

**Intrapreneurship: Testing the application of theory within a  
New Zealand workplace.**

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## **ABSTRACT**

The concept of intrapreneurship (as termed by Pinchot, 1985) was built upon the notion that entrepreneurial characteristics could be integrated within an established organisation. A growing body of intrapreneurial research and knowledge now exists (Pinchot & Pellman, 1999). It is however questionable whether the application of such theory is being appropriately applied in today's corporate workplace (Teltumbde, 2006). This research project discusses the relevance of intrapreneurial and entrepreneurial theory and puts forward an integrated framework for testing intrapreneurship and its culminating factors.

This project additionally reports on questions relating to an innovative and productive capacity. This study surveyed 61 random employees from across 14 New Zealand organisations. The results illustrate a weak acknowledgement and application of intrapreneurial factors particularly in the areas of 'organisational foresight', 'resistance to bureaucracy', 'time to explore new ideas', 'staff review', 'staff development', and 'strategic vision'. The results go on to show an average productive capacity measurement of 70% and an innovative capacity measurement of 68% from within the sampled organisations. Both the innovative and productiveness figures are suggestive of an inability for New Zealand organisations to adjust to a knowledge based economy in which New Zealand government policy desires (Clark, 2007; Key, 2008). Intrapreneurial theorists (Pinchot, 1985; Kuratko, Montagno, & Hornsby, 1990; Zahra, 1993; Carrier, 1994; Knight, 1997; Antoncic & Hisrich, 2003) refer to an association between an organisations ability to promote intrapreneurial activities and its capacity to be productive and innovative. This study further explores this association and finds a positive

correlation between a high application of intrapreneurial factors, a high innovative capacity and a high productive capacity. This project utilises a quantitative research approach using a 11 point multi-item scale. The intensity of intrapreneurship was measured through integrating; ‘The Pinchot & Company Innovation Climate Questionnaire’ (Pinchot & Pellman, 1999), Knight’s (1997) refinement of Khandwalla’s (1977) ‘ENTRESCALE’, Kuratko, Montagno, & Hornsby’s (1990) ‘Intrapreneurial Assessment Instrument’, and Hill’s (2003) ‘Intrapreneurial Intensity Index’. Additional clarification was attained from Antoncic & Hisrich (2001), Carrier (1996), Eesley & Longenecker (2006), and Maes (2003). An initial research hypothesis was that; *organisations are not realising their full innovative and productive capacity due to poor acknowledgement of their own staff’s intrapreneurial abilities*. This research proved this hypothesis true and will go on to provide a useful comparative tool in gauging ‘intrapreneurial intensity’ for further research.

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## CHAPTER 1. INTRODUCTION

In 1985 Gifford Pinchot coined the term ‘intrapreneurship’. Intrapreneurship is short for *intra-corporate entrepreneurship* (Pinchot, 1985). Pinchot (1985) regards ‘intrapreneurs’ as individuals who take a hands-on approach in facilitating innovation within established organisations. Academic recognition of the term intrapreneurship followed Pinchot’s (1985) writings which set a platform for intrapreneurial theory to be further considered a subset of entrepreneurship (Antoncic & Hisrich, 2001). Pinchot (1985) advocates that in allowing entrepreneurial characteristics to be cultivated within the workplace, workplace adaptability and innovativeness is facilitated. However as Carrier (1996) suggests, the degree to which intrapreneurial theory is applied in the workplace is questionable. Such a notion underlines the methodology of this research to gauge the application of intrapreneurial theory within the workplace in a New Zealand context. This project additionally reports on questions relating to an innovative capacity and productive capacity as perceived by personnel. This process allowed for a correlation between intrapreneurship, innovativeness, and productivity to be examined. Carrier (1996) referred to intrapreneurial research as receiving relatively low levels of scholarly attention. The literature reviewed assumes that entrepreneurial activities within organisations are possible and should be facilitated (Pinchot, 1985). The literature reviewed additionally identified ‘organisational politics’ or a ‘corporate immune system’ as a primary stifling factor of intrapreneurial activity (Birkinshaw, 2000; Pinchot & Pellman, 1999). My initial research proposition is; *organisations are not realising their full innovative and productive capacity due to poor acknowledgement of their own staff’s intrapreneurial abilities*. My second research proposition is; *all individuals’ possess’ naturisms capable of generating innovative and productive ideas, however the capacity*

*to do so is stifled by a 'corporate immune system' and a limited acknowledgment of intrapreneurial theory. My third research proposition is that; New Zealand companies are not fulfilling their innovative potential due to a sluggish adjustment to a knowledge based form of management.*

This research report sought to critique the application of intrapreneurial theory within New Zealand organisations, while working to highlight factors that can maximise an organisations capacity to be innovative and productive. This research aims to be influential in characterising appropriate measures for intrapreneurial testing and for determining procedural and cultural weaknesses within New Zealand organisations. It is hoped that this research will help stimulate the acknowledgement of intrapreneurial theory within participating organisations and help create a cause-and-effect rationale, useful for critiquing intrapreneurial factors in different organisational environments and international settings.

## **CHAPTER 2. THE LITERATURE REVIEW**

### **2.1 Context**

This literature review will use the year 1945 as a starting point to consider the framework of intrapreneurship and its relating topics. This rationale is associated with the rise of Weber's (1947) Organizational theory, neo-liberalism (Friedman, 1982), immigration (Hunter & Morrow, 2006), business schools (Starkey & Tiratsoo, 2007), and globalisation (Easton, 2007) that followed the Second World War and continues to influence current day business operations. This literature review will critique the concept of the organisation, entrepreneurship, intrapreneurship, innovation, creativity, productivity, and the New Zealand business environment.

### **2.2 The concept of the Organisation**

Pinchot (1985) referred to intrapreneurs as entrepreneurs operating within the realms of established organisations. Scott (2003) defines an 'organisation' as "collectivities orientated to the pursuit of relatively specific goals" (p. 26). Scott (2003) elaborated suggesting that organisations are a social arrangement pursuing collective goals with a controlling influence over its own performance. Developments in organisational theory include Taylor's (1911) 'scientific management' which involves analysing and synthesising work processes, Weber's (1947) 'organisational theory' which embodied efficiency and control through bureaucratic processes, and Senge's (1990) notion of a 'learning organisation' which suggests organisations have a capacity to learn through cultivating collective ideas from personnel. Morgan (1998) refers to an organisation as being one of three metaphors (a 'machine', an 'organism' and a 'brain'). The perspective

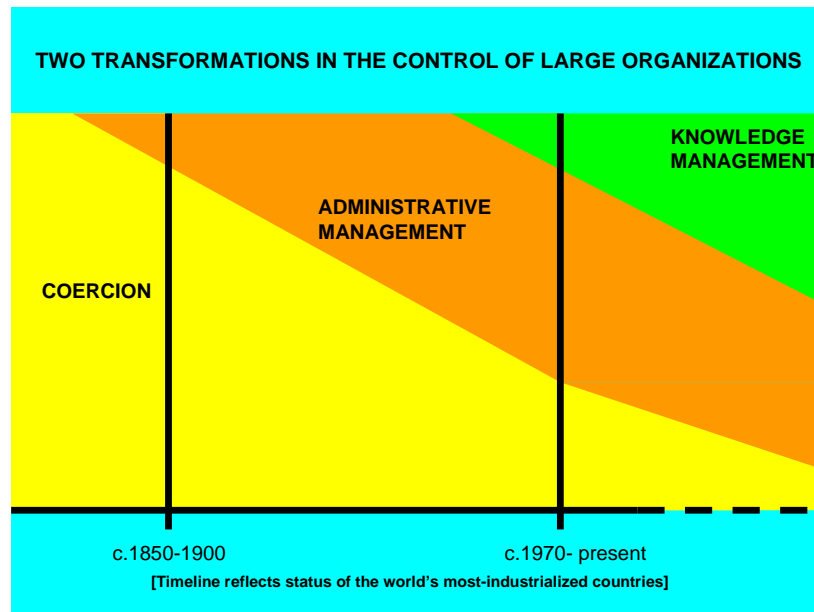
that an organisation is a 'machine' is suggestive of predetermined actions (Morgan, 1998). This metaphor is based on Weber's (1947) 'organizational theory' and Taylor's (1911) 'scientific management' approach. The second metaphor is suggestive of an organisation being seen as an 'organism' by its ability to continually grow and adapt within an indefinite life time (Morgan, 1998). The third perspective sees the organisation as a *brain* that can learn and process information (Morgan, 1998). This research will consider an organisation to be an 'organism' in which it has the ability to continually grow and adapt while also being a 'brain' through which personnel continually learn and process information.

### **2.2.1 The learning organisation**

Pinchot (1985) suggested that intrapreneurs take a hands-on role for creating innovation within organisations. However, the ability to create something innovative depends on whether a organisations processes will allow it (De Geus, 1988). De Geus (1988) suggests that businesses need to adapt to their environment through learning quicker while acting more effectively than their competitors. Senge (1990) stated that learning organisations are; "*organizations where people continually expand their capacity to create the results they truly desire*" (p. 3). Kim (1998) backs up this premise by affirming that organisations need to continually learn in order to sustain their existence. A growing body of literature now surrounds the notion of a 'learning organisation' including the topics of 'change management' (Hayes, 2002), 'knowledge economy' (Sarkar, 2007), and 'team creativity' (Adair, 2007). Encompassing such concepts is a movement suggestive of an underlining transformation of how organisations operate. Stager Jacques (2005) puts forward that a 'transformation of control' within large organisations has evolved

from a ‘coercion’ form of management through to a ‘administrative management’ form of management, and now onto a knowledge based form of management. This transition is demonstrated in Figure 2.1.

