivational state of work-related well-being, characterised by vigour (work hard), dedication (involved), and absorption (happily engrossed), which not only benefits the individual but also provides the organisation with a competitive advantage by striving for maximal performance due to a need for excellence.

Frank, Finnegan, and Taylor (2004) suggest employee engagement is the greatest challenge facing organisations and is directly tied to the bottom line performance of organisations. Engagement is a mutual contract of social exchanges between employee and employer, where the employer is responsible for creating a meaningful workplace and employees contribute to an engaging workplace due to a desire and willingness to provide discretionary effort in their jobs. Loyalty, engagement and retention are intertwined and closely linked to trust, and therefore the challenge for leadership is to become a trust builder, equipped with retention and engagement competencies critical to creating committed employees.

Klann (2004) considers communication as the key to bonding teams by forming positive and lasting relationships. Information communicated in an open, honest and safe manner, about things that affect people in the workplace, make them feel important and emotionally secure. This increases their buy-in, ownership and sense of belonging to the team and to the achievement of organisational goals and outcomes.



Cole and Bruch (2006) state organisational commitment is an individual's emotional attachment to, and involvement in, an employing organisation.

Thomas *et al.* (2009) noted that communication practices play a critical role in organisational outcomes in that they develop trust amongst workers, supervisors and management, which influences perceptions of organisational openness and in turn, determines an employee's involvement in achieving organisational goals. The quality of information predicts the level of trust amongst colleagues and supervisors, whilst information adequacy predicts the level of trust in top management. Employees who feel safe to express themselves within an organisation are more committed to achieving organisational goals.

Bakker *et al.* (2008) state that engaged employees have high levels of energy, feel vital and strong due to good health, are enthusiastic about their work and apply their skills, abilities and knowledge to deliver better financial results and satisfied customers. They are committed to high performance standards and demonstrate mental resilience and persistence in the face of difficulties. Worker engagement is enhanced by social support from colleagues, performance feedback, autonomy, skill variety and learning opportunities that foster growth, learning and development.

#### 2.6.4 Human Resource Development

Hood (2001) observed that organisational and people development go hand-in-hand, releasing the energy of staff and bringing about organisational effectiveness. Development is a continuous process dependent on individual, organisational and external environmental forces and constraints, often necessitating cultural changes. Motivating staff to meet the demands of external influences requires explicit and achievable rewards based on the application of a non-judgemental appraisal system that is relevant to the organisation culture, valued by staff and achieves the objectives of the medium- to long-term organisational strategic plan to remain competitive. Organisations must plan for anticipated change by instituting human resource development policies that continuously align and integrate the training and development of all staff in order to achieve the organisation's goals. They should be involved in the skills and competencies needs analysis process, requiring staff to also work and learn together, and agree to growth targets and regular reviews.

Reward systems can include both a financial and non-financial component, with non-monetary rewards including promotion, recognition, training and development,



assignment to challenging tasks, celebrating success and public acknowledgement. The use of monetary rewards to reinforce performance criteria that deliver greater value with fewer resources, and those that capture opportunities, are critical for both short term survival and longer term competitive capabilities (Mohrman and Worley 2009).

## 2.6.5 Intrapreneurial Orientation

#### 2.6.5.1 Innovation

Kruger (2003) argues that a learning organisation is innovative and creative by continually changing and expanding its capacity to meet the needs of its people, markets and technologies. According to Fard *et al.* (2009), a learning culture has high environmental adaptation and internal integration and thereby increases the performance of organisations. Goh (1998) defines a learning organisation as one that is "skilled at creating, acquiring and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights" (Goh, 1998, p.15).

Cross *et al.* (2003) found productive organisation energy improves performance and fosters morale, innovation and learning in the advancement of important organisational initiatives. Fard *et al.* (2009) assert there is a significant positive relationship between organisational culture and a learning organisation, which is characterised by personal mastery, mental models, shared vision, team learning and system thinking. Kruger (2003) argues that systems thinking is the core of a learning organisation, which can only reach its full potential by integrating the characteristics into coherent thought and action.

Goh (1998) suggests teamwork and cooperation are the key strategic building blocks for a learning organisation. The collective skills and knowledge of teams are focussed on solving problems and developing innovative ideas that provide organisations with a sustainable competitive edge. Learning organisations are underpinned by flat and decentralized structures with minimum formalized control and work procedures and an emphasis on training and skill development. Training focuses on action for teams and behavioural skills.

Zack, M. H. (2003) postulates knowledge-based organisations have a significant and sustainable competitive advantage because they leverage the invisible asset of knowledge – about what the organisation does, how and why it does it, and its ability to learn.



### 2.6.5.2 Pro-activeness and Autonomy

Kruger (2003) stated that a goal orientated management process requires the alignment of individual and business goals and progress to be continually measured in order to provide feedback for corrective action. Kotter (1996) argues short-term goals inject energy into the organisation and maintain momentum for change by creating excitement and the opportunity to celebrate by rewarding people for clear performance improvements.

Goodridge (2009) states managing change together with the positive and negative energy surrounding it, is a process of engaging individuals (one size doesn't fit all) and harnessing group energy, and is critical for improved performance. Energy in support of change empowers people and regenerates, whereas resistance to change diminishes the individual and the organisation in the long term.

Bruch and Ghoshal (2004) observed the art of getting things done by mobilising productive energy as critical to overcoming resistance to change through personal energy and focus.

## 2.6.5.3 Risk Taking

Jacobs & Kruger (2001) suggest a flexible organic organisational structure that allows risk taking, characterised by the decentralisation of decision-making, and the empowering of people to act and meet customer demands efficiently. Kotter (1996) recommends removing internal structural and process barriers in order to empower people to act and implement effective change.

#### 2.6.5.4 Competitive Aggressiveness

An organisational culture focused on customers, markets and competitors is critical to the success of an organisation (Jamrog *et al.*, 2008). Kaliprasad (2006) asserts the stronger the organisational culture, the more likely there will be resistance to change. It is therefore critical for organisations to ensure the following elements are prevalent if it wants change to be embraced:

- 1. An individual's contribution in terms of actual results and value added is recognised and rewarded:
- 2. Candour is encouraged; individuals express themselves openly and freely by confronting the facts; and



3. Constant learning by individuals in order for the organisation to listen to, understand and align with both internal and external stakeholders.

#### 2.7 Conclusion

The literature review reveals that performance is influenced by the energy dynamics of individual and team behaviour. In a high performance organisation, the levels of energy are high and focussed on achieving strategic organisational objectives. Although productive organisational energy is well-defined in literature, a positive relationship between productive organisational energy and improved performance is inferred and thus a gap in empirical evidence, that explicitly demonstrates this as fact, exists. Organisations would benefit if leadership knew how to unleash productive organisational energy to achieve a sustainable high performance organisation.

This research aims to develop a framework of the key drivers of organisational energy that can be used by management and owners of businesses to alter the energy state of an organisation in order to improve organisational performance and create a sustainable competitive advantage. This research also aims to examine the underlying independent drivers of productive organisational energy in order to identify those that have significant influence, and allow leaders to implement initiatives to alter the energy state of an organisation positively and improve organisational performance.

SMEs are recognised as the engine room of economic growth and employment in both developed and developing economies, countering the liability of limited resources through innovation and entrepreneurial behaviour. Energising these organisations may be the critical factor in the creation of a sustainable competitive advantage that ensures SMEs become high performance organisations in the long term. In an information technology era, SMEs have the opportunity to leverage the benefits of information technology by energising employees, collaborating with network partners and implementing knowledge management practices to drive innovation. Information technology furthermore often leapfrogs developing economies onto a path of sustainable development which addresses social issues of poverty and unemployment.

The literature review furthermore indicates an overlap or commonality of the factors that drive high performance and high (quality and intensity) energy organisations. Both are built on the foundation of people behaviour (individuals and teams) focussed on achieving organisational goals. This observation would suggest, though not conclusively, that productive organisational energy leads to a high performance



organisation capable of competing on a sustainable basis. Social energy networks within organisations, characterised by high-quality, meaningful interactions between individuals and teams, play a significant role in energising organisations in pursuit of excellence.

Leaders of high performance organisations implement performance measures based on both financial and non-financial factors to ensure strategic organisational objectives are executed. Establishing a productive organisational energy key performance indicator (KPI) as a key driver of business performance, would encourage behaviour changes and action-taking that would leverage organisational energy to achieve strategic objectives in pursuit of a high-performance organisation.

In a rapidly changing, globally competitive world, the ultimate aim of this research is to provide management with a tool to positively alter and sustain the desired energy level of an organisation; to improve organisational performance by designing and building an organisational environment that leverages productive organisational energy.



### 3. Chapter 3: Research Questions

The objectives of this research are to gather empirical evidence to determine whether there is a link between a high performance organisation and its energy level, to establish the key drivers of productive organisational energy, and to build a practical framework that can be used by managers and owners of organisations to leverage energy to improve and measure performance.

#### 3.1 Research Question 1

Is there a relationship between organisational energy and organisational performance?

Research question 1 aims to demonstrate a relationship between the independent variable organisational energy and the dependent variable organisational performance.

Organisational success refers to organisations achieving their strategic performance measures. Organisational performance was added as an outcome of organisational energy.

Literature infers a positive link between organisational energy and organisational performance, though this has not been confirmed by empirical evidence.

#### 3.2 Research Question 2

What are the key independent drivers of productive organisational energy and their respective rankings?

Research question 2 aims to identify and rank the key independent drivers of organisational energy by identifying the most highly correlated predictors of productive organisational energy. These key predictors will be incorporated into a framework that can be used by management to alter or sustain energy within an organisation, which in turn has the potential to increase organisational performance.



## 4. Chapter 4: Research Methodology

This chapter discusses the research methodology utilised in this study. The research was conducted in three phases and follows a methodology used by Boyd and Sutherland (2006), in which they also utilised four case study organisations as the subject of their research project. Four high-energy Information Technology organisations formed the basis of this research project. Barbour (2008) notes case studies enhance the comparability potential of research and allows the researcher to reason the generalisation of the study's findings.

The aim of this research was to validate and gain new insights into the key drivers of productive organisational energy and rank their relative importance. Furthermore, the research aimed to determine whether there is a relationship between productive organisational energy and organisational performance.

This research project has been undertaken utilising both quantitative and qualitative research methods, based on theoretical constructs contained in literature, feedback gathered from respondents surveyed during this research and by expanding on the research conducted by Lamberti (2010), Sriruttan (2011) and Louw (2010).

## 4.1 Phase One: Identify Case Study Organisations

#### 4.1.1 Research Method

Phase One of this research project made use of a qualitative survey which was administered to industry experts who were asked to identify and recommend small to medium sized high energy information technology organisations for consideration as case studies for this research project (refer to Appendix 1 for the Expert Interview Guide).

## 4.1.2 Population and Unit of Analysis

The population from which responses were gathered included all people who work with or have industry knowledge of small to medium sized information technology organisations. The unit of analysis was the perceptions and opinions of the respondents.



### 4.1.3 Interview Guide Design

All participants were introduced to the research topic and its objectives, and their rights were explained and discussed. Furthermore, the definition of what constitutes a high energy organisation and the case study selection criteria were provided.

The organisations were required to demonstrate high levels of productive organisational energy including the following non-compulsory guidelines:

- Turnover of between R20 and R100M; and/or
- A total staff complement of between 20 to 50; and
- Established for at least five years

Barbour (2008) argues qualitative research 'de-mystifies' by bearing witness to the lived experiences of respondents. Expert opinion was solicited in order to improve the probability of sampling quality high-energy organisations for the purposes of this research project.

#### 4.1.4 Pre-test

Before contacting the experts, the researcher conducted a pre-test by rehearsing the interview guide, with the objective of ensuring a professional interaction with experts in the acquisition of four case study organisations for the purposes of this research.

#### 4.1.5 Data Collection Tool

Using the interview guide as per Appendix 1, the researcher initially conducted telephonic interviews with all the experts in order to extract the names of small to medium sized high energy information technology organisations. Telephonic interviews were followed up in writing with the experts. A face-to-face interview was also conducted with two of the experts at their offices to discuss potential organisations to be considered for research purposes.

Written notes were taken of all information gathered during the telephonic and face-to-face interviews. In order to prevent response bias by the researcher, all interviews, whether telephonic or face-to-face, were conducted in an open-ended fashion with minimal input from the researcher.



### **4.1.6** Sample

The sampling technique of choice was non-probability purposive or judgemental sampling. A small sample of experts was selected in a controlled manner by the researcher using his judgment for the collection of qualitative data based on recommendations by academia and personal choice (Saunders and Lewis, 2012).

Four respondents, representing the total sample size selected, who worked with or had industry knowledge of small to medium sized organisations within the information technology sector, were approached for their professional opinions.

## 4.1.7 Data Analysis

All data collected as part of the telephonic and face-to-face interview processes with the experts was consolidated and incorporated into a single document. The researcher identified six potential case study organisations from this list, taking into consideration the intensity and frequency of the recommendations by the experts. Recommendations were primarily based on their interactions with the Directors, owners and staff of each organisation, and the organisation's history and reputation of outstanding business success.

Although two of the organisations selected for further research did not meet every guideline initially stipulated, the intensity and frequency of the expert opinion on the high-energy nature of these organisations was the deciding factor for inclusion as part of this research. Furthermore, these case study organisations fall within common internationally accepted definition of SMEs as noted by Cunningham (2011).

#### 4.2 Phase Two: Interview with Managing Directors

#### 4.2.1 Research Method

During Phase Two of this research project both a quantitative and qualitative survey was conducted with each Managing Director of the four high-energy case study organisations.

## 4.2.2 Population, Unit of Analysis

Based on the researcher's judgement, after taking into consideration the feedback from experts, a non-probability purposive sampling technique was chosen for the



selection of the Managing Directors to be interviewed. The unit of analysis was the perceptions and opinions of the respondents.

## 4.2.3 Questionnaire Design

### 4.2.3.1 Research Approval Guide

In order to gain approval from the Managing Directors for the research to be conducted in their respective businesses, the Research Approval Guide in Appendix 2 was utilised.

All potential participants were introduced to the research topic and its objectives, and their rights were explained and discussed. Furthermore, the definition of what constitutes a high-energy organisation and the case study selection criteria were provided. As part of this initial contact and correspondence process with the Managing Directors, the researcher requested their input and assistance with regards to the following:

- A face-to-face interview with the Managing Director;
- The completion of a self-administered questionnaire by the Managing Director; and
- The identification of a sample of employees five managers/supervisors and five skilled non-supervisors from a cross-section of staff within each organisation – who would complete the same self-administered questionnaire.

#### 4.2.3.2 Face-to-Face Interview Guide

The Managing Directors Interview Guide in Appendix 3 was utilised to interview the Managing Directors of the case study organisations. The structure and design of the interview guide consisted of 3 main sections, namely:

- Section One consisted of five questions to be discussed during the faceto-face interviews with the Managing Directors and required input regarding:
  - i. The success of the business to date as well as the drivers and measures of business performance (Question 1.1 to 1.3); and



ii. The energy state of the organisation and the factors that drive the energy levels of staff (Question 1.4 to 1.5).

In this section an open-ended question format was used by the researcher to gain a deeper insight into the above topics, with care being taken to avoid introducing interviewer bias and response error by focussing on the general ideas and insights of the participants. Badenhorst (2008) notes that qualitative research may lead to multiple realities, dependent on context, meaning and interpretation. Barbour (2008) argues that open ended questions allow respondents to focus on the issues that are most important to them rather than the interests of the researcher.

- Section 2 required the Managing Directors to complete a quantitative self-administered questionnaire at the same interview session. This questionnaire was also used as part of Phase Three of this research project, refer Appendix 4.
- Section 3 required the Managing Directors to identify a sample of employees that would form part of Phase Three of the research project.
   Barbour (2008) notes the goal of qualitative sampling is to provide diversity and comparability and not produce a representative sample.

#### 4.2.4 Pre-Test

## 4.2.4.1 Research Approval Request

Before contacting the Managing Directors, the researcher conducted a pre-test by rehearsing the interview questions and scenario. The objective was to ensure a professional interaction with each respondent in the acquisition of information from the four case study organisations.

#### 4.2.4.2 Face-to-face Interview Guide

A pre-test was conducted using the Managing Directors Interview Guide (Appendix 3). Three test respondents from the Gordon Institute of Business Science (GIBS) were asked to evaluate and critique the Managing Directors' qualitative interviews. Based on the feedback from the test respondents, the interview guide was amended where it was deemed appropriate by the



researcher. A trial run was then conducted with a further test respondent in a simulated interview scenario.

The objective of the pre-testing was to assess whether the interview process and questions would actually work, by ensuring the research respondents would be able to follow the instructions, understand the meaning of questions as intended, answer the questions and that their responses could be recorded correctly (Saunders and Lewis, 2012).

The pre-testing highlighted ambiguities, biases, errors, and the time frame required for completion of the interview and questions. The natural flow of the interview process and questionnaire was also improved. The pre-testing improved the validity of data collected by identifying problems upfront and allowing for corrections and revision before the actual research was undertaken.

#### 4.2.5 Data Collection Tool

### 4.2.5.1 Research Approval

Based on the experts' feedback and researcher's preference, the Managing Directors of four organisations were approached for permission to conduct research in their respective high-energy organisations. Approval to gain access to each of the organisations was requested telephonically and followed up in writing by the researcher utilising an interview guide, refer Appendix 2, Research Approval Request Guide – Managing Directors.

Written notes were taken of all information gathered during the telephonic interviews and records were kept of written responses.

## 4.2.5.2 Interview with Managing Directors

The Managing Directors of the organisations who agreed to the research were interviewed face-to-face during a prearranged meeting at the premises of the respective organisation. The researcher utilised a qualitative interview guide, refer Appendix 3 (Interview Guide Managing Directors) to conduct the face-to-face interview process. Written notes and an audio recording were taken of all information gathered during the face to face interview. The Managing Directors



also completed the self-administered questionnaire during the prearranged meeting, refer Phase Three.

## **4.2.6** Sample

The sample size was one Managing Director per organisation, providing a total sample size of four across all organisations selected for the purpose of this research project.

**Table 1: Sample Size Managing Directors** 

Organisation	Face-to-face Interview	Self-administered Questionnaire
1	1	1
2	1	1
3	1	1
4	1	1
Total	4	4

Each Managing Director completed the face-to-face interview and the self-administered questionnaire.

## 4.2.7 Data Analysis

The qualitative data gathered during the interviewing of the Managing Directors was consolidated and manipulated in order to identify key themes for driving and measuring the success of a high-performance organisation, as well as the key drivers of staff energy. The perceived energy state of each organisation was also identified.

#### 4.3 Phase Three: Quantitative data collected from Staff

### 4.3.1 Research Method

Phase Three of the research project made use of a structured quantitative survey in the form of a self-administered questionnaire, refer Appendix 4.

## 4.3.2 Population and Unit of analysis

The population from which responses were gathered included all employees of the four organisations selected for the purpose of this research project. The unit of analysis was the perceptions and opinions of the respondents.



## 4.3.3 Questionnaire Design

The structure and design of the self-administered questionnaire was based on theoretical constructs contained in literature, and a questionnaire developed by Sriruttan (2011) was modified for the purposes of this research.

The questionnaire consisted of six sections:

- Section one of the survey introduced all respondents to the research topic
  and its objectives, and their rights were explained. All participants were
  furthermore advised that the survey was voluntary, that they had the right
  to opt out at any time, and that confidentiality was guaranteed. The
  questionnaire, administered in English, was clear and easy to read and
  printed on good quality paper.
- Section Two included demographic information such as company name and position held. The demographic variables were classified as categorical and descriptive in nature.
- Section Three contained questions focussing on determining the level of organisational energy within the target organisation, represented by dependent variables.
- Section Four contained questions focussing on the drivers of productive organisational energy, represented by independent variables.
- Section Five contained questions focussing on the drivers of highperformance organisations that represent the output of productive organisational energy.
- Section Six contained a question requiring respondents to identify one of four possible energy states that best represented their organisation. A brief description of the four possible organisational energy states as described by Bruch and Ghoshal (2003) – resignation, comfort, aggression or the passion zone – was provided.

In sections Three to Five of the questionnaire:

 Respondent feedback was measured on a seven point Likert scale, ranking the independent variables by distinguishing between the following



extremes: 1 representing 'strongly disagree' and 7 representing 'strongly agree'. The scale consisted of the following ranking options of categorical data: 'strongly disagree', 'disagree', 'somewhat disagree', 'neither agree nor disagree', 'somewhat agree', 'agree', 'strongly agree'.

- The seven point Likert scale was expected to enhance the reliability of the scale and introduce variance in responses.
- The questions were presented in a closed format in the questionnaire.
- All questions were phrased in a positive style to avoid ambiguity.
- Instructions were also included on how to return the questionnaire to the researcher.

#### 4.3.4 Pre-test

A pre-test was conducted on the self-administered questionnaire. Three test respondents from GIBS were asked to evaluate and critique the questionnaire. Based on their feedback, the questionnaire was amended where it was deemed appropriate by the researcher. A trial run was then conducted with a further two respondents to simulate the completion of the self-administered questionnaire by organisational staff.

The objective of the pre-testing was to assess whether the questionnaire would actually work, by ensuring the research respondents would be able to follow the instructions, understand the meaning of questions as intended, answer the questions and that their responses could be recorded correctly (Saunders and Lewis, 2012).

The pre-testing highlighted ambiguities, biases, errors, and the time frame required for completion of the questionnaire. The natural flow of the questionnaire was also improved. The pre-testing improved the validity of data collected by identifying problems upfront and allowing for corrections and revision before the actual research was undertaken. Pre-testing also reduced the likelihood of selective perception, whereby respondents attach different meanings to questions.

#### 4.3.5 Data Collection Tool

The data collection instrument used for Phase Three of the research project was a selfadministered questionnaire. The Managing Directors of each organisation administered



the distribution and collection of the self-administered forms to and from staff, on behalf of the researcher.

Due to the fact it was not practically possible to assemble the required sample size at a single meeting, flexibility in the time frame for the completion of the form was allowed. In order to improve the response rate, arrangements were made with the Managing Directors for the researcher to physically collect the completed staff surveys on a prearranged date, typically within two to three days after the initial interview with the Managing Directors.