**Figure 2.1. Organisational control evolution.**



**(Source: Stager Jacques, 2005, p. 6).**

Figure 2.1 illustrates that the emergence of ‘knowledge management’ finding traction in the 1970’s, This is of a similar era to the academic recognition of intrapreneurship (Pinchot, 1985). Maier, Hadrich, & Peinl (2005) define ‘knowledge management’ as “the management function responsible for regular selection, implementation and evaluation of knowledge strategies” (p. 38). In regard to Figure 2.1 a progression from a administrative form of management to one that is knowledge based could be accredited to a increasingly educated workforce, a growth of business schools (Starkey & Tiratsoo, 2007) the on-set of globalisation and greater business adaptability. Davis, Subrahmanian, & Westerberg (2005) suggested that organisational knowledge is an important productive resource which can lead to a competitive advantage. A Ernest & Young (2006) report affirms this

premise by suggesting that organisations must learn to leverage the ‘untapped knowledge’ within their employees. Nevertheless an ‘adaptive tension’ (Johnson, Scholes, & Whittington, 2005) relating to a ‘paradox of organisations’ (Teltumbde, 2006) could be a hindering factor within the process of moving towards a knowledge based form of management. Teltumbde (2006) refers to a ‘paradox of organisations’ as an organisational desire to remain stable and structured, while profitability requires adaptability and innovativeness. Pinchot’s (1985) suggested that innovation is being stifled in large organisations by an over emphasis on analysis and control, Pinchot (1985) recommended fostering intrapreneurial characteristics in the workplace. As intrapreneurship is a sub-branch of entrepreneurship, a backdrop of entrepreneurial theory should be explored.

## **2.3 Entrepreneurship**

### **2.3.1 History of Entrepreneurship**

The term ‘entrepreneurship’ has French origins dating back to the 1700’s. Richard Cantillon is credited with the first theoretical use of the term, as he referred to entrepreneurship as any sort of self-employment (Cantillon 1755, in Long 1983). Since Cantillon (1755), a timeline can be drawn further critiquing the parameters of entrepreneurial theory. Schumpeter (1954) referred to the entrepreneurial function of bringing together the ‘factors of production’ and forming a producing organism. Schumpeter (1954) elaborated, emphasising the themes of creativity and innovation within the context of entrepreneurship. Schumpeter (1954) notes that historic perspectives of entrepreneurship are primarily centred around financial capital and risk, while pointing

out that in modern times entrepreneurship has taken on more of an innovative perspective with an increased focus on creating new products, services, and processes in new or different combinations. Further critique of the entrepreneurial construct followed Schumpeter's (1954) writings, including Knight's (1967) reference to uncertainty and risk as encompassing factors of entrepreneurship, Kirzner's (1973) reference to an entrepreneurs strength of identifying new opportunities in the marketplace, and Leibenstein (1976) reference to entrepreneurs needing to have strong managerial capabilities. Kanter (1989) built on these themes and was suggestive of a 'post-entrepreneurial' revolution, which aligns with Pinchot's (1985) description of intrapreneurship. Kanter (1989) spoke about the concept of entrepreneurship being taken a step further by applying the principles of entrepreneurship within traditional workplace. Kanter (1989) makes reference to the importance of organisations encouraging 'continuous improvement' through a process of 'incremental innovation'. Covin & Slevin's (1989) referred to 'innovativeness', 'risk taking', and 'pro-activeness' as the primary dimensions of the entrepreneurial orientation. Lumpkin & Dess (1996) sought to clarify the nature of 'entrepreneurial orientation' and illuminate the differences between 'entrepreneurship' and 'entrepreneurial orientation'. Lumpkin & Dess (1996) referred to 'entrepreneurship' as a 'new act', or a: 'new venture', 'new goods', 'new service', or 'new markets'. In contrast Lumpkin & Dess (1996) referred to an 'entrepreneurial orientation' as the "processes, practices, and decision-making activities that lead to a new entry" (p. 2). Morris (1998) suggested that historical definitions of entrepreneurship have often been too narrowly focused.

### **2.3.2 Defining entrepreneurship**

Morris (1998) defined entrepreneurship as “*the process through which individuals and teams create value by bringing together unique packages of resource inputs to exploit opportunities in the environment*” (p. 16). This differs to Cantillon’s (1755) interpretation of intrapreneurship as ‘any sort of self employment’. A quandary regarding the interpretation of entrepreneurship still however remains prevalent although a large amount of entrepreneurial theory exists (Lumpkin & Dess, 1996). An example can be seen within the ‘Global Entrepreneurship Monitor’ (GEM) (as cited by Frederick (2004)) which collects and correlates entrepreneurial activity data from around the world (Frederick, 2004). When presenting the entrepreneurial activity data the ‘GEM’ places all its emphasis on business start-ups and early activity statistics. However as Morris (1998) suggests, a start-up that quickly becomes stagnant in its operations is only entrepreneurial in the fact that it opened for business and is not representative of a growth-oriented, proactive, or innovative approach that an entrepreneurial orientation by essence is about (Lumpkin & Dess, 1996). This is evident of a mismatch between how entrepreneurial theorists define entrepreneurship and how the theory is applied. This literature review will now explore the intricacies of intrapreneurship in more detail.

## **2.4 Intrapreneurship**

*Corporations must innovate to survive; the best method is to encourage creative people to become entrepreneurs within the company structure (“intrapreneurs”) by allowing them to earn the freedom and resources (“intracapital”) with which to pursue their visions (establish “intraprises”)* (Pinchot, 1985, p. 1).



Gifford Pinchot spurred on academic recognition of the term ‘intrapreneurship’ in 1985 with a book named *‘Intrapreneuring: why you don’t have to leave the corporation to become an entrepreneur’*. Intrapreneurship encompasses the concept of ‘internal corporate entrepreneurship’ (Schollhammer, 1982) and ‘corporate entrepreneurship’ (Vesper, 1984). Pinchot (1985) suggested that intrapreneurs are “those who take hands-on responsibility for creating innovation of any kind within an organization” (p. ix). Pinchot (1985) goes on to explain that an article by Norman Macrae (1976) titled ‘The coming entrepreneurial revolution: a survey’, printed in the London *Economist* was the basis for his ideas relating to the potential of entrepreneurs within large organisations and spurred a challenge for him to turn the idealism into a reality. Since Pinchot (1985), scholars and practitioners have taken a growing interest in the usefulness of entrepreneurial activities within an organisational context (Antoncic & Hisrich, 2001). A line can also be drawn between Pinchot’s (1985) explanation of intrapreneurship and earlier institutional theorist such as Zucker (1983), Meyer & Scott (1983), and Kanter (1984). The definition of intrapreneurship is now often seen in various lights because of the assorted nature of an organisation.

### 2.4.1 Defining intrapreneurship

Common definitions are presented in Table 2.1

**Table 2.1. Definitions of intrapreneurship**

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Pinchot (1985)

*“Entrepreneurship inside large organisations”* (p. xv).

Covin & Miles (1999)

*“The presence of innovation plus the presence of the objective of rejuvenating or purposefully redefining organizations, markets, or industries in order to create or sustain competitive superiority”* (p. 50).

Antoncic & Hisrich (2001)

*“A process that goes on inside an existing firm, regardless of its size, and leads not only to new business ventures but also to other innovative activities and orientations such as development of new products, services, technologies, administrative techniques, strategies and competitive postures”* (p. 498).

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A critique of the intrapreneurial definitions seen in Table 2.1 alludes to the common denominators of (1) entrepreneurial characteristics, (2) established organisations and (3) rejuvenation. Nevertheless by nature, individuals with entrepreneurial flair often feel constrained by large organisations and choose to exploit their ideas elsewhere (Pinchot, 1985). The framework that Pinchot (1985) put forward not only suggests that intrapreneurial characteristics are possible within large organisations but they are desperately needed. Pinchot (1985) characterises entrepreneurs and intrapreneurs as not

being motivated by monetary rewards, but rather driven by a personal desire to achieve. Eleven years later, Carrier (1996) agrees suggesting that many successful entrepreneurs were once discontented intrapreneurs. Intrapreneurship differentiates itself from entrepreneurship by the context to which an act takes place (Carrier, 1996). Carrier (1996) refers to entrepreneurs as individuals who innovate for themselves, whereas intrapreneurs take action on behalf of an organisation. Claver, Llopis, Garcia, & Molina (1998) unite in making reference to a managerial intension of cultivating intrapreneurial activity, but the reality of what commonly eventuates are worlds apart. Teltumbde (2006) suggests that organisational politics or a 'corporate immune system' will often respond with scepticism to a new idea. This premise reinforces Pinchot's (1985) earlier notion that innovation within large organisations is 'stagnating' because of an over entrenchment of analysis and control. Pinchot (1985) has used the term stagnating in the context of being 'dormant' or 'sluggish'. Seshadri & Tripathy (2006) advocates that intrapreneurs are "urgently required by corporations" (p. 17). Pinchot (1985) explains that intrapreneurs can help stimulate an entrepreneurial spirit useful in cultivating adaptive change and innovative ideas. Pinchot (1985) suggests that corporations must learn to 'manage' intrapreneurs and therefore retain innovative people, otherwise potential intrapreneurs risk getting frustrated and moving on. Carrier (1996) notes that the majority of intrapreneurial research has been conducted within the realms of large organisations. However Zahra & Pearce (1994) advocates that intrapreneurial activities are just as important within smaller organisations.