## 4.3.6 **Sample**

A non-probability quota sampling technique, as suggested by Saunders and Lewis (2012), was utilised: Respondents were sampled from two main groupings within each organisation, namely management/supervisory staff and skilled/non-supervisory staff. The sample size collected from the four participating organisations was as follows:

Table 2: Sample Size Management/Supervisory & Skilled/Non-supervisory

Organisation	Management / Supervisory	Skilled / Non- supervisory	Total
1	2	3	5
2	9	5	14
3	2	10	12
4	4	8	12
Total	17	26	43

The selection criteria for respondents furthermore required that respondents be literate in order to be able to read and answer the self-administered questionnaire. The population was perfectly positioned to cover a cross-section of staff within each organisation. There was a total sample size of 43 respondents across all four organisations.

## 4.3.7 Data Analysis

A wide variety of statistical techniques were used to analyse data gathered in Phase Two and Phase Three of this research, in order to determine:

- The relationship between productive organisational energy and organisational performance (success measurements); and
- The ranking of the key drivers of organisational energy.



Statistical techniques deployed included:

- Frequencies and means;
- Correlations and scatter plots. The Spearman's Rank Correlation Coefficient, as a non-parametric measure, was used to assess the strength of the relationship between two variables (Albright, Winston and Zappe, 2009).;
- The Cronbach Alpha was used to assess the internal consistency or reliability of an entire scale or category (Albright et al. 2009).; and
- The Kruskal-Wallis ANOVA, a non-parametric test, was used to determine whether there was a significant difference in the results (population medians) between independent groups (Albright et al. 2009).

The statistician who was used for the Sriruttan (2011) and Lamberti (2010) research projects was retained.

## 4.4 Data Validity and Reliability

The following was done to improve the validity and reliability of data collected:

- Theory from literature and prior research formed the basis for the design of the self-administered questionnaire.
- A pilot test, for both the face-to-face interview and self-administered questionnaire, was conducted to ensure questions were understood as intended.
- Multiple case studies were examined to determine if findings could be generalised across a number of organisations.
- The questionnaires were prepared according to guidance as proposed by Saunders and Lewis (2012), and administered in a controlled manner.
- The interview guides were prepared as proposed by Saunders and Lewis (2012).
- Data collected during the course of interviews was written and/or audio recorded.
- Both researcher and respondent bias and non-response were considered.



 An independent statistician was used to conduct statistical analysis on the data collected.

#### 4.5 Potential Research Limitations

The limitations of this study include the following aspects:

- Respondents were limited to four organisations sampled from within the information technology sector.
- Experts were relied upon to identify high-energy companies for the purpose of this research project.
- The drivers of organisational energy and performance included in the selfadministered questionnaire may not be all-inclusive. Although qualitative exploratory analysis was conducted on potential drivers of productive organisational energy, due to the limited sample size, data collected may be insufficient to draw conclusions.
- The outcome of the non-probability judgemental sampling may not be representative of the entire population of the target organisation.



### 5. Chapter 5: Results

#### 5.1 Introduction

Following an outline of the research methodology in Chapter 4, the objective of this chapter is to provide an overview of the results obtained during the data collection phase of this research project. This chapter is divided into three broad sections, following the research design phases as summarised below in Table 3. This chapter seeks to record and describe the data as collated from both the qualitative and quantitative surveys completed. It presents the results separately for each research question presented in Chapter 3 in the form of tables, charts and statistics.

**Table 3: Research Phases** 

Phase	Туре	Aim
Phase One	Qualitative Exploratory	To identify high-energy information technology organisations for consideration as case studies for this research project.
Phase Two	Qualitative Exploratory	To validate, provide insight, new ideas and complement literature and the quantitative survey findings in Phase Three.
Phase Three	Quantitative Descriptive	To assess the key drivers of productive organisational energy and the relationship between organisational energy and organisational performance.

## 5.2 Phase One: Results of Qualitative Expert Interviews

In total, four experts were interviewed. Using the insights from the selected experts, 11 organisations were identified as potential case study subjects for this research project. Two of the experts recommended the same three organisations for the project, and these were selected to participate in this research. Based on the frequency and intensity of expert recommendations, four organisations were ultimately approached. All four agreed to participate in this research project.



## 5.3 Phase Two: Results of Qualitative Interview with Managing Directors

#### 5.3.1 Introduction

The total sample constituted four interviewees who were interviewed utilising an exploratory qualitative interview guide. The sample consisted of three Managing Directors and one Founding Member of an organisation. The tables that follow focus on the interpretation of the qualitative results, highlighting the main findings and themes specific to the questions asked as part of the Interview Guide in Appendix 3. The data gathered from these interviews will be utilised to validate, provide insight, generate new ideas and complement literature and the quantitative survey findings in Phase Three.

## 5.3.2 Case Study Organisational Information

The turnover and employee figures for the four case study organisations were as follows:

**Table 4: Case Study Company Information** 

Description	Company 1	Company 2	Company 3	Company 4
Approximate Annual Turnover	R50M	R180M	R14M	R16M
Number of Employees	7	100	14	18

#### 5.3.3 Organisation Success to date, Key Drivers and Measures of Success

The output of the qualitative interview questions illustrated as part of Tables 5, 6 and 7 below, provides insight into the success of the case study organisations to date and identifies the drivers and measures of organisational performance according to the perceptions of the interviewees. Key themes identified during this phase will be tested and compared to the organisation performance output section in Table 12, per the quantitative survey completed as part of Phase Three of this research. The output of the content analysis has been rank ordered.



Table 5: How would you describe the organisation's success to date?

Rank	Construct	Frequency
1	A good reputation in the market	3
2	Do things differently versus the market (products and services)	3
3	Deliver on customer needs	3
4	A customer centric mind-set is central to the business	3
5	Long-term decision making perspective	2
6	A mind-set to be successful	2
7	Flexible to changing customer requirements, reinvent business	2
8	Extremely successful	1
9	A great success	1
10	Moderately successful	1
11	Right place, right time and lucky	1
12	Business started in tough times	1
13	Recognised and rewarded by suppliers	1

Table 6: What do you do to personally drive the success of the business?

Rank	Construct	Frequency
1	Hire the right people (attitude, behaviour, culture)	4
2	The leadership team have long term relationships with each other and drive the success of the business as a collective	4
3	Not about rules and policies, flexible with staff	3
4	Invest in people and allow them to grow and contribute	3
5	Actively involved with, and focus on, customer relationships and requirements	3
6	Excellence in delivery of products and services	3
7	Open and honest communication and debate with staff	3
8	Frugal and started in tough times	2
9	Empower staff to make decisions and act	2
10	Mentoring and coaching by leadership	2
11	Hands-on and understand the business	2
12	Believe in teamwork, not heroes	2
13	We know we are a start-up	1
14	Allow everybody to inject their DNA into the organisational culture	1
15	DNA or culture of the business is a mix of the leaders	1
16	Strong reporting and business systems	1
17	Think long-term when making decisions	1
18	Work life balance	1
19	Care about how things get done	1
20	Pay market related salaries	1



Table 7: What measures do you use to determine the success of your business?

Rank	Construct	Frequency
1	Ensure margins on sales that generate profit	4
2	Focus on client requirements and satisfaction by survey and direct contact	4
3	Set sales and profit targets	4
4	Monitor staff satisfaction by way of surveys and/or informally	4
5	Growth in sustainable sales	3
6	Informally support and encourage the training, upskilling and learning of staff	3
7	Cash generated by the business	2
8	Intuitively monitor the culture of the organisation	2
9	Benchmark performance against competitors	1
10	Monitor future pipeline of business	1
11	Real-time financial and customer sales information	1
12	Set limited achievable goals for the year	1
13	Monitor and return excess profits to customers	1

## 5.3.4 Qualitative Open Ended Organisational Energy State Description

The output of the qualitative interview question, illustrated as part of Table 8 below, shows how each interviewee describes his organisation's particular energy state based on an open-ended question. Key themes identified during this phase will be tested and compared to the key organisation energy output variables highlighted in the quantitative survey, illustrated in Table 12 as part of Phase Three of this research. The output of the content analysis has been ordered according to rank.

Table 8: How would you describe the energy state of your organisation?

Rank	Construct	Frequency
1	Staff are passionate and motivated	3
2	A high-activity organisation	2
3	The organisation displays positive energy (energetic & great vibe)	2
4	Staff are hardworking and focused	2
5	Staff indicate they work for the best organisation	1
6	Members of the organisation display meaningful relationships	1
7	Staff display a collective identity	1
8	The organisation is an exciting place in which to work	1
9	The majority of people positively influence the others	1
10	Management overworked, stretched	1



## 5.3.5 Quantitative Closed-Format Organisational Energy Zone Question

Response to a closed-format question completed as part of the quantitative survey in Phase Three, and which required the four interviewees to identify the energy state of their respective organisations – as described by Bruch and Ghoshal (2003) in Figure 3 – is illustrated in Table 9 below. The results will be tested and compared with the perceptions of staff members who completed the same question as part of the same quantitative questionnaire.

Table 9: Energy state that best represents your organisation?

Description	Company 1	Company 2	Company 3	Company 4
Energy Zone	Passion	Passion	Passion	Aggression

## 5.3.6 Factors that Drive Staff Energy

The output of the qualitative interview question, illustrated as part of Table 10 below, shows the key drivers of staff energy levels according to the perceptions of the interviewees of the case study organisations. Key themes identified during this phase will be tested and compared to the key independent drivers of organisational energy as highlighted in the quantitative survey (Table 12) as part of Phase Three of this research project. The output of the content analysis has been rank ordered.

Table 10: What factors do you believe drive the energy of your staff?

Rank	Construct	Frequency
1	Leaders energise the organisation	4
2	Encourage and maintain teamwork	3
3	Open and honest communication	2
4	Clear vision and strategy	2
5	Empower staff	2
6	Caring for staff	2
7	Action orientated	1
8	Provide staff with the necessary tools to do their jobs effectively	1
9	Hire the right people	1
10	Challenge staff beyond their comfort zone	1
11	Healthy competition amongst staff	1
12	Staff are part of the innovation process	1
13	Acknowledge & reward staff performance	1
14	Have fun at work	1
15	A sense of belonging	1



## 5.4 Phase Three: Results of Quantitative Survey

#### 5.4.1 Data and Factors

## 5.4.1.1 Sample and Demographic Data

The quantitative survey solicited responses from 47 respondents. The initial section of the questionnaire requested demographic data which has been presented using counts, and distinguishing between the three main staff levels surveyed and the case study organisations as follows:

Table 11: Quantitative Questionnaire: Sample & Demographic Data

Description	Company 1	Company 2	Company 3	Company 4	Total
MD	1	1	1	1	4
Management/Supervisory	2	9	2	4	17
Skilled/Non-supervisory	3	5	10	7	25
Unknown				1	1
Total Staff	6	15	13	13	47

### 5.4.1.2 Frequency and Means for Indicator Variables

The frequency distribution in percentages and the means for all respondents, is presented in Table 12 below for all questions included as part of the quantitative survey. A colour scale has been used to grade the response percentages and means separately: the highest number of endorsements is dark green (modal response), decreasing to yellow, amber and finally, dark red.

Using theory contained in literature, the survey questions have been summarised into the following broad categories as indicated in Table 12:

- Two dependent variables organisational energy and organisational performance; and
- Seven independent variables engagement, trust, collective identity, innovation, intrapreneurial orientation, employee investment and leadership.



**Table 12: Frequency Distribution and Means of all Indicator Items** 

Category	Questions	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	Mean All Companies
	1: Employees in my organisation are highly committed to achieving company goals.	0%	2%	2%	4%	15%	49%	28%	5,89
	2: Employees in my organisation display high levels of enthusiasm and passion.	4%	2%	11%	2%	19%	23%	38%	5,53
ORGANISATIONAL ENERGY [DV]	3: My organisation is a fun place to work.	2%	2%	4%	4%	6%	23%	57%	6,11
	4: Employees in my organisation thrive on strong positive emotions of joy and pride.	2%	0%	9%	4%	26%	32%	28%	5,57
	5: My organisation is a high positive energy organisation.	2%	2%	17%	6%	9%	26%	38%	5,47
	50: My organisation has a distinctive, competitive edge.	2%	2%	4%	4%	9%	13%	66%	6,17
	51: My organisation drives work excellence and output.	0%	0%	9%	2%	9%	26%	55%	6,17
	52: My organisation has a clear and credible vision that is achievable.	0%	2%	4%	9%	15%	34%	36%	5,83
ORGANISATIONAL PERFORMANCE [DV]	53: I know what's expected of me to achieve the company's goals.	2%	0%	4%	6%	2%	43%	43%	6,04
OKGANISATIONAL PERI OKMANGE [BV]	54: In my organisation going beyond customer expectations is the norm.	2%	2%	2%	4%	6%	23%	60%	6,19
	55: The organisation's performance measures are clearly defined.	2%	4%	4%	11%	17%	32%	30%	5,51
	56: Employees in my organisation are treated well.	0%	0%	0%	9%	6%	30%	55%	6,32
	57: My organisation is a highly successful organisation.	0%	2%	6%	4%	6%	23%	57%	6,15
	6: Cooperation and sharing of information and resources is common practice in my organisation.	0%	2%	2%	13%	21%	32%	30%	5,68
	7: In my organisation I feel safe to express myself.	0%	2%	4%	2%	17%	34%	40%	5,98
	8: In my organisation I strive for excellence in the performance of my duties.	0%	0%	0%	0%	4%	23%	72%	6,68
ENGAGEMENT [IV]	9: My manager provides me with constructive feedback on my performance.	0%	0%	6%	4%	6%	26%	57%	6,23
	10: In my organisation I enjoy my work.	0%	0%	0%	4%	11%	30%	55%	6,36
	11: There is a high level of positive interaction amongst colleagues and teams in my organisation.	0%	6%	4%	2%	26%	43%	19%	5,51
	12: In my organisation information is communicated in an open and honest manner.	2%	2%	2%	4%	15%	36%	38%	5,89
	13: I have the autonomy to make decisions to reach my work deliverables in my organisation.	0%	4%	0%	2%	23%	23%	47%	6,02
	14: My organisation shows respect for employees.	0%	0%	2%	6%	13%	15%	64%	6,32
TRUST [IV]	15: My Manager shares relevant information with me to do my job better.	0%	0%	2%	9%	11%	32%	47%	6,13
IKUSI [IV]	16: My manager asks for and acts on my opinion.	2%	0%	2%	9%	15%	32%	40%	5,91
	17: My organisation acts in good faith.	0%	0%	2%	4%	2%	32%	60%	6,43
	18: I have honest and frank discussions with my manager.	0%	0%	4%	2%	9%	30%	55%	6,30
	19: I identify with the values of my organisation.	0%	0%	0%	4%	6%	26%	64%	6,49
	20: Employees in my organisation feel a sense of community.	2%	2%	9%	9%	11%	38%	30%	5,57
	21: My organisation demonstrates a concern for its employees, rather than rules, policies and procedures.	2%	0%	4%	11%	4%	38%	40%	5,91
COLLECTIVE IDENTITY [IV]	22: My organisation sets clear performance standards and recognises my contribution.	2%	0%	9%	4%	13%	36%	36%	5,79
	23: There are strong social networks within my organisation.	2%	2%	9%	11%	19%	43%	15%	5,30
	24: My organisation values and rewards teamwork.	0%	6%	2%	11%	17%	21%	43%	5,72
	25: My organisation optimises the integration of new employees.	0%	4%	4%	9%	23%	40%	19%	5,49



**Table 12: Frequency Distribution and Means of all Indicator Items (continued)** 

Category	Questions	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	Mean All Companies
	26: My organisation has new projects and initiatives that make the workplace exciting.	0%	2%	4%	4%	13%	40%	36%	5,94
	27: My organisation encourages new ideas, experimentation and creativity.	0%	0%	0%	9%	17%	32%	43%	6,09
INNOVATION [IV]	28: In my organisation I am able to do my work effectively.	2%	0%	2%	6%	13%	30%	47%	6,04
introvation [14]	29: My organisation values collaboration and cooperation in solving problems.	0%	0%	4%	6%	9%	34%	47%	6,13
	30: My organisation shares knowledge and encourages learning.	0%	0%	2%	2%	15%	28%	53%	6,28
	31: My organisation is highly adaptable to a changing environment.	0%	4%	2%	11%	9%	15%	60%	6,06
	32: In my organisation I am empowered to act independently to achieve organisational objectives.	0%	0%	4%	2%	9%	26%	57%	6,33
	33: In my organisation we act in anticipation of future problems or needs.	4%	4%	4%	9%	19%	30%	30%	5,43
INTRAPRENEURIAL ORIENTATION [IV	34: My organisation strongly challenges its competitors.	0%	4%	4%	2%	6%	15%	68%	6,28
INTRAFRENCORIAL ORIENTATION [IV	35: Management actively seeks out new opportunities to grow the business.	0%	2%	0%	6%	9%	15%	68%	6,38
	36: In my organisation things get done.	0%	0%	11%	4%	13%	32%	40%	5,87
	37: In my organisation we tolerate uncertainty and take calculated risks with the goal to benefit the business.	0%	2%	2%	9%	23%	30%	34%	5,79
	38: My organisation allows me to build on my strengths.	2%	0%	0%	9%	11%	28%	51%	6,13
	39: In my organisation I have opportunities for growth, learning and development.	2%	0%	4%	2%	9%	23%	60%	6,23
EMPLOYEE INVESTMENT [IV]	40: My organisation assigns me challenging tasks.	0%	0%	2%	2%	15%	23%	57%	6,32
EMPLOTEE INVESTMENT [IV]	41: My organisation's appraisal system is fair.	2%	0%	9%	13%	15%	32%	30%	5,53
	42: My organisation celebrates and publically acknowledges my success.	2%	0%	4%	11%	15%	32%	36%	5,77
	43: My organisation promotes employees based on merit.	0%	0%	0%	21%	13%	34%	32%	5,77
	44: The leadership style in my organisation inspires and brings the best out of me.	0%	2%	4%	11%	6%	30%	47%	5,98
	45: Management in my company demonstrates high levels of positive energy.	0%	2%	2%	6%	6%	23%	60%	6,26
L EADEDCHID ING	46: Management makes me feel good about myself.	0%	0%	4%	13%	9%	45%	30%	5,83
LEADERSHIP [IV]	47: Management in my organisation creates a sense of urgency for change.	0%	4%	2%	11%	15%	30%	38%	5,79
	48: Management provides me with the tools and resources necessary to achieve organisational goals.	0%	0%	2%	6%	11%	34%	47%	6,17
	49: Management creates a positive image of the future.	0%	0%	6%	4%	4%	30%	55%	6,23

## Ranking

- Seven point Likert scale:
  - 1 'strongly disagree'; 4 'neither agree nor disagree'; 7 'strongly agree'
- Colour scale:
  - o Independent for Likert scale and means

Dark green (modal response) to light green to yellow (intermediate) to amber to red (lowest response)



## 5.4.2 Scale Reliability - Cronbach's Alpha

The Cronbach Alpha, normally expressed as a number between 0 and 1.0, measures the internal consistency or reliability of an entire scale or category. In this measure, 0.70 is deemed the lower limit of acceptability. The range indicates that the multiple indicator variables (questions) that make up each category, measure the same concept or construct. This provides evidence that the category is connected to the interrelatedness of the variables within the category (Albright *et al.* 2009). The Cronbach Alpha was calculated for all questions, by category, contained in Table 12, the results of which are illustrated in Table 13 below.

**Table 13: Scale Reliability** 

Category	Number of items	Mean	Standard Deviation	Cronbach Alpha	Average inter-item correlation
Engagement	7	6.05	0.81	0.85	0.47
Trust	6	6.18	0.82	0.84	0.49
Collective identity	7	5.75	0.97	0.85	0.47
Innovation	6	6.09	0.92	0.88	0.57
Intrapreneurial orientation	6	5.99	1.01	0.88	0.57
Employee investment	6	5.96	0.94	0.85	0.51
Leadership	6	6.04	0.99	0.91	0.65
Energy	5	5.71	1.25	0.90	0.67
Organisational performance	8	6.05	1.12	0.95	0.72

For all categories used in this research, the Cronbach Alpha falls within an acceptable range of 0.84 to 0.95. The internal consistency of all categories is thus considered to be reliable for the purposes of this study.



#### 5.5 Research Question 1

#### 5.5.1 Introduction

Is there a relationship between organisational energy and organisational performance?

The statistical results that form the basis for answering Research Question 1 are presented within this section. The quantitative questionnaire consisted of a total of five output variables for organisational energy and a total of eight output variables for organisational performance, as illustrated in Table 12.

## 5.5.2 Dependent and Independent Variables

Table 14 below distinguishes between the dependent and independent variables for Research Question 1.

Table 14: Research Question 1 – Dependent and Independent Variables

Independent Variable	Dependent Variable
Organisational Energy	Organisational Performance

## 5.5.3 Company Means for Organisational Energy and Organisational Performance

Table 15 below shows the mean by company for both organisational energy and organisational performance. A colour scale has been used to grade the means – the highest in dark green (modal response), decreasing to yellow, then amber and finally, red.

**Table 15: Company Means for Organisational Energy and Performance** 

Company	Organisational Energy	Organisational Performance
1	6.77	6.56
2	5.88	6.35
3	6.28	6.57
4	4.48	4.94
All Companies	5.71	6.05
Companies 1 to 3	6.19	6.47

Company 1 has the highest mean for organisational energy whereas Company 3 has the highest mean for organisational performance. Furthermore, Company 4 has the lowest mean for both organisational energy and organisational performance. For all



four companies combined, the means for organisational energy and organisational performance are 5.71 and 6.05 respectively.

## 5.5.4 Correlation between Organisational Energy and Organisational Performance

Table 16 below shows the Spearman's Rank Correlation Coefficient, a non-parametric measure assessing the strength of the relationship between two variables. Here, -1 or +1 represents a perfect Spearman correlation between variables in a monotonic relationship. A positive Spearman's correlation indicates that the dependent variable tends to increase as the independent variable increases and alternately, a negative Spearman's correlation indicates that the dependent variable tends to decrease as the independent variable increases. Spearman correlations are significant at p < 0.05, meaning that the strength of the relationship or association between the variables is significant. The table below indicates the correlation between organizational energy and organizational performance.

Table 16: Correlation between Organisational Energy and Organisational Performance

Description	Valid	Spearman	t(N-2)	p-value
Energy and Performance	47	0.722336	7.006912	0.000000

A Spearman's correlation of 0.72 together with a p value < 0.05 indicates a positive relationship between energy and performance, i.e. as organisational energy increases, organisational performance increases.