### **2.4.2 Research on intrapreneurship**

Intrapreneurship is a relatively young concept, however because intrapreneurship is a sub-branch of entrepreneurship a substantial backdrop for scholarly reference exists (Antoncic & Hisrich, 2003). Academic recognition of the term intrapreneurship has evolved since Pinchot's 1985 publication of 'Intrapreneuring'. Further studies (Covin & Slevin, 1989; Kuratko et al., 1990; Zahra, 1991; Knight, 1997; Antoncic & Hisrich, 2001; Hill, 2003) have paid particular reference to developing intrapreneurial assessment instruments while others have sought to better understand the construct of intrapreneurship (Lumpkin & Dess, 1996; Meng & Roberts, 1996; Eesley & Longenecker, 2006).

Khandwalla (1977) developed an early measuring tool named the 'ENTRESCALE' which was designed to measure a firm's orientation towards entrepreneurship. The 'ENTRESCALE' tested eight items relating to innovativeness' and 'proactiveness' using a 9 point item scale. The 'ENTRESCALE' was found to have strong validity and reliability (Knight, 1997). The primary themes found within the 'ENTRESCALE' were innovativeness and proactiveness which aligned with Pinchot's (1985) notion that intrapreneurship involves 'creating' innovation within a 'hands on' proactive manner.

Pinchot (1985) compiled a self-test of 12 questions that was used to measure intrapreneurial tendencies of an organisation. The self test was derived from 10 factors in which Pinchot had considered ideal for an intrapreneurial environment to foster. The factors were; (1) 'self selection', (2) 'no handoffs', (3) 'the doer decides', (4) 'corporate slack', (5) 'ending the home-run philosophy', (6) 'tolerance of risk, failure, and mistakes', (7) 'patient money', (8) 'freedom from turfiness', (9) 'cross-functional teams',

and (10) 'multiple options'. These ten factors laid a platform for other intrapreneurial researchers to build from. Covin & Slevin (1989) went on to consider the effectiveness of different strategic responses to environmental hostility within small manufacturing companies. Covin & Slevin's (1989) findings indicated that the performance of small firms operating in a hostile environment are positively related to its 'entrepreneurial posture', 'organic structure', and 'long-term orientation'.

Kuratko, Montagno & Hornsby (1990) built upon the 'ENTRESCALE' model by developing a 'intrapreneurial assessment instrument' to measure the degree of change within a corporations cultural perspective before and after an intrapreneurial training program. Kuratko et al. (1990) identified (1) 'management support', (2) 'organisational structure', and (3) 'resource availability' as crucial factors in facilitating intrapreneurial activity.

Zahra (1991) developed the 'Corporate entrepreneurship scale' which was later refined in Zahra (1993). The 'Corporate entrepreneurship scale' measured an organisations commitment towards venturing, self-renewal activities and innovation. Zahra's (1991) findings indicated that; (1) 'environmental dynamism', 'heterogeneity', and 'hostility' all intensify corporate entrepreneurship, (2) growth oriented strategies can positively relate to increased corporate entrepreneurship, (3) a strategy of stability is not conducive with corporate entrepreneurship, (4) predefined organisational values relate positively with corporate entrepreneurship, and (5) extensive controls can have a stifling effect on corporate entrepreneurship. Zahra's (1993) 'Corporate entrepreneurial scale' focused on the themes of 'new business venturing', 'self renewal', and 'innovativeness'. The intrapreneurial theme of innovativeness is present in Khandwalla (1977) and Pinchot's

(1985) models, however Zahra (1993) goes further to emphasis the themes of ‘self renewal’ and ‘business venturing’.

Md-Nor’s (1992) research compared American and Malaysian intrapreneurs in an attempt to distinguish if cultural differences existed within intrapreneurial style, personality or climate. Md-Nor’s (1992) concluded that there were no significant intrapreneurial style differences between American and Malaysian intrapreneurs.

Carrier (1994) conducted a intrapreneurial comparative study between ‘small to medium enterprises’ (SME) and large firms. Carrier (1994) suggested that large firms find it more challenging to detect potential intrapreneurs than SME’s and that intrapreneurs in large organisations are potentially more disruptive but have the benefit of greater anonymity. Carrier’s (1994) ‘disruptive’ description alludes to the effect that intrapreneurs may have in challenging the ‘status quo’, linking back to the ‘paradox of organisations’ dilemma (Teltumbde, 2006). Carrier (1994) referred to the importance of financial and symbolic rewards to facilitate successful intrapreneurial activities within both small to medium sized enterprises (SME’s) and large organisations. Carrier (1994) pointed out that SME’s are often more reactive to intrapreneurial actions than large organisations as SME often have a greater willingness to adapt. Carrier (1994) goes on to note that losing frustrated intrapreneurs within SME’s is often more severe than that seen by larger organisations, particularly if an intrapreneur moves into competition.

Research conducted by Lumpkin & Dess (1996) sought to clarify the construct of an ‘entrepreneurial orientation’ and put forward a framework for investigating the association between ‘entrepreneurial orientation’ and a firms operating performance. Lumpkin & Dess (1996) concluded that the entrepreneurial orientation construct is

representative of the entrepreneurial process while engaging in a combination of (1) autonomy, (2) innovativeness, (3) risk taking, (4) proactiveness, and (5) competitive aggressiveness. Notably, Lumpkin & Dess (1996) highlighted the themes of innovativeness and proactiveness in which Khandwalla (1977) and Pinchot (1985) had earlier identified.

Knight (1997) sought to assess the 'cross-cultural' reliability and validity of the 'ENTRESCALE' that was originally developed by Khandwalla (1977). Knight (1997) sampled English-speaking and French-speaking managers to clarify if a measuring instrument developed in America would be troublesome within another culture. Knight (1997) concluded that this was not the case, suggesting that the 'ENTRESCALE' was a suitable tool for using abroad. However such a decisive conclusion has limited validity with only one nationality being tested.

Antoncic & Hisrich (2001) also built upon the 'ENTRESCALE' (Khandwalla, 1977), however integrated it with the 'corporate entrepreneurship scale' (Zahra, 1993). Antoncic & Hisrich (2001) believed an integrated intrapreneurial scale would more widely consider the dimensions of 'new-business venturing', 'innovativeness', 'self-renewal', and 'proactiveness'. As in the case of Knight's (1997) research, Antoncic & Hisrich (2001) tested for an American bias, but instead developed an integrated scale to test a sample from America and Slovenia. Antoncic & Hisrich (2001) also concluded that an American bias was not distinctive and that the integrated intrapreneurial instrument showed suitable validity across both samples. Hill (2003) set out to develop an 'intrapreneurial intensity instrument' by building on Tushman & Nadler's (1997) 'Congruence model for organisational analysis' as a theoretical framework. Hill (2003) asserted that the resulting

instrument suitably provided an overview of an organisation's intrapreneurial ability and could identify areas requiring organisational change.

Eesley & Longenecker's (2006) research sought to understand the factors that stifle and encourage intrapreneurship. In doing so, Eesley & Longenecker's (2006) created a list of the top ten barriers to intrapreneurship (as seen in Table 2.2) and the top ten gateways to intrapreneurship (as seen in Table 2.3).

**Table 2.2. Top 10 barriers to intrapreneurship**

1	<i>Punishing risk taking, new ideas, and mistakes</i>
2	<i>Ideas with nowhere to go for follow-up or action</i>
3	<i>Failing to sanction, promote, and encourage intrapreneurship</i>
4	<i>Unhealthy politics: infighting and lack of cooperation</i>
5	<i>Poor communications and organisational silos</i>
6	<i>People not encouraged to think about opportunities</i>
7	<i>Unclear organisational mission, priorities, and objectives</i>
8	<i>Lack of real management support</i>
9	<i>Improvement and risk taking activity not rewarded</i>
10	<i>Inadequate time or resources</i>

(Source: Eesley & Longenecker, 2006, p. 20)

**Table 2.3. Top 10 gateways to intrapreneurship**

1	<i>A culture of work force empowerment, risk taking, and action</i>
2	<i>Celebrating and rewarding ideas, progress, and results</i>
3	<i>Free-flowing customer information and internal communication</i>
4	<i>Management support and engagement at all levels</i>
5	<i>Ongoing encouragement and promotion of risk taking and new ideas</i>
6	<i>Developing processes for idea generation and advancement</i>
7	<i>Clearly defined organisational needs, vision, and direction</i>
8	<i>Developing better cooperation and teamwork</i>
9	<i>Providing resources to support new ideas</i>
10	<i>Cross training and special assignments</i>

(Source: Eesley & Longenecker, 2006, p. 22)

These points carry similar themes to those barriers and gateways to intrapreneurship that Pinchot (1985) put forward twenty one years earlier. However, more emphasis can be



seen in Eesley & Longenecker's (2006) writings in regard to the importance of clearly defining an organisations vision and direction. Eesley & Longnecker (2006) also built on entrepreneurial themes identified by Lumpkin & Dess (1996) such as autonomy, risk taking, and competitive aggressiveness. Eesley & Longenecker (2006) note that the primary barriers to intrapreneurship are not based on financial or time constraints, but rather through a lack of systematic methods to empower and encourage innovative action on the part of personnel.

De Clercq, Castaner, & Belausteguigoitia's (2007) research considered the theoretical framework of intrapreneurship and concluded that entrepreneurial ideas in the workplace are more intense when (1) an idea is believed to be strategically important (2) individuals are content with strategic direction, (3) resources and human capital are perceived to be available, and (4) management suitably communicates organisational goals.

De Clercq et al. (2007) goes on to reinforce the importance of selling an idea to management and the significance of having the appropriate political backing to enable an idea to be suitably heard.

Now a platform for intrapreneurial theory has been put forward, a more detailed review of the associating concepts - innovation, creativity, and productivity is needed.

## **2.5 Innovation, Creativity, & Productivity**

*"The ability of firms to innovate can often be attributed to organisational and management problems"* (Harvey, 2003, p. 20).

### **2.5.1 Innovation**

The term innovation is Latin, meaning to ‘make new’ or to alter (Oxford, 2004).

According to Schumpeter (1954) innovation is either ‘incremental’ or ‘radial’.

Incremental innovation refers to gradual improvements and radical innovation refers to sudden change. Lumpkin & Dess (1996) stated that “innovativeness reflects a firm’s tendency to engage in and support new ideas” (p. 6). Morris (1998) elaborated further, stating “innovation implies something new, something unknown, something that has not happened yet” (p. 25). Fagerberg (2003) summarised innovation as the first commercialization of an idea” (p. 3). Sundbo & Gallouj (1998) built on Schumpeter’s (1954) reference noting that innovation is rarely radical and is often about small adjustments to procedures. Claver, Llopis, Garcia, & Molina (1998) suggested that without clear values and a shared orientation towards innovation, results are unlikely to materialise within an organisational environment. Harvey (2003) suggests that the amount innovation materialises or not can be made relative to an ‘innovative capacity’. Harvey (2003) noted that innovation requires a different form of management, and that suitably organising ‘existing ideas’, ‘capabilities’, ‘skills’ and ‘resources’ is where the challenge lies. The concept of an ‘innovative capacity’ is built on by Claver *et al.* (1998). Claver *et al.* (1998) notes that an innovative capacity relates to an organisations ability to blend and control creativity, manage diversity and effectively deploy resources. Fagerberg (2003) points out that an organisation which is open to new ideas and allows groups to experiment with new solutions can mobilise a knowledge base more effectively and be more adapt to fostering innovation. This aligns with Pinchot (1985) suggestion that intrapreneurial characteristics can induce a greater freedom for personnel to express and follow up new ideas.

### **2.5.1.1 Cultivating innovation**

In cultivating intrapreneurship and innovative practices, Kuratko, Montagno, & Hornsby (1990) refer to an idea used by 3M employees that allows personnel to use a percentage of their work time to consider and develop new concepts, products or procedures. Adair (2007) suggests that a flexible organisational framework, inter-department cooperation, clear lines of communication and suitable reward practices are good starting points to foster innovation. Conversely, factors that can hinder innovation are notably an overemphasis on rules, formalities, hierarchy and specialisation (Adair, 2007). New Zealand based research conducted by Gilberston, Gilberston, & Andrews (1995) put forward the following nine key barriers to innovation; (1) low incentives for idea champions, (2) over control of creative people, (3) management which are short-term orientated, (4) accountants and lawyers with too much influence in management, (5) high personal risk if the innovation fails, (6) limited incentives for organisational entrepreneurs, (7) institutionalising attitude change, (8) decision-making is too centralised, (9) a reluctance to invest in 'problem-orientated training'. These barriers encompass similarities to the barriers of intrapreneurship (Pinchot, 1985) such as management short sightedness and a stifling of creativity.

### **2.5.2 Creativity**

Jevons (1877) refers to creativity as a divergence from common lines of thought. However in business a divergence from common paradigms can be part of creating new and innovative ideas which can propel growth and generate competitive advantages

(Harvey, 2003). An association between intrapreneurship and creativity can also be seen in Pinchot's (1985) writings where he wrote "intrapreneurs are dreamers" (p. 21) who form an idea and transform it into a reality. Unfortunately as Amabile (1998) suggests, business creativity gets stifled more often than it gets supported. Amabile (1998) believes that this is not because managers are against creativity, but rather due to a business yearning for control and coordination. Amabile (1998) points out a common misconception in business is that creativity is often seen as the sole property of the marketing or R&D department, rather than a generic function that can provide benefits to all facets of an organisation. Jevons (1877) referred to creativity being a 'divergence from common lines of thought', this premise aligns with Amabile's (1998) notion that creativity can be applied in all facets of an organisation where decisions are made. Bilton (2007) notes that creative ideas need to be aligned with organisational resources in order to materialise, otherwise non-conformist ideas will be stifled. Amabile (1998) points out that the risk of stifling creativity is not just in losing new ideas, but also in losing the commitment and enthusiasm of employees which is fundamental to intrapreneurship and also productivity.

### **2.5.3 Productivity**

Longenecker & Fink (2006) refer to a crucial business challenge of the 21st century as being able to remain productive and innovative. Productivity is seen as being relative to 'output per unit of labour' (Farrell, 2006). To be productive, workers must function at their 'optimum' ability at all times (Sumanth, 1998). Parker's (2008) cites Paul Krugman, the 2008 winner of the Nobel Prize for economics as stating, "productivity isn't

everything, but in the long run it's nearly everything" (p. 2). Sumanth (1998) referred to motivation, focus, ease of doing a job, communication, lack of distractions, ability to manage time, bureaucracy, and political factors as themes that can affect a capacity to be productive. Sumanth (1998, p. 47) refers to a Theodore Barry and Associates study whereby a typical 8 hour day was broken down and derived the following statistics:

- 4.4 hrs (55%) productive time
- 1.2 hrs (15%) unavoidable delays
- 2.4 hrs (30%) wasted time

Such an illustration of wasted time is a far cry from functioning at an 'optimum' ability. Sumanth (1998) points out that; (1) poor planning or scheduling of work, (2) unclear and untimely instructions to employees, (3) an inability to adjust staff size and duties, (4) peak and valley workload periods, (5) required tools not being available, (6) excess travel time, and (7) lax supervision of workers starting and finish times as being detrimental to productivity. If in the case innovative processes brought about by intrapreneurial actions diluted this 30% wasted time, a correlation between intrapreneurship and productivity could be drawn. A New Zealand Department of Labour report (D.O.L, 2008) identified the following seven practices as having a positive effect on workplace productivity; (1) worker training, (2) workplace culture, (3) encouragement of workers to think innovatively, (4) development and training of managers (5) team building activities, and (6) encouragement of workers to use new technology. Many of these factors interlink with the factors of intrapreneurship and a capacity to be productive. To further understand the New Zealand context further examination of the New Zealand business environment is needed.

## 2.6 The New Zealand Business Environment

*“Managing and organising work in ways that reflect its social character is of fundamental importance to New Zealand’s innovative success.”* (Harvey, 2003, p. 5).

The New Zealand economic environment has a history of being innovative and independent while generating a relatively high standard of living (Hunter & Morrow, 2006). This is despite New Zealand’s geographic isolation from its primary trading partners. Since the end of the Second World War, New Zealand has evolved from being a heavily regulated and insulated economy to one that adopted open-market policies rapidly in the 1980’s. However throughout this transition New Zealand’s ‘Gross domestic product’ (GDP) figures have failed to keep pace with other developed countries (Hunter & Morrow, 2006).

**Table 2.4 Comparable GDP per capita figures (US dollars).**

	1970	1975	1980	1985	1990	1995	2000	2005	2006
Australia	4487	6690	10182	13988	17222	21591	27224	33983	35453
Canada	4377	6893	11103	15561	19601	22771	28444	35078	36813
Ireland	2306	3752	6228	8753	13032	17957	28587	38061	40716
Japan	3323	5321	8953	13005	18841	22564	25593	30290	31919
New Zealand	4145	6395	8675	12584	14367	17369	20754	24882	25910
Sweden	4605	7081	10604	14946	19334	21919	27727	32770	34870
United Kingdom	3564	5394	8353	11851	16127	19488	25573	31580	32990
United States	4998	7519	12159	17557	23012	27542	34571	41674	43801

(OCED, 2008)

Table 2.4 demonstrates a weaker rise in the (GDP) figures compared to other developed countries for the period between 1970 and 2006. Hunter & Morrow (2006) refer to a rise in demand for industrial resources such as steel (for which New Zealand has a limited supply) as a compounding factor to limited GDP growth. Instead New Zealand businesses have found it necessary to source a majority of raw materials offshore. This has become more apparent through the onset of globalisation. As a result New Zealand has lost out in

terms of many ‘value added’ industries. In contrast, New Zealand’s largest trading partner Australia, has a wealth of minerals as well as a larger population to a greater economies of scale (Hunter & Morrow, 2006).