## 5.5.5 Kruskal-Wallis ANOVA by Ranks for Companies

Table 17 below shows the results of the non-parametric Kruskal-Wallis test used to determine whether there is a significant difference in the results (population medians) between independent groups. Where p > 0.05 there is no significant difference in the results from the various groups being measured. The table below shows the results from testing whether there was a significant difference in the results from the various companies taking part in this research – for organisational energy and organisational performance.



Table 17: Research Question 1 - Kruskal-Wallis ANOVA by Ranks for Companies

Description	Comparing A	II Companies	Comparing Companies 1 - 3		
Description	H ( 3, N= 47)	р	H ( 2, N= 34)	р	
Energy	24.45418	0.0000	5.874076	0.0530	
Organisational Performance	17.55818	0.0005	0.1430045	0.9310	

The result p < 0.05 when comparing all four companies, indicates a significant difference in the results between them. A further Kruskal- Wallis test was conducted on Companies 1 to 3, whereby p > 0.05 indicated no significant difference in the results from these respondents. The additional test indicates that Company 4's results are significantly different from those of Companies 1 to 3.

## 5.5.6 Kruskal-Wallis ANOVA by Ranks for Staff Levels

Table 18 below shows the results of testing whether there was a significant difference in the results for both organisational energy and organisational performance, from the various staffing levels for all companies taking part in this research.

Table 18: Research Question 1 - Kruskal-Wallis ANOVA by Ranks for Staff Levels

Description	N=46	n	
Description	H ( 2, N= 46)	р	
Energy	0.40	0.8188	
Organisational Performance	1.71	0.4263	

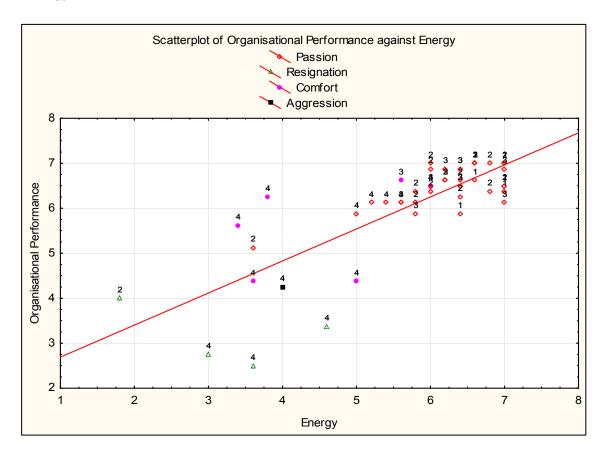
The result p > 0.05 indicates no significant difference in the results between the various staffing levels for organisational energy and organisational performance.



# 5.5.7 Scatter Plot: Organisational Performance against Organisational Energy - All Companies

The Scatter Plot in Figure 4 depicts the relationship between organisational energy and organisational performance for all respondents within all four companies. The Scatter Plot indicates that there is a positive relationship between organisational energy and organisational performance. The result is supported by a high Spearman correlation of 0.72 (p < 0.05) indicating a significant positive relationship between the variables. As organisational energy increases, so would organisational performance be expected to increase, indicating a strong linear relationship between the variables.

Figure 4: Scatter Plot of Organisational Performance against Organisational Energy (all Companies)



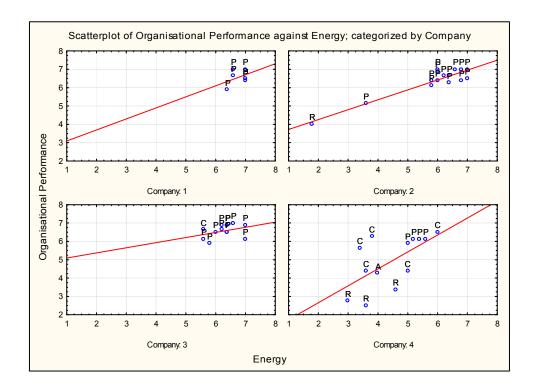
The plots are primarily concentrated in the upper scale for both energy and performance, representing high positive energy companies (Companies 1, 2 and 3). The 'outliers', indicating lower energy and lower performance, primarily relate to Company 4.



# 5.5.8 Scatter Plot: Organisational Performance against Organisational Energy – By Company

The Scatter Plots in Figure 5 below shows the relationship between organisational energy and organisational performance by company.

Figure 5: Scatter Plot of Organisational Performance against Organisational Energy (by company)



The results show a concentration of high energy, high performance results for Companies 1 to 3. Company 4 has a high degree of variability in results, less concentration, and overall lower energy and performance results.



#### 5.6 Research Question 2

#### 5.6.1 Introduction

What are the key independent drivers of productive organisational energy and their respective rankings?

The statistical results that form the basis for answering Research Question 2 are presented within this section. The quantitative questionnaire consisted of a total of 44 indicator variables measuring seven independent drivers of productive organisational energy, as illustrated in Table 12.

## 5.6.2 Dependent and Independent Variables

Table 19 below distinguishes between the dependent and independent variables for Research Question 2.

Table 19: Research Question 2 - Dependent and Independent Variables

Independent Variable	Dependent Variable
Engagement	
Trust	
Collective identity	Organisational Energy
Innovation	Organisational Energy
Intrapreneurial orientation	
Employee investment	
Leadership	

A total of seven independent variables were tested for organisational energy.

## 5.6.3 Company Means for Dependent and Independent Variables

Table 20 and Figure 8 below show the means by company for the seven independent variables of engagement, trust, collective identity, innovation, intrapreneurial orientation, employee investment and leadership, as well as the dependent variable of organisational energy.

In Table 20, a colour scale has been used to grade the means: the highest in dark green (modal response), decreasing to yellow, then amber and finally, red. The table has been ordered by rank for all companies.



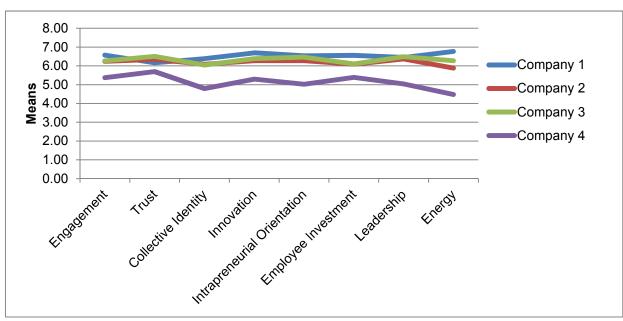
Table 20: Research Question 2 - Company Means for Dependent and Independent Variables (DV and IV)

Category	Co. 1	Co. 2	Co. 3	Co. 4	All Co.s	Co.s 1 - 3
Trust [IV]	6.17	6.34	6.50	5.69	6.18	6.37
Innovation [IV]	6.69	6.28	6.38	5.29	6.09	6.39
Engagement [IV]	6.57	6.24	6.26	5.37	6.05	6.31
Leadership [IV]	6.44	6.37	6.49	5.04	6.04	6.43
Intrapreneurial Orientation [IV]	6.53	6.28	6.46	5.03	6.01	6.39
Employee Investment [IV]	6.56	6.09	6.10	5.38	5.96	6.18
Collective Identity [IV]	6.38	6.09	6.04	4.79	5.75	6.12
Energy [DV]	6.77	5.88	6.28	4.48	5.71	6.19

Trust has the highest mean for All Companies at 6.18, whereas leadership has the highest mean for Companies 1-3 at 6.43. Overall collective identity has the lowest mean for All Companies as well as for Companies 1-3 at 5.75 and 6.12 respectively. For All Companies and Companies 1-3, the mean for organisational energy is 5.71 and 6.19 respectively. In Companies 1-3, the means for all dependent and independent variables are considered high, the lowest being 6.12. The highest mean for Company 4 is lower than the lowest mean for Companies 1-3.

Figure 8 below is a graphical representation of the above means by company by dependent and independent variables.

Figure 6: Research Question 2 - Company Means for Dependent and Independent Variables





The means for all dependent and independent variables for Companies 1 - 3 are concentrated in close proximity, whereas Company 4's means for all variables distinctly trend below these. The result would suggest that lower levels of the seven independent variables translate to lower organisational energy.

## 5.6.4 Correlation between Independent Variables and Organisational Energy

Table 21 below shows the Spearman's Rank Correlation Coefficient, a non-parametric measure assessing the strength of the relationship between each independent variable and organisational energy. A positive Spearman's correlation indicates that the dependent variable tends to increase as the independent variable increases. Spearman correlations are significant at p < 0.05, meaning that the strength of the relationship or association between the variables is significant. The table has been rank-ordered according to the Spearman correlation from highest to lowest.

Table 21: Research Question 2 - Correlation between Independent Variables and Organisational Energy

Description	Valid	Spearman	p-value
Intrapreneurial Orientation & Energy	47	0.745239	0.000000
Collective Identity & Energy	47	0.682505	0.000000
Engagement & Energy	47	0.668089	0.000000
Leadership & Energy	47	0.657627	0.000001
Innovation & Energy	47	0.608560	0.000006
Employee Investment & Energy	47	0.593838	0.000011
Trust & Energy	47	0.438111	0.002070

The results indicate all the independent variables have a significant (p < 0.05) positive correlation to organisational energy – as each independent variable increases so will organisational energy. Intrapreneurial orientation has the strongest relationship to organisational energy, whilst trust has the weakest relationship to organisational energy.

## 5.6.5 Kruskal-Wallis ANOVA by Ranks for Companies

Table 22 below shows the results of the non-parametric Kruskal-Wallis test used to ascertain whether there was a significant difference in the results (population medians) of the various companies taking part in this research for the independent and dependent variables listed. Where p > 0.05 there is no significant difference in the results of the various companies being measured for each variable.



Table 22: Research Question 2 - Kruskal-Wallis ANOVA by Ranks for Companies

Description	Comparing A	II Companies	Comparing Companies 1 - 3			
Description	H ( 3, N= 47)	р	H ( 2, N= 34)	р		
Engagement	11.96158	0.0075	3.410374	0.1817		
Trust	5.223627	0.1561	1.936652	0.3797		
Collective Identity	16.85607	0.0008	1.180114	0.5543		
Innovation	10.6836	0.0136	2.557978	0.2783		
Intrapreneurial Orientation	16.33381	0.0010	0.479183	0.7869		
Employee Investment	7.741347	0.0517	3.121373	0.2100		
Leadership	13.37428	0.0039	0.0189545	0.9906		
Energy	24.45418	0.0000	5.874076	0.0530		

For All Companies there was a significant difference in the results for each of the independent and dependent variables, except trust and employee investment. A further Kruskal-Wallis test was conducted on Companies 1 - 3, indicating no significant difference in the results from these respondents for all variables. The additional test indicates that Company 4's results are significantly different from those of Companies 1 - 3, except for trust and employee investment.

# 5.6.6 Kruskal-Wallis ANOVA by Ranks for Staff Levels

Table 23 below shows the results of testing whether there was a significant difference in the results from the various staffing levels for all companies taking part in this research for all independent and dependent variables.