### **2.6.1 New Zealand as a knowledge economy**

Prior to 1975 New Zealand was a big exporter of agricultural products particularly to the United Kingdom. However with the effect of the United Kingdom becoming more immersed within the European Economic Community (Hunter & Morrow, 2006) and the culminating factors of market de-regulation, many New Zealand industries have struggled to be internationally competitive. To rectify this competitive issue, talk of a ‘knowledge economy’ has become more prevalent within New Zealand politics (Clark, 2007; Key, 2008). Under a backdrop of a knowledge economy, both Clark (2007) and Key (2008) considered that New Zealand could create value added processes and services irrespective of New Zealand’s geographic location or a lack of raw materials.

### **2.6.2 New Zealand’s ability to be innovative**

In 2008, New Zealand business’s operated under a backdrop of a comparatively low population base (4,2 million (stats.govt.nz, 2008)), high levels of self-employment (Frederick, 2004), and with a skilled yet culturally diverse workforce (Hunter & Morrow, 2006). Although a knowledge based economy is yet to fully materialise, New Zealand can be seen as a country with entrepreneurial flair (Frederick, 2004). This alludes to New Zealanders having the ability to build their own business, or be successful intrapreneurs. Frederick (2004) refers to figures presented in the ‘Global Entrepreneurship Monitor’

(GEM) which illustrates this. Frederick (2004) refers to New Zealand's ranking of being the 5<sup>th</sup> highest entrepreneurial country in regard to 'total early stage activity'. Further noteworthy statistics show that a significantly high proportion of female entrepreneurs and a high propensity of Maori entrepreneurs (Frederick, 2004) .

Throughout this literature review a context for a knowledge economy has been set, the benefits of intrapreneurship acknowledged and the rationale why a knowledge based form of management may be stifled.

The next section of this report will describe the methodology used to test the application of intrapreneurial theory within the New Zealand workplace.



## **CHAPTER 3. METHODOLOGY**

This chapter discusses the rationale, conceptualisation and administration of a measuring instrument developed to gauge the intrapreneurial activity of New Zealand organisations. A quantitative methodology was used within a questionnaire format. An electronic and printed version of the questionnaire was developed and tested within a pilot study and later refined for the implantation of the final questionnaire.

### **3.1 Rationale**

From the outset, the researcher sought to develop a user-friendly measuring device that could graphically depict the extent to which New Zealand organisations acknowledge and apply intrapreneurial theory within their workplace. The researcher further sought to measure the perceived innovative and productive capabilities of the sample organisations from the perspective of personnel. In doing so a correlation between the application of intrapreneurial factors, innovativeness, and productivity could be tested. Furthermore it would demonstrate the level of continuity between what personnel believe and what organisations are doing. Within the literature review, Carrier's (1996) suggestion that acknowledgment and application of intrapreneurial theory are 'worlds apart' was discussed. This research would develop a methodology to test this notion with in a New Zealand context.

### **3.2 Research Objective**

The objective of this research is to gauge the acknowledgment and application of intrapreneurial theory within New Zealand organisations and to test for a correlation

between intrapreneurship, innovation, and productivity from the perspective of personnel. Furthermore this study will endeavour to provide a testing format that can graphically illustrate an organisations intrapreneurial abilities, so it can later be conducive to practical interpretation.

### **3.3 Conceptualisation**

The research objective sought to quantify the extent to which intrapreneurial factors were being acknowledged and applied within New Zealand organisations. The research objective additionally called for a relationship between intrapreneurial factors, productivity and innovativeness to be examined. Measuring the differing factors of intrapreneurship, productivity, and innovativeness in their own right is not new, however measuring the three together within a integrated format is new. In conceptualising the design of a suitable measuring instrument, the research by Khandwalla (1977), Pinchot (1985), and Antoncic & Hisrich (2001) were identified as being suitable benchmarks for further development and exploration. Particular interest was taken upon Antoncic & Hisrich's (2001) research which built on Khandwalla's (1977) 'ENTRESCALE' and Zahra's (1993) 'Corporate entrepreneurial scale'. Antoncic & Hisrich's (2001) methodology integrated these two previously used scholarly models, combining common denominators and in turn aiding construct validity in a contemporary format. Within the literature review Carrier (1996) questioned the application of intrapreneurial theory in the work place, relating to the 'paradox of organisations' (Teltumbde, 2006) whereby organisations desire stability. In comparing the differences between the acknowledgement and application of intrapreneurial theory, Carrier's (1996) suggestion

that acknowledgment and application of intrapreneurial theory are ‘worlds apart’ would be tested. This measuring technique is new and would facilitate a platform for further study to work from. The research objective additionally called for a perceived level of innovativeness and productivity to be measured. Harvey (2003) referred to an innovative capacity, which would be an ideal parameter to measure. The term capacity relates to a maximum amount possible (Oxford, 2004), however a portion of an items capacity could be illustrated as a percentage of 100, as in the case of a school exam where a student may get 78% correct. It was conceptualised that asking the participants to rate how productive and also innovative they thought there organisation was out of 100%, an illustration of how much room to improve the personnel felt existed within their respective organisations could attained. Within the realms of measuring intrapreneurial factors, an innovative capacity and a productive capacity from the perspective of personnel, the following research presumptions were put forward.

### **3.3.1 Research propositions**

The research presumptions within this study were as follows;

- (1) *All individuals’ posses’ naturisms capable of generating innovative and productive ideas, however the capacity to do so is stifled by a ‘corporate immune system’ and a limited acknowledgment of intrapreneurial theory.*
- (2) *New Zealand companies are not fulfilling their innovative potential due to a sluggish adjustment to a knowledge based form of management.*
- (3) *Organisations are not realising their full innovative capacity due to poor acknowledgement of their own staff’s intrapreneurial abilities.*

### **3.4 Construction**

#### **3.4.1 Questionnaire format**

Through the conceptualisation process a case for a quantitative research methodology beckoned. Firstly, the research objective called for the results to be graphically presentable for practical interpretation. Secondly, integrating comparative testing models that were quantitatively based meant that a similar format needed to be followed. Thirdly a qualitative testing method was going to be a more accessible way of attaining a large pool of data from a number of organisations.

#### **3.4.2 Sampling**

The research design called for a large population base to be surveyed from various organisational types. Industry segments such as manufacturing, design, banking, education, legal, and governmental were identified as being suitable for inclusion. Criteria for inclusion were based upon organisation having a minimum of 10 staff members permanently employed, been operating for at least 5 years, and located in New Zealand. This would insure that an organisation was suitably established. Participation from the personnel would then be based upon full-time employment for a minimum of six months. This would certify that a participant had a suitable understanding of the parameters and processes of their respective organisation. The research task required a large amount of reliable data to be collected. An anonymous approach was therefore chosen to insure participants were not put off answering questions honestly. Collecting anonymous questionnaires from participating organisations also aligned with a quantitative format. Within such parameters the response rate of comparative research

was considered. Hill (2003) received a response rate of “36%” (p. 97) from a population pool of “370” (p. 97). A sample size of at least 50 employees from a minimum of 10 organisations were identified as being sufficient. This would mean at least 15 employees from each organisation would need to be approached in order to fulfil the sample requirements. For the purposes of a pilot questionnaire the sample size would be reduced to at least 1 participant from at least 5 different organisations.

Randomly selecting volunteers with the help of the participating organisations ‘human resources’ and ‘information technology’ department was initially intended. A letter to thirty five organisations was written to organisations that were identified as being suitable. The majority of organisations unfortunately didn’t reply and others excused themselves due to time restraints. One general manager that declined to take part in the research stated, “I feel we are suffering from survey fatigue”. As a result, organisations that agreed to participate were embraced and were followed up on.

### **3.4.3 Presentation**

The studies conceptualisation called for the questionnaire to be as user-friendly as possible. The OECD (2005) Oslo manual backed up this notion by stating “the questionnaire should be as simple and short as possible, logically structured, and have clear definitions and instructions” (p. 71). Therefore no reference to ethnicity, sex, politics, religion, physicality, mental, criminal or trade union views were included. This point also held alignment with Massey Universities code of conduct (2006) which states; “researchers have a responsibility to provide prospective participants with all information

relevant to their decision to participate, in a manner comprehensible to prospective participants” (p. 8).

In considering the questionnaire layout, background information was provided to assist the participant in making an informed decision whether to participate or not. Secondly, a definitions page accompanied the questionnaire to help explain the wording and clarify the context. The type of the questions alternated between acknowledgement of an intrapreneurial factor and the application of an intrapreneurial factor for test category. Through the development of the questionnaire, steps were taken to insure the appropriate ethical considerations were met. The Massey University (2006) code of ethical conduct for research makes reference to ‘informed and voluntary consent’. Accordingly participation for this research will be voluntary. A ‘declaration to participate’ box (as seen in Figure 3.1) was included to enhance authenticity and ensure the participants of their anonymity.

**Figure 3.1 Declaration to participate**

<b>Step (1) - Declaration</b>
I understand the nature of this research and I am voluntarily participating. I also understand that strict confidentiality guidelines will be adhered to. I Agree: <input type="checkbox"/> (Please tick)

Participants were however asked to provide information about their job type with a multi choice question box at the start of the questionnaire. This information was not to be quantitatively measured, instead it was to provide the researcher with a reference point as to the job type spread of the participants. The three multi choice options were;  
*(1) customer or product focus / service delivery, (2) administrative focus/ service planning, (3) management focus / strategic.* The presentation of options is illustrated in Figure 3.2.

**Figure 3.2 Multichoice options for role classification**

<b>Step (2) Please circle the letter (A, B or C) that <u>best</u> describes your role within your organisation :</b>	
<b>A</b>	Customer or Product Focus / Service Delivery
<b>B</b>	Administrative Focus / Service Planning
<b>C</b>	Management Focus / Strategic

#### **3.4.4 Scale**

Selecting a suitable questionnaire scale was widely considered to ensure a high level of validity and reliability. Brace (2004) suggests that a questionnaire design needs to be straight forward, and easy to analyse. A Likert Scale (Fink, 2003) and a ‘multiple-rating list scale’ (Alreck & Settle, 2004) were short listed. Alreck & Settle (2004) advocated that a ‘multiple-rating list scale’ uses less question space and lessens the “response task” (p. 138), while being quick, easy and accurate. Alreck & Settle (2004) also pointed out that circling an item (within a ‘multiple-rating list’) is faster than filling out a written response or scribing a symbol. Such factors positively correspond with the researcher’s intention of creating user-friendly measuring tool. As a result a ‘multiple-rating list’ scale was selected over a Likert Scale. An eleven point satisfaction scale was then thought to be appropriate size to attain a detailed response. Krosnick & Fabrigar (1997) affirmed this design by stating that “scales that are too short cannot reveal much about the distinctions a person makes among a large set of objects” (p. 146). Brace (2004) discusses the use of a ‘balanced scale’ by citing that a ‘balanced’ or ‘non-balanced’ scale decides whether a neutral answer can occur or not. Avoiding neutral answers was desirable as to facilitate decisive responses. However because of the intention to present the final results as a numerical percentage of 100, an eleven point the rating scale (from 0 to 10, or 0% to 100%) was deemed to be suitable.

### **3.4.5 Questionnaire Format**

Two questionnaire formats, an online electric version and a printed version were developed to maximise the chances of a high response rate. The electronic version was initially seen as preferable for its ease of data collection and cost effectiveness. Alreck & Settle (2004) advocated that the majority of people have access to email and that modern software and online databases allow for more secure and timely interpretation of results. However, it was further acknowledged that not all employees will have access to computers during work time. Therefore a printed hard copy version was still going to be required. Individual coding upon each electronic questionnaire deciphered the organisational origin of the survey. This coding also corresponded with the printed version distributed to each organisation.

#### **3.4.5.1 Characteristics of the hard copy questionnaire format**

- Distributed and submitted via traditional postal services
- Appropriate answer box will be circled upon the A4 print out
- The organisations H.R department will be asked to distribute the questionnaires randomly as so the researcher does not have access to the participants email address or contact details.

#### **3.4.5.1 Characteristics of the electronic questionnaire format**

- The questionnaire will be located upon an electronic form based upon a secure website that accesses an online database using MySQL software.



- An email link (specific to the participating organisation) will be addressed to the participant.
- The organisations I.T department will be asked to distribute the questionnaires randomly as so the researcher does not have access to the participants email address or contact details.

### 3.4.6 Compiling of items

In compiling the intrapreneurial factors to be investigated, 87 intrapreneurial variables were considered from ‘The Pinchot & Company Innovation Climate Questionnaire’ (Pinchot & Pellman, 1999), Knight’s (1997) refinement of Khandwalla’s (1977) ‘ENTRESCALE’, Kuratko, Montagno, & Hornsby’s (1990) ‘Intrapreneurial Assessment Instrument’, and Hill’s (2003) ‘Intrapreneurial Intensity Index’. The complete list of considered variables can be seen in Appendix C. Further classification was derived from Antoncic & Hisrich (2001), Carrier (1996), Eesley & Longenecker (2006), and Maes (2003). 87 intrapreneurial factors were narrowed down to 38 factors (as seen in Appendix C) and then down to 23 factors through creating a comparative chart (as seen in Appendix D) and cross checking for commonality. The final list of intrapreneurial variables to be tested can be seen in Table 3.1.

**Table 3.1 Intrapreneurial variables to be surveyed.**

1	Vision	13	Treatment
2	Risk	14	Motivation
3	Support	15	Bureaucracy
4	Sponsors	16	Politics
5	Teams	17	Communication
6	Time for new ideas	18	Goals
7	Foresight	19	Review

8	Hand offs	20	Feedback
9	Boundaries	21	Training
10	Community	22	Staff Development
11	Customers	23	Use of Time
12	Transparency		

Two additional questions regarding a perceived innovative capacity and productive capacity were embedded within the intrapreneurial factors to make up 25 variables for testing. The 23 intrapreneurial variables then had a question structured around the acknowledgement of a variable, and the occurrence of the variable in the workplace. The final wording of these questions can be seen in Appendix ( ).

### **3.4.7 Validity and reliability**

Questionnaire validity and reliability was strengthened by the design process and the question structure. Questionnaire validity was aided by an integrated format that derived from previous research models (Khandwalla, 1977; Kuratko et al., 1990; Knight, 1997; Pinchot & Pellman, 1999). Additionally, by narrowing down 87 intrapreneurial factors to 38 factors and then down to 23 factors by cross-checking for commonality. An illustrative table demonstrating this process can be found in Appendix C and Appendix D. For each of the intrapreneurial factors tested two questions were developed, one regarding to acknowledgment and the other occurrence. This ensured that participants needed to properly consider the characteristics of each factor and limited quick fire answering. The size of the questionnaire was also considered. It was the intention of the researcher to create a questionnaire that would require around five minutes to complete. It

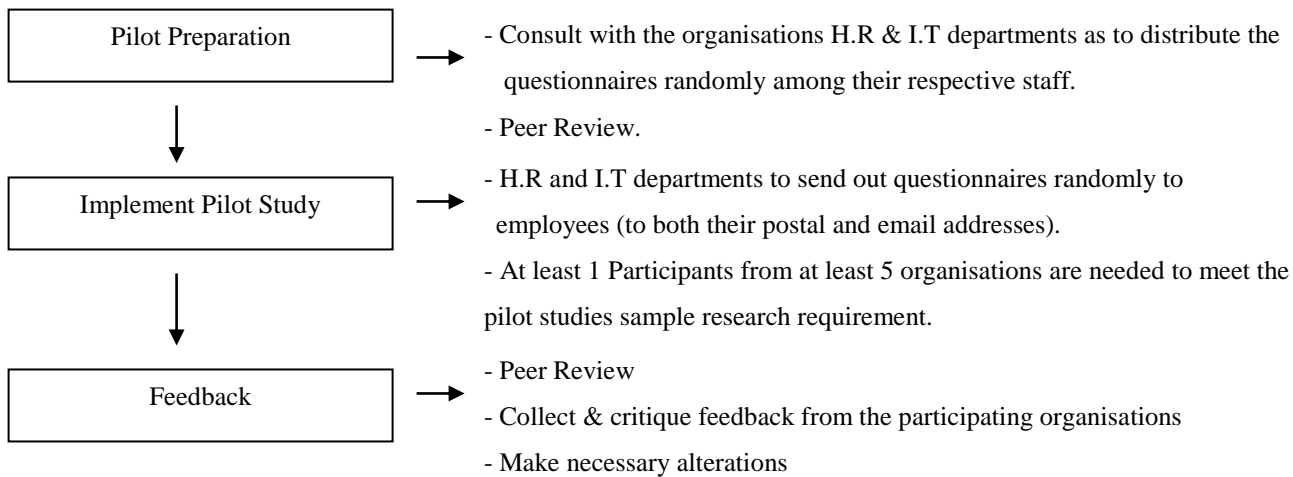
was thought that if participants understood that it wasn't going to take too long to complete they would pay more attention to each question and limit survey fatigue.

### **3.5 Implementation**

#### **3.5.1 Pilot Questionnaire**

A pilot study was used to test the suitability of questions and distribution methods. The pilot questionnaire followed the planned format for the final questionnaire however with a target sample size will be at least 1 participant from a minimum of 5 organisations.

#### **3.5.2 Administering the pilot questionnaire**



#### **3.5.3 Methodological concerns**

##### **3.5.3.1 Method/Design Strengths**

- Utilisation of technology
- Consideration to a suitable response rate,
- New database software allows data to be automatically captured into a specific database in a quantitative format ready for processing.

#### **3.5.3.2 Method/Design Weaknesses**

- Procedures need to be put in place to ensure only one response is received from each individual.
- Random sampling is dependent upon the co-operation of the organisations H.R and I.T department to randomly disperse questionnaire material.

#### **3.5.4 Review of pilot questionnaire**

The feedback from the pilot questionnaire was generally positive. Participants noted that the questionnaire did not take overly long to complete and question format seemed appropriate. However further feedback suggested that the printed version of the questionnaire was going to be more user-friendly and receptive to a higher response rate than the online alternative.

The researcher noted that some participants showed signs of being a little dubious and reluctant prior to taking part. However to the researchers surprise a change of attitude seemed apparent once the pilot surveys were collected. Participants noted that the survey got them thinking about their organisations processes and were interested in the results. This curiosity spurred on a confidence to go forth with the final questionnaire.