Table 23: Research Question 2 - Kruskal-Wallis ANOVA by Ranks for Staff Levels

Description	N=46	<b>n</b>	
Description	H ( 2, N= 46)  2.11  0.34  0.79  1.55  0.08  0.97  0.67  1.41  0.49	Р	
Engagement	2.11	0.3488	
Trust	0.79	0.6731	
Collective Identity	1.55	0.4601	
Innovation	0.08	0.9617	
Intrapreneurial Orientation	0.97	0.616	
Employee Investment	1.41	0.4934	
Leadership	1.13	0.5692	
Energy	0.40	0.8188	

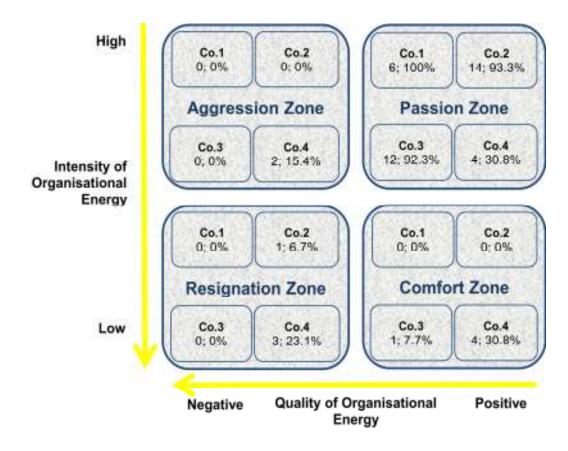
The result of p > 0.05 indicates no significant difference in the results between the various staffing levels for all independent and dependent variables.



# 5.6.7 Energy Zones – Case Study Companies

Figure 7 below shows the results (headcount and percentage of the total company) of the energy zones selected by the respondents of the case study companies 1-4. One of four possible energy zones could be selected by each respondent – passion, aggression, comfort or resignation.

Figure 7: Energy Zones - Case Study Companies



The results indicated the vast majority of the respondents from companies 1-3 selected the passion zone as follows: company 1, 6 respondents representing 100% of the sample for company 1; company 2, 14 respondents representing 93.3% of the sample for company 2; and company 3, 12 respondents representing 92.3% of the samples for company 3. The passion zone represents a high intensity positive energy company. In contrast, company 4's results were largely inconsistent and spread over many zones: 4, 4 and 3 respondents, representing 30.8%, 30,8% and 23.1% of those sampled for company 4, mainly selected the passion, comfort and resignation zone respectively. This spread of results for company 4 indicated an overall lower intensity and level of positive energy in the company.



### 6. Chapter 6: Discussion of Results

#### 6.1 Introduction

The results presented in Chapter 5 are interpreted and evaluated in this chapter. The purpose of this study was to determine whether there is a relationship between productive organisational energy and organisational performance and furthermore to identify the key drivers of productive organisational energy. The results from the four case study organisations, classified as SMEs, are discussed and conclusions are drawn for each research question, taking into consideration the findings of both the quantitative and qualitative surveys and theory contained in literature. Productive organisational energy has a critical role to play in the success of SMEs.

This dissertation does not attempt to prove direct causality between the drivers of productive organisational energy or between productive organisational energy and organisational performance, but rather, using the research data, seeks to identify the strength of the relationship between the multiple variables.

### 6.2 Case Study Companies

The initial intent was to conduct research on four high-energy information technology companies. Despite expert opinion, the energy data for Company 4 proved to be distinct from the data for Companies 1, 2 and 3, which was similar. A discussion and interpretation of the key differences in the results between Company 4 and those of Companies 1-3, follows. It should be noted that there were no significant differences between the results of the different staffing levels surveyed across all four companies according to the Kruskal-Wallis tests conducted per Table 18 and Table 23.

# 6.2.1 Energy and Performance

The means for productive organisational energy and organisation performance were lowest for Company 4 when compared to the individual means of Companies 1, 2 and 3 (refer Table 15). The means for Company 4, at 4.48 for organisational energy and 4.94 for organisational performance, were lower than the consolidated means for Companies 1 - 3 which were 6.19 and 6.47 respectively.

Companies 1 - 3's results were closely clustered, indicating high levels of energy and performance as illustrated in the Scatter Plot in Figure 4, whereas company 4's results were inconsistent and spread over a range of levels.



The higher energy and performance levels for Companies 1 - 3, in comparison to Company 4, are mapped to the energy zone selected by respondents as most representative of their particular organisation in Figure 4. The passion zone, primarily selected by respondents from Companies 1 - 3, is an indicator of a high positive energy organisation, whereas Company 4 respondents selected the passion, comfort and resignation zones, indicating lower levels of energy and performance overall; refer to figure 7 for a count and percentage breakdown of respondents who selected each zone by company and the Scatter Plot in Figure 5 for levels of energy, performance and energy zones.

The Kruskal- Wallis test per Table 17 indicates that there is a significant difference in the results (population medians) for organisational energy and organisational performance between All Companies (1-4). However, when running the same test for just Companies 1- 3, there were no significant differences in the results for these companies. The result validates the fact that Company 4's results for productive organisational energy and organisational performance is significantly different from those of the other 3 companies.

In conclusion, Companies 1 - 3, representing the passion zone, demonstrate highenergy, high-performance characteristics, whereas Company 4, which represents a combination of the zones – primarily the passion, comfort, and resignation zones – demonstrated lower energy, lower performance characteristics. These findings are consistent with the four organisational energy zones model developed by Bruch and Ghosal (2003), who suggest that higher levels of productive organisational energy lead to higher performance. The results of this research indicate that companies that demonstrate higher levels of energy also have higher levels of performance.

# 6.2.2 Independent Variables and Energy Output

The means for Companies 1 - 3 for the seven independent variables or drivers of productive organisational energy – trust, innovation, engagement, leadership, intrapreneurial orientation, employee investment and collective identity – were consistently higher than in Company 4. In fact, the highest mean for Company 4 - 5.69 for trust – was lower than the lowest consolidated mean of 6.12 for collective identity relating to Companies 1 - 3 (refer Table 20). The finding indicates that the intensity of the drivers of productive organisational energy in Company 4 was consistently lower than that of Companies 1 - 3, individually or consolidated.



Figure 6 illustrates that all the key drivers of productive organisational energy and their resultant organisational energy level, consistently trended below the same drivers and resultant energy output for Companies 1 to 3, which are closely clustered together.

The Kruskal- Wallis test per Table 22 indicates that there is a significant difference in the results (population medians) for all the drivers of productive organisational energy, except trust and employee investment, between all companies. However, when running the same test for just Companies 1 - 3, there were no significant differences in their results. The result validates the fact that Company 4's results for the drivers of productive organisational energy are significantly different from those of the other three companies, except for trust and employee investment.

In conclusion, the intensity of all the drivers of productive organisational energy for Companies 1 - 3 are at a higher level and lead to higher levels of productive organisational energy than in Company 4. The findings suggest that the higher the intensity of the drivers, the higher the level of productive organisational energy, implying that it is critical for leadership of an organisation to proactively manage and sustain productive organisational energy as suggested by Bruch and Vogel (2011).

#### 6.2.3 Performance Measures

The qualitative survey revealed that respondents largely used the following organisational performance measures to guide and determine the success of their respective organisations (refer Table 7): profitable sales margins, client satisfaction, sales and profit targets, staff satisfaction, growth in sustainable sales, cash generated by the business, staff training and development, and organisation culture. The measures represent a mix of both financial and non-financial indictors which is consistent with the balanced score card philosophy suggested by Deem *et al.* (2010). A further indicator, although not used as extensively by all respondents, but considered vital to the sustainability of a business, is the monitoring of the future pipeline of business.

Jamrog et al. (2008) suggest high performance organisations establish a performance matrix to meet organisation strategies, which is evident in the in the case study companies.



#### 6.3 Research Question 1

Is there a relationship between organisational energy and organisational performance?

#### 6.3.1 Introduction

Whilst literature implies leveraging productive organisational energy leads to improved business performance, there has been a lack of empirical evidence to support this. Bruch and Ghoshal (2003) suggest that unleashing and focusing productive organisational energy leads to organisations radically improving performance.

# 6.3.2 Statistics and Interpretation

The predictor variable organisational energy was tested for the purposes of this research question (refer Table 14). The correlation coefficient of 0.72 and p < 0.05 in Table 16 indicates a significantly positive relationship between organisational energy and organisational performance. At least 52 per cent of the variance in organisational performance can be explained as a consequence of organisational energy.

The Scatter Plot in Figure 4 illustrates organisations that exhibit positive high energy levels also tend to demonstrate high performance characteristics. Based on the outcomes of this research, organisations falling within the passion zone as described by Bruch and Ghoshal (2003), consistently demonstrated high levels of positive energy and organisational performance (refer Figure 3).

Furthermore, respondents of the qualitative survey described their high-energy organisations as high-performance organisations. High energy organisations were typically described as follows (refer Table 8): staff are passionate and motivated; the organisation is a high-activity organisation; the organisation is energetic and has a great vibe; staff are hardworking and focused. High performance organisations, refer Table 5, were described as: extremely successful; a great success; a good reputation; customer centric; delivering on changing customer needs; bringing unique solutions to the market. These organisations also used a wide variety of performance measures to guide the success of the business.

The above description of a positive, high-energy organisation and a high performance organisation is largely consistent to those envisaged by Bruch and Vogel (2011) and Jamrog *et al.* (2008) respectively. Furthermore, the above description of the energy state and performance of the organisation was consistent with the higher ratings of



organisational energy and performance as per the quantitative questionnaire completed by staff of the high-energy organisations (refer Tables 12 and 15).

Although direct causality between productive organisational energy and organisational performance was not established, the results for this research question, which is central to this dissertation, reflect a significantly strong positive relationship between productive organisational energy and organisational performance.

The results build on the findings of Sriruttan (2011), validating the significant correlation between organisation energy and organisational performance. The empirical evidence gathered in this study adds to the body of knowledge in terms of the relationship between production organisational energy and organisational performance.

#### 6.3.3 Conclusion

In conclusion, this study validated Cross *et al.*'s (2003) assertion that increasing energy enhances performance, in that it found a significantly positive relationship between productive organisational energy and organisational performance of the SMEs researched: the greater the productive organisational energy, the greater the organisational performance. This has broad implications for both academics and business leaders. Future researchers should use the findings of this research as a foundation for further research on the topic. The results also suggest leaders and management of organisations would be well-advised to leverage organisational energy in order to improve organisational performance and maintain a sustainable competitive advantage.

#### 6.4 Research Question 2

What are the key independent drivers of productive organisational energy and their respective rankings?

### 6.4.1 Introduction

Literature refers to many predictors of productive organisational energy. This dissertation set out to identify and rank the key drivers of productive organisational energy in order to develop a framework that can be used by leadership to enhance and/or manage productive organisational energy. Cross *et al.* (2007) assert that the energising and de-energising of staff has an important role to play in organisational



performance. The results provided empirical evidence of the key drivers of productive organisational energy.

### 6.4.2 Statistics and Interpretation

Seven categories of predictors (refer Table 19) were independently tested for the purposes of this research question. All the predictors, included as part of the results of Table 21, were considered to have a significant positive relationship to organisational energy and were able to be ranked. The top four indicators, ranked in order of influence, are intrapreneurial orientation, collective identity, employee engagement and leadership. Intrapreneurial orientation, largely characterised by the ability to get things done and adapt to change, is consistent with the findings of Cole *et al.* (2005), where allowing people to act, mobilises productive organisational energy. Although innovation, employee investment and trust were ranked lowest, these predictors still demonstrate a significant positive relationship to organisational energy.