However, a clear change of 'tack' was needed in regard to distribution and collection if a hard copy format was going to be used more widely. Comparative research conducted by Hill (2003) cited that the use of a designated contact person within each of the participating organisations reduced many of the headaches in distributing, collecting and attaining feedback on the questionnaires. This suggestion was noted and efforts were made to identify a suitable contact person.

### 3.5.5 Reformatting the final questionnaire

Hard copy questionnaires were re-formatted and made more readily available along side the online version. Further refinement also took place in regard to adding a reference guide to the scale at the top of each page (as seen in Figure 3.3).

**Figure 3.3. Scale reference template**



The intention of the reference guide was to help participants to correlate how they perceived a testing variable within the context of a percentage. A definitions page was further developed in a single age format at the start of the questionnaire. A website was also constructed for further reference (as seen in Figure 3.4).

**Figure 3.4. Website Screenshot**



### 3.5.6 Administering final questionnaire

The final research sample consisted of fourteen organisations (as illustrated in Table 3.2). The questionnaire design called for a sample size of at least 50 employees working within ten various types of organisations and industries.

**Table 3.2. Sample organisations**

Org.	Industry	Org.	Industry
A	Engineering	H	Legal
B	Governmental	I	Manufacturing

C	Telecommunication	J	Manufacturing
D	Finance	K	Manufacturing
E	Manufacturing	L	Manufacturing
F	Manufacturing	M	Architecture
G	Education	N	Bank

Once confirmation to conduct the final questionnaire was attained a contact person from each organisation was identified. The contact person was then briefed about the study and the research process. The contact person was an important link to provide constructive feedback. Questionnaires were then distributed to other employees who were willing to participate in the study. The researcher and the contact person agreed on a collection date and continued to communicate via telephone and email. This insured any problems could be dealt with accordingly. Printed copies of the questionnaire were given to the contact person along with instructions and a link to an online version to distribute. Permission was obtained from the participants through a declaration from embedded within the questionnaire. The contact person facilitated the safe and confidential return of the questionnaires to the researcher.

### **3.5.7 Data capture**

Once the timeframe for each organisation to complete the questionnaires had ended, the researcher collected the completed printed questionnaires and went on to enter the results into a online database. This allowed for spreadsheets to be generated. Organisations were named; Organisation 'A', through to Organisation 'N'. The final results can be seen in the following section of this report.

## CHAPTER 4. RESULTS

### 4.1 Introduction

The results within this section transcend from the research methodology and provide a clear depiction how personnel from 14 organisations perceive the intrapreneurial factors of their organisation.

### 4.2 Response rate

A total of 210 questionnaires were distributed to 14 organisations. 61 completed questionnaires were returned, generating a response rate of 29.05%. This figure is illustrated in table 4.1.

**Table 4.1. Summary of the 14 participating organisations**

Org.	Industry	# Distributed	# Returned	Response Rate %
A	Engineering	15	6	40.00%
B	Governmental	15	5	33.33%
C	Telecommunication	15	4	26.67%
D	Finance	15	1	6.67%
E	Manufacturing	15	5	33.33%
F	Manufacturing	15	8	53.33%
G	Education	15	4	26.67%
H	Legal	15	3	20.00%
I	Manufacturing	15	10	66.67%
J	Manufacturing	15	4	26.67%
K	Manufacturing	15	1	6.67%
L	Manufacturing	15	5	33.33%
M	Architecture	15	4	26.67%
N	Bank	15	1	6.67%
	Total	210	61	
	Average			29.05%

### 4.3 Result Charts

Table 4.2, 4.3, 4.4 illustrate the quantitative results found within this study:

**Table 4.2. Mean intrapreneurial factor results**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Avg.
<b>Vision</b>															
Acknowledgement	6.2	7	9	8	6	5.6	9	4.0	8.4	7	8	5	6	8	6.88
Occurrence	6.3	5	8	8	5	5.3	8	4.0	7.6	7	7	5	6	7	6.28
<b>Risk</b>															
Acknowledgement	7.0		8	9	6	7.3	6	4.0	7.4	7	7	5	8	10	6.53
Occurrence	6.7	4	8	9	6	6.5	6	5.3	7.4	8	7	4	6	9	6.54
<b>Support</b>															
Acknowledgement	7.0	4	10	9	8	6.9	8	3.3	8.2	8	8	5	8	9	7.24
Occurrence	7.0	4	9	8	7	6.6	8	3.0	7.8	7	6	6	8	8	6.78
<b>Sponsors</b>															
Acknowledgement	6.7	6	9	8	7	6.4	9	4.3	7.3	7	7	6	9	8	7.14
Occurrence	7.5	4	9	7	8	7.1	9	5.0	8.1	6	6	5	8	7	6.93
<b>Teams</b>															
Acknowledgement	7.3	6	10	9	7	6.4	10	5.7	7.4	7	7	5	9	9	7.47
Occurrence	7.8	5	8	9	8	7.4	10	6.7	8.2	8	7	6	7	6	7.36
<b>Time</b>															
Acknowledgement	6.2	4	9	8	6	4.4	7	4.0	6.7	6	7	4	8	6	6.17
Occurrence	5.8	4	9	8	6	4.9	6	4.0	6.9	6	6	5	8	7	6.14
<b>Foresight</b>															
Acknowledgement	6.7	7	10	10	4	6.8	9	4.3	7.4	8	7	6	8	7	7.20
Occurrence	5.8	5	7	9	4	5.3	8	3.3	6.5	4	7	4	5	5	5.61
<b>Hand offs'</b>															
Acknowledgement	6.0	6	8	6	6	5.5	8	4.0	7.2	6	7	5	7	7	6.29
Occurrence	6.2	6	8	5	6	5.3	9	4.7	7.6	7	6	4	7	6	6.23
<b>Boundaries</b>															
Acknowledgement	6.8	7	9	8	6	7.6	8	6.0	7.7	6	8	6	8	7	7.26
Occurrence	6.5	6	9	8	5	5.3	7	5.0	7.2	6	6	5	7	9	6.49
<b>Community</b>															
Acknowledgement	6.2	7	9	8	5	7.3	10	5.3	7.4	7	8	6	8	8	7.29
Occurrence	6.8	6	9	8	7	7.3	9	5.7	7.7	7	8	6	8	7	7.33
<b>Customers</b>															
Acknowledgement	7.2	6	9	9	7	7.0	9	4.7	7.7	7	9	6	7	9	7.53
Occurrence	6.3	7	9	9	6	5.3	9	4.7	7.8	6	5	5	7	8	6.77
<b>Transparency</b>															
Acknowledgement	7.2	6	9	9	6	5.0	9	5.0	7.0	6	6	5	7	7	6.73
Occurrence	6.5	6	9	9	6	4.5	8	5.0	6.7	6	6	4	5	8	6.38
<b>Treatment</b>															
Acknowledgement	7.0	7	9	10	5	5.8	10	5.3	7.4	7	7	6	8	7	7.23
Occurrence	6.2	5	9	9	6	4.8	9	5.0	7.3	7	8	6	8	7	6.86



**Continued: Table 4.2. Mean intrapreneurial factor results**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Avg.
<b>Motivation</b>															
Acknowledgement	5.8	5	9	8	6	6.5	7	3.7	6.5	8	8	5	7	7	6.56
Occurrence	6.8	5	9	9	7	7.4	8	6.0	7.4	8	10	5	8	7	7.36
<b>Bureaucracy</b>															
Acknowledgement	5.8	3	8	8	6	6.4	5	5.0	7.1	6	4	6	8	6	6.05
Occurrence	5.8	2	7	8	5	5.8	6	4.3	6.6	7	4	5	6	7	5.71
<b>Politics</b>															
Acknowledgement	5.7	4	8	9	6	7.3	6	3.7	6.9	5	6	5	8	6	6.11
Occurrence	6.0	4	8	8	6	5.9	7	4.0	6.7	7	8	6	8	9	6.66
<b>Communication</b>															
Acknowledgement	5.0	4	8	8	5	5.4	7	4.0	6.6	8	9	5	8	8	6.51
Occurrence	6.0	4	9	8	4	5.4	8	4.3	6.5	7	9	6	6	8	6.50
<b>Goals</b>															
Acknowledgement	5.2	5	8	9	5	6.5	8	4.3	6.1	8	9	3	8	7	6.54
Occurrence	6.7	4	8	9	5	6.9	8	4.0	6.6	7	9	3	7	8	6.56
<b>Review</b>															
Acknowledgement	5.5	5	8	10	5	6.5	8	5.7	6.0	8	6	4	7	7	6.51
Occurrence	5.0	5	8	10	5	4.1	8	5.0	5.9	8	8	3	7	6	6.22
<b>Feedback</b>															
Acknowledgement	5.7	5	9	10	5	6.3	8	4.7	6.3	8	7	5	7	7	6.65
Occurrence	5.2	5	8	10	5	4.6	8	5.0	6.3	8	8	4	6	7	6.41
<b>Training</b>															
Acknowledgement	5.2	7	9	9	6	6.1	9	6.0	6.3	8	8	4	8	8	7.08
Occurrence	4.7	6	9	9	5	4.8	8	6.0	5.9	8	7	4	7	8	6.55
<b>Staff Development</b>															
Acknowledgement	5.5	6	8	9	6	6.4	8	5.7	6.4	8	8	4	6	8	6.85
Occurrence	4.8	6	8	9	5	4.3	7	5.0	5.8	8	7	4	5	8	6.24
<b>Time</b>															
Acknowledgement	6.0	5	9	9	7	8.0	7	5.3	7.0	8	8	6	9	8	7.23
Occurrence	5.5	4	8	9	5	5.6	7	5.0	6.8	7	8	5	6	7	6.43

**Table 4.3. Mean innovative capacity results**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Avg.
Innovative capacity rating	6.8	5	9	8	7	7.0	7	3.3	7.7	7	9	4	7	8	6.81

**Table 4.4. Mean productive capacity results**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Avg.
Productive capacity rating	6.3	6	9	8	6	6.1	8	5.7	7.2	9	8	6	6	7	7.00

## **CHAPTER 5. DISCUSSION**

This study quantitatively measured the perception ratings of 23 intrapreneurial factors, a perceived innovative capacity and a perceived productive capacity from 61 individuals across 14 New Zealand organisations. The results particularly highlight; (1) a weak application and acknowledgement of intrapreneurial factors in New Zealand organisations, (2) an average productive capacity of 70%, (3) an average innovative capacity of 68%, and (4) a positive correlation between intrapreneurship, productivity, and innovativeness.