The correlation coefficient of the top four predictors ranged from 0.75 to 0.66 (p < 0.05) with intrapreneurial orientation in first place and leadership in fourth place. The first four predictors explained anywhere between 55.5 per cent and 43 per cent of the variance in organisational energy as a result of the predictor.

Furthermore, the key drivers of productive organisational energy as described by the respondents in the qualitative survey (refer Table 10) are consistent with the top four drivers above, illustrated as follows:

- Leadership: energising, caring for staff, a clear vision and strategy and providing tools to do job effectively
- Collective identity: encouraging teamwork and a sense of belonging
- Engagement: open and honest communication and have fun at work
- Intrapreneurial orientation: empowering staff and action-orientated

Another prominent factor in the survey was that the majority of people positively influence one another. This validates the findings of Schiuma *et al.* (2007) and Cross *et al.* (2003): that individuals and teams, through their behaviour within social interactions and networks, energise the organisation.



Although direct causality between the predictors and organisational energy was not established, the results demonstrate a significantly strong positive relationship between all the predictor variables and productive organisational energy. In order to enhance productive organisational energy – although emphasis should be placed on the top four predictors for practical purposes – the data suggests the compound effect of using all the predictors in combination will achieve the desired result of energising employees.

In order to drive the success of the business, respondents to the qualitative survey indicated they employed the following tactics (refer Table 6): hire the right people, not about rules and policies (flexibility with staff), invest in and grow people, customer relationships, excellence in service delivery, open and honest communication. Hiring people with the right attitude, as suggested by Boyd and Sutherland (2006), is central to aligning the culture and core values of an organisation. The respondents also indicated that the leadership team typically had long-standing relationships and worked together as a collective to drive the success of the business.

The result of this research question builds on the findings of Sriruttan (2011), validating the significant correlation between collective identity and employee engagement to organisational energy, also ranked second place and third place respectively in her research. In Sriruttan's (2011) research findings, innovation was the top predictor of organisational energy, whereas in this research, intrapreneurial orientation replaced innovation for first place. However, innovation is still considered to have a significant positive relationship to organisational energy according to these research findings. A key difference in this research was identifying leadership influence as a key driver or organisational energy. This finding is consistent with Bruch and Ghoshal (2003) who suggest that leaders are responsible for mobilising and focussing organisational energy.

The empirical evidence gathered in this study adds to the body of knowledge, by validating and expanding on the key predictors of productive organisational energy and their respective ranking.

### 6.4.3 Conclusion

In conclusion, this study found significantly positive relationships between each of the drivers and productive organisational energy: the greater the driver's presence, the greater the likelihood of productive organisational energy. The finding has broad implications for both academics and business leaders. Future researchers should use



the findings of this research as a foundation to do further research on the key drivers of productive organisational energy. The results suggest leaders and management of organisations wanting to enhance organisational energy, should focus on the top four drivers of productive organisational energy, whilst taking cognisance of the fact all the drivers should be worked on concurrently, as they all have a significant relationship to organisational energy. The drivers should be implemented holistically. The research further suggests SMEs are flexible and adapt to a changing customer environment.



# 7. Chapter 7: Discussion of Results

# 7.1 Purpose of the Study

The central purpose of this study was to determine whether there is a relationship between productive organisational energy and organisational performance. Furthermore, the objective was to develop an empirically based model of the key drivers of organisational energy, providing insight and tools that could be utilised by leaders and management to proactively take actions to energise an organisation, deliver superior organisational performance and measure that success. This study built and expanded on previous research conducted by Lamberti (2010), Sriruttan (2011) and Louw (2010).

This dissertation asserts that the ability of SMEs to leverage organisational energy may be the differentiator between success and failure, and may provide the basis for a sustainable competitive advantage. According to Cole *et al.* (2005), organisational energy is the fuel that makes great organisations perform.

In ever-changing internal and external environments it is critical for leadership to leverage productive organisational energy in pursuit of a high-performance organisation, by either changing or maintaining the current energy state of the organisation. High environmental adaptability and internal integration lead to improved organisation performance.

The outcome of the study has added to the existing body of knowledge by providing a model that can be used to energise employees in order to improve performance.

# 7.2 Main Findings

This empirical study has revealed a significant positive relationship between productive organisational energy and organisational performance, suggesting the greater the productive organisational energy the greater the organisational performance.

It has revealed a significant relationship between all seven predictor categories and organisational energy. The top four key drivers of organisational energy, ranked in descending order are: intrapreneurial orientation, collective identity, employee engagement, and leadership.

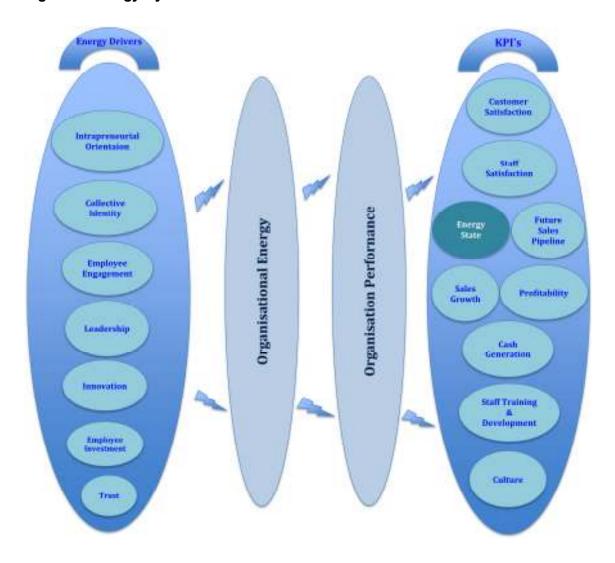
Based on the findings of this research the following model has been developed in order to provide leadership with the necessary insight and tools to effectively alter the energy



state of an organisation in order to improve performance and measure the outcome against Key Performance Indicators (KPI's).

The findings of this research will have value for both the academic and business community.

Figure 8: Energy Cycle



Leadership should focus on the four key drivers to enhance organisational energy, although a holistic approach, in which all drivers are addressed, is recommended to leverage the full benefits of productive organisational energy to improve performance. The Key Performance Indicators (KPI's) provide guidance as to progress made in achieving a high-performance organisation. It is proposed that an energy state KPI be implemented to assess the energy levels of employees, providing leadership with the necessary information to correctly apply key drivers of productive organisational energy.



# 7.3 Recommendations to Management

The findings of this study provide the business community with valuable insight into the drivers that energise organisations and the positive relationship that exists between productive organisational energy and organisation performance. The model illustrated in Figure 8 above provides leadership with the energiser drivers available and the measures to be used to assess the performance of the organisation.

Management would be well-advised to assess the current energy state of their organisation by way of an energy audit, and implement corrective actions that underlie the drivers of productive organisational energy deemed necessary to enhance the energy state of the organisation. The four key drivers should be prioritised, but to maximise the impact on organisation energy, all drivers should be implemented collectively and the unique requirements of the organisation taken into account. Monitoring and acting on key performance indicators will provide management with a benchmark to assess progress in improving organisation performance.

Organisation energy matters, and leadership's key role is to mobilise and focus organisational energy in order to inspire, arouse passion and enthusiasm within people. SMEs are able to increase long-term competitiveness by leveraging productive organisational energy.

#### 7.4 Future Research

The findings of this research could be expanded and enhanced by way of future research in the following areas:

# 7.4.1 Energy Zones

The four companies sampled for the purposes of this study primarily fell into the passion energy zone, with one company exhibiting characteristics of multiple zones. This study empirically demonstrated a significant relationship between organisational energy and organisational performance.

It is suggested that a far larger sample, not limited to high-energy organisations, form the basis of a future study. The purpose of the study would be to explore the relationship between the four possible energy zones relative to organisational energy and organisational performance. One would expect different levels of energy and performance for the various energy zones. Should the outcome empirically



demonstrate this, it would provide management with an incentive to manage organisational energy states in order to achieve a desired level of performance.

#### 7.4.2 External Environment

High-performance organisations are characterised by their ability to adapt to the requirements of the external market place. Organisational energy levels are impacted by threats and opportunities in the external environment. The customer provides business with a major opportunity for sustainable growth. Based on literature and the findings of this research, high-energy, high-performance organisations have an extremely strong customer centric approach.

It is suggested this external factor, where organisations are focussed on building strong long-term customer relationships and excellence in service delivery, has a significant impact on the internal energy state of an organisation. It possibly provides the organisation with a sense of purpose to drive employee behaviour and energy levels.

It is suggested that future studies explore the relationship between customer satisfaction and employee energy levels. The assertion is the higher the customer centricity and satisfaction, the higher the energy levels of employees. Should the outcome empirically demonstrate this claim, it would provide management with an incentive to be more customer-centric, and thereby energise the organisation and improve customer satisfaction and performance.

#### 7.4.3 Culture

Central to aligning the culture of an organisation with its core values, is the hiring of the right people. One of the key outcomes in this research for a successful organisation has been the hiring of the right people. A key observation during this research was that in the high-energy case study organisations, people were encouraged to inject their own 'DNA' into the organisation. The study also showed that although the culture of the high-energy companies was not explicitly measured, it was indeed heeded and nurtured by leadership.

It is suggested that further research be undertaken to explore the relationship between the culture of an organisation and employee energy levels. Fard *et al.* (2009) suggest four broad organisational cultures exist, namely: competitive, learning, bureaucratic and participative. The assertion is that many organisations strive to implement a particular culture but don't understand its impact on employee energy levels and



organisation performance. Should the outcome empirically demonstrate that different cultures lead to different energy levels; it would provide management with an incentive to consciously manage the culture of an organisation in order to energise it and improve performance.

#### 7.5 Conclusion

The research findings suggest that the opportunity exists for leadership to create a sustainable competitive advantage by leveraging productive organisational energy in pursuit of improved organisational performance, in an ever-changing business environment. Leadership is able to diagnose and proactively manage the drivers of productive organisational energy and the consequential energy level within an organisation. High-performance organisations are characterised by high levels of positive energy.

It is critical for leadership to consider highly energised individuals and teams focussed on achieving strategic organisational goals, as an organisational asset, to be nurtured and valued in the creation of a high-energy, high-performance organisation. The energy model as shown in Figure 8, provides leadership with a tool to positively alter and sustain the desired energy level of a high-performance organisation. In a global competitive environment, SMEs are able to sustain high performance by leveraging productive organisational energy. Furthermore, this dissertation hopes to provide a basis for future research on productive organisation energy.



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# Appendix 1: Research Phase One - Expert Interview Guide

I am an MBA student conducting research on the drivers of productive organisational energy. The concept of 'organisational energy' is defined as the level of intensity, positivism, enthusiasm and high energy in the workplace. High levels of these factors in an organisation may play a key role in enhancing an organisation's performance.

Your input would be most valuable in assisting to identify small to medium high energy organisations in the information technology sector for the purposes of this research project that meet the following criteria:

- Turnover of between R20 and R100M and/or
- A total staff complement of between 20 to 50 and
- Established for at least five years

Your participation in this survey is purely voluntary and you can withdraw at any time. The survey does not request your personal details and all response data will be kept confidential.

If you have any concerns or queries regarding this research and the survey, kindly contact:

Researcher Pierre Maxl		082 901 6663	pierre.maxl@networklogicsa.com	
Research Supervisor	Prof. Margie Sutherland	(011) 771 4362	sutherlandm@gibs.co.za	

# **Question to Experts:**

1. Please name 3 (three) Information Technology companies that meet the criteria above and demonstrate high levels of productive organisational energy?

Thank you for your participation in this survey.



# Appendix 2: Research Phase Two - Research Approval Request Guide Managing Directors

# SURVEY ON THE DRIVERS OF PRODUCTIVE ORGANISATIONAL ENERGY AND ORGANISATIONAL SUCCESS MEASUREMENTS

I am an MBA student conducting research on the drivers of productive organisational energy and success measures of organisational performance. The concept of 'organisational energy' is defined as the level of intensity, positivism, enthusiasm and high energy in the workplace. High levels of these factors in an organisation may play a key role in enhancing an organisation's performance. Your approval is sought for your organisation to participate in this research project.

Your input would be considered most valuable in participating in and providing information on the following:

- A face-to-face interview conducted by the researcher with you regarding the success of your organisation and how you drive the performance of your organisation.
- 2. The completion of a self-administered questionnaire by yourself on the intensity of energy within your organisation.
- 3. To identify a sample of employees according to predefined criteria that would complete the same self-administered questionnaire,

Your participation in this survey is purely voluntary and you can withdraw at any time. The survey does not request your personal details and all response data will be kept confidential.

If you have any concerns or queries regarding this research and the survey, kindly contact:

Researcher Pierre Maxl		082 901 6663	pierre.maxl@networklogicsa.com		
Research Supervisor	Prof. Margie Sutherland	(011) 771 4362	sutherlandm@gibs.co.za		



# Appendix 3: Research Phase Two - Interview Guide - Managing Directors

# SURVEY ON THE DRIVERS OF PRODUCTIVE ORGANISATIONAL ENERGY AND ORGANISATIONAL SUCCESS FACTORS

# **Questions to Managing Director:**

I am an MBA student conducting research on the drivers of productive organisational energy and success measures of organisational performance. The concept of 'organisational energy' is defined as the level of intensity, positivism, enthusiasm and high energy in the workplace. High levels of these factors in an organisation may play a key role in enhancing an organisation's performance.

Your participation in this survey is purely voluntary and you can withdraw at any time. The survey does not request your personal details and all response data will be kept confidential.

If you have any concerns or queries regarding this research and the survey, kindly contact either my supervisor, or myself, our details are as follows:

Researcher Pierre Maxl		082 901 6663	pierre.maxl@networklogicsa.com		
Research Supervisor	Prof. Margie Sutherland	(011) 771 4362	sutherlandm@gibs.co.za		

#### 1. Face-to-face interview:

1.1. How would you describe your organisation's success to date?
(Query if exceptional/high/average/poor if required, keep the discussion open to get the conversation flowing)
1.1.1. What was the approximate turnover of your business in the last financial year?
1.1.2. How many employees do you have?



1.2. What do you personally do to drive the success of the business?			
1.3. What measures do you use to			
Factors (Financial)	Factors (Non Financial)		
Growth in Sales	Customer / Staff Satisfaction		
Sales per Employee	Internal Processes		
Return on Investment / Assets	Learning and Growth		
Cash Flow Generation	Culture		
Net Profit	Staff Performance		
1.4. How would you describe the el	nergy state of your organisation?		
	-		
-			
	-		

Refer self-administered questionnaire (Question 58)



1.5. Which factors do you believe drive the energy of your staff?				
2. Self-administered Questionnaire				
Refer Appendix 3 self-administered	questionnaire.			
3. Staff Recommendation				
Please recommend six (6) staff men	mbers from each category of staff below to			
participate in the self-administered qu	uestionnaire.			
Management and supervisory	Skilled and non-supervisory			

Thank you for your participation in this survey.



# Appendix 4: Research Phase Three – Self-Administered Questionnaire

# SURVEY ON THE DRIVERS OF PRODUCTIVE ORGANISATIONAL ENERGY AND ORGANISATIONAL SUCCESS FACTORS

I am an MBA student conducting research on the drivers of productive organisational energy and success measures of organisational performance. The concept of 'organisational energy' is defined as the level of intensity, positivism, enthusiasm and high energy in the workplace. High levels of these factors in an organisation may play a key role in enhancing an organisation's performance.

Your participation in this survey is purely voluntary and you can withdraw at any time. The survey does not request your personal details and all response data will be kept confidential.

If you have any concerns or queries regarding this research and the survey, kindly contact either my supervisor or myself, our details are as follows:

Researcher Pierre Maxl		082 901 6663	pierre.maxl@networklogicsa.com		
Research Supervisor	Prof. Margie Sutherland	(011) 771 4362	sutherlandm@gibs.co.za		

# **QUESTIONS**

INSTRUCTION: Please mark your selected response with an "X" as indicated below

**Samual** 

	Answer
Your Company Name:	

Position in Company in which you are currently employed:

MD / CEO	Management	Supervisor	Skilled/Non-supervisory Please Specify
1	2	3	4



No.	QUESTIONS	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
1	Employees in my organisation are highly committed to achieving company goals.	1	2	3	4	5	6	7
2	Employees in my organisation display high levels of enthusiasm and passion.	1	2	3	4	5	6	7
3	My organisation is a fun place to work.	1	2	3	4	5	6	7
4	Employees in my organisation thrive on strong positive emotions of joy and pride.	1	2	3	4	5	6	7
5	My organisation is a high positive energy organisation.	1	2	3	4	5	6	7
6	Cooperation and sharing of information and resources is common practice in my organisation.	1	2	3	4	5	6	7
7	In my organisation I feel safe to express myself.	1	2	3	4	5	6	7
8	In my organisation I strive for excellence in the performance of my duties.	1	2	3	4	5	6	7
9	My manager provides me with constructive feedback on my performance.	1	2	3	4	5	6	7
10	In my organisation I enjoy my work.	1	2	3	4	5	6	7
11	There is a high level of positive interaction amongst colleagues and teams in my organisation.	1	2	3	4	5	6	7
12	In my organisation information is communicated in an open and honest manner.	1	2	3	4	5	6	7
13	I have the autonomy to make decisions to reach my work deliverables in my organisation.	1	2	3	4	5	6	7
14	My organisation shows respect for employees.	1	2	3	4	5	6	7
15	My manager shares relevant information with me to do my job better.	1	2	3	4	5	6	7
16	My manager asks for and acts on my opinion.	1	2	3	4	5	6	7
17	My organisation acts in good faith.	1	2	3	4	5	6	7
18	I have honest and frank discussions with my manager.	1	2	3	4	5	6	7
19	I identify with the values of my organisation.	1	2	3	4	5	6	7
20	Employees in my organisation feel a sense of community.	1	2	3	4	5	6	7
21	My organisation demonstrates a concern for its employees, rather than for rules, policies and procedures.	1	2	3	4	5	6	7
22	My organisation sets clear performance standards and recognises my contribution.	1	2	3	4	5	6	7
23	There are strong social networks within my organisation.	1	2	3	4	5	6	7
24	My organisation values and rewards teamwork.	1	2	3	4	5	6	7



No.	QUESTIONS	Strongly Disagree	Disagree	Somewha t Disagree	Neither Agree nor Disagree	Somewha t Agree	Agree	Strongly Agree
25	My organisation optimises the integration of new employees.	1	2	3	4	5	6	7
26	My organisation has new projects and initiatives that make the workplace exciting.	1	2	3	4	5	6	7
27	My organisation encourages new ideas, experimentation and creativity.	1	2	3	4	5	6	7
28	In my organisation I am able to do my work effectively.	1	2	3	4	5	6	7
29	My organisation values collaboration and cooperation in solving problems.	1	2	3	4	5	6	7
30	My organisation shares knowledge and encourages learning.	1	2	3	4	5	6	7
31	My organisation is highly adaptable to a changing environment.	1	2	3	4	5	6	7
32	In my organisation I am empowered to act independently to achieve organisational objectives.	1	2	3	4	5	6	7
33	In my organisation we act in anticipation of future problems or needs.	1	2	3	4	5	6	7
34	My organisation strongly challenges its competitors.	1	2	3	4	5	6	7
35	Management actively seeks out new opportunities to grow the business.	1	2	3	4	5	6	7
36	In my organisation things get done.	1	2	3	4	5	6	7
37	In my organisation we tolerate uncertainty and take calculated risks with the goal to benefit the business.	1	2	3	4	5	6	7
38	My organisation allows me to build on my strengths.	1	2	3	4	5	6	7
39	In my organisation I have opportunities for growth, learning and development.	1	2	3	4	5	6	7
40	My organisation assigns me challenging tasks.	1	2	3	4	5	6	7
41	My organisation's appraisal system is fair.	1	2	3	4	5	6	7
42	My organisation celebrates and publically acknowledges my success.	1	2	3	4	5	6	7
43	My organisation promotes employees based on merit.	1	2	3	4	5	6	7
44	The leadership style in my organisation inspires and brings the best out of me.	1	2	3	4	5	6	7
45	Management in my company demonstrates high levels of positive energy.	1	2	3	4	5	6	7
46	Management makes me feel good about myself.	1	2	3	4	5	6	7
47	Management in my organisation creates a sense of urgency for change.	1	2	3	4	5	6	7
48	Management provides me with the tools and resources necessary to achieve organisational goals.	1	2	3	4	5	6	7
49	Management creates a positive image of the future.	1	2	3	4	5	6	7



No.	QUESTIONS	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
50	My organisation has a distinctive, competitive edge.	1	2	3	4	5	6	7
51	My organisation drives work excellence and output.	1	2	3	4	5	6	7
52	My organisation has a clear and credible vision that is achievable.	1	2	3	4	5	6	7
53	I know what's expected of me to achieve the company's goals.	1	2	3	4	5	6	7
54	In my organisation going beyond customer expectations is the norm.	1	2	3	4	5	6	7
55	The organisation's performance measures are clearly defined.	1	2	3	4	5	6	7
56	Employees in my organisation are treated well.	1	2	3	4	5	6	7
57	My organisation is a highly successful organisation.	1	2	3	4	5	6	7



### **Organisational Energy State:**

#### Question 58:

Please indicate with an "X" which one of the following energy states best represents your organisation? A short description of each energy state is provided below.



### Passion/Productive energy zone:

**High positive energy:** staff demonstrate high activity levels, speed, stamina and productivity i.e. the organisation thrives on strong positive emotions of joy and pride where enthusiasm and excitement direct attention to shared organisational priorities

## Aggression/Corrosive energy zone:

**High negative energy:** staff demonstrate collective aggression and destructive behaviour e.g. internal politics, resistance to change, maximizing individual benefits i.e. strong negative emotions drive an intense competitive spirit with high levels of activity and alertness focussed on achieving company goals.

#### Comfort energy zone:

Low positive energy: staff demonstrate high shared satisfaction and identification coupled with low activity levels and organisational inertia i.e. the organisation has weak but positive emotions of calm and contentedness and lacks the vitality, alertness and emotional tension necessary to initiate bold new strategic thrusts or significant change and are happy with the status quo.

# Resignation inertia zone: \_\_\_\_\_

Low negative energy: staff demonstrate high levels of frustration, mental withdrawal and cynicism and low collective engagement i.e. people lack excitement or hope and suffer from lethargy and are emotionally distant from achieving organisational goals.

Thank you for your participation in this survey. Please return the questionnaire to the researcher by hand on completion of the survey after this session

Source: Sriruttan, 2011; Lamberti 2010