### **5.1 Intrapreneurial factor critique**

#### **5.1.1 Intrapreneurial factor weaknesses**

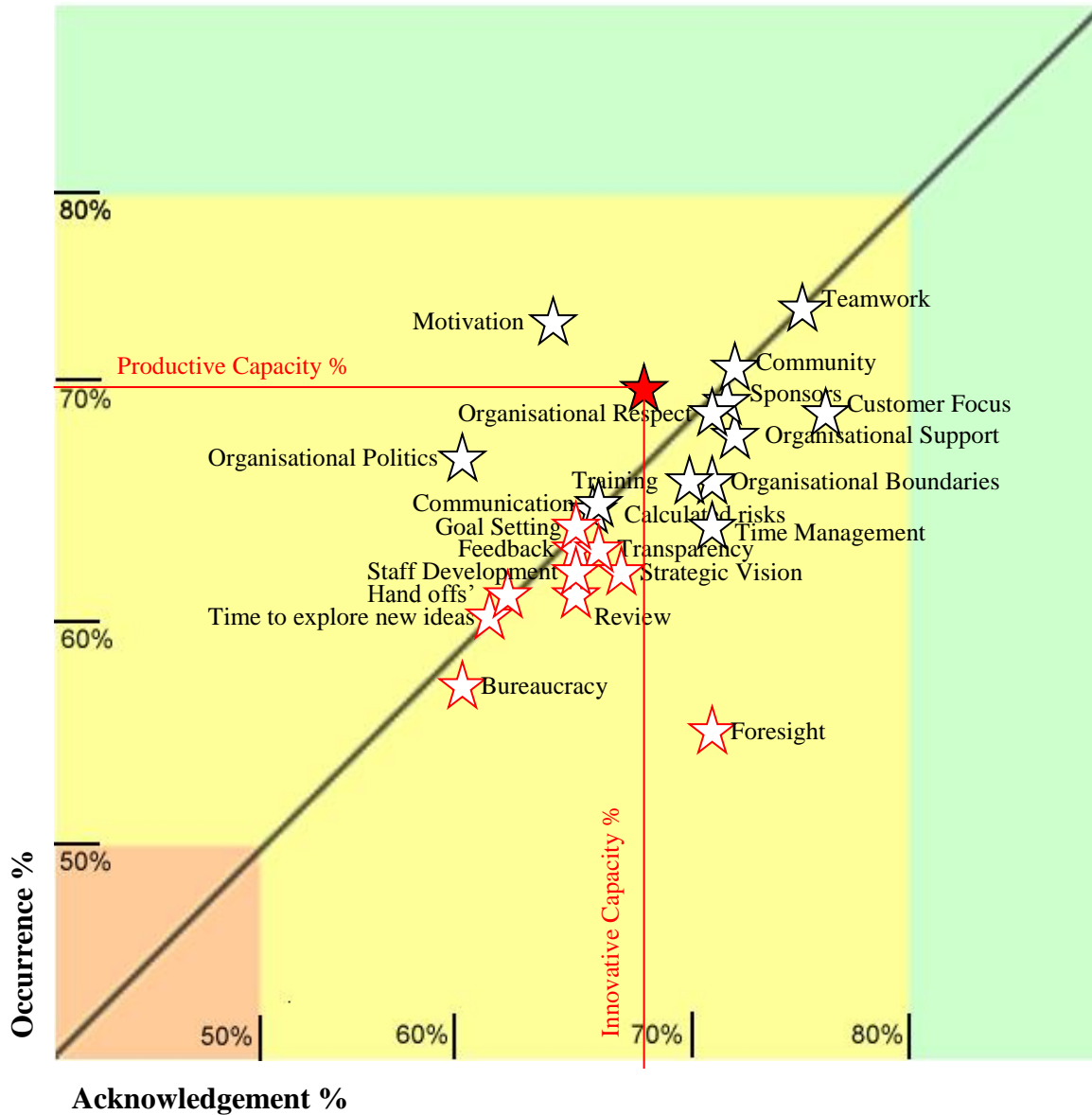
Results within this study show a weak application and acknowledgement of intrapreneurial theory within New Zealand organisations. Most notably in the areas of ‘organisational foresight’, resistance to ‘bureaucracy’, ‘time to explore new ideas’, ‘hand offs’, ‘staff review’, ‘staff development’, ‘strategic vision’, ‘feedback’, ‘transparency’, ‘time management’, and ‘goal setting’. These results suggest that New Zealand businesses are acting more re-actively than proactively. A weak application of intrapreneurial factors in the workplace aligns with the research presumption that ‘New Zealand companies are not fulfilling their innovative potential due to a sluggish adjustment to a knowledge based form of management.’ The intrapreneurial factor results are illustrated in Figure 5.1. To reduce a low acknowledgment and application of ‘discretionary time practices’ Pinchot & Pellman (1999) suggests; (1) allowing employees to use 10 to 15 percent of their time to work on projects of their own

choosing, (2) don't over assign work projects, (3) value employees that stop to investigate a new idea. To minimise a low acknowledgment and application of practices that reduce project 'hand-offs' Pinchot & Pellman (1999) recommends; (1) allow intrapreneurs to remain stay with their projects till completion, (2) when team changes occur, move one person at a time to insure continuity, (3) allow intrapreneurs to recruit others.

To counteract a low acknowledgment and application of respect for others, Pinchot & Pellman (1999) recommends; (1) making rules about how people are to be treated within the organisation, (2) discourage brutal behaviour, even if it produces short term results, (3) develop a safety net for employees that lose their job.

To counteract a low acknowledgment and application of organisational transparency, Pinchot & Pellman (1999) recommends; (1) create an open-book policy, (2) communicate candidly, (3) reward honesty. To minimise a low acknowledgment and application of low levels of customer satisfaction, Pinchot & Pellman (1999) recommends; (1) getting employees from different departments spend time with different customers, (2) measure customer satisfaction levels, (3) develop value propositions. To minimise a low acknowledgment and application of community spirit within an organisation, Pinchot & Pellman (1999) recommends; (1) develop a set of organisational values, develop a caring organisational culture, discourages symbols of rank and hierarchy. To reduce a low acknowledgment and application of procedures to overcome organisational boundaries Pinchot & Pellman (1999) recommends; (1) develop a culture that interacts across organisational boundaries, (2) cross boundary social events, (3) set up rewards for companywide performance.

**Figure 5.1. Results mean of intrapreneurial factors within surveyed sample**



### **5.1.2 Intrapreneurial factor strengths**

Results within this study on average show a weak acknowledgement of intrapreneurial theory. However The intrapreneurial factors of ‘teamwork’, ‘motivation’, ‘community’, ‘sponsors’, ‘customer focus’, ‘organisational respect’, ‘support’, ‘organisational

boundaries', 'training', 'organisational politics', and 'communication' scored on average a higher perception rating as seen in Figure 5.1.

### **5.1.3 A lack of foresight outweighed by motivation**

The results (as illustrated in Figure 5.1) suggest a high occurrence of employee motivation is possibly compensating for a lack of organisational foresight within New Zealand organisations. This alludes to the kiwi 'can do', 'she'll be right' mentality being applied in the way New Zealanders do business. This also aligns with the earlier observation that New Zealand organisations are acting reactively than proactively. The implications of poor organisational foresight is emphasised in times of economic downturn which can manifest problems relating to stock levels and cash flow (Parker, 2008). To counteract a low acknowledgment and application of 'organisational foresight' Pinchot & Pellman (1999) recommends; (1) involving personnel in visioning exercises that consider five, ten, and fifty years ahead, (2) in all meetings, consider the effect of decisions on the organisation two to ten years in the future, (3) notice who cares about thinking into the future and who considers it to be silly, (4) consider long-term thinking within personnel appraisals.

## **5.2 Unrealised productive capacity**

The results show an average 'productive capacity' rating of 70% as perceived by employees of the sampled organisations. This suggests that on average there is an unrealised potential of 30% productive capacity not being utilised by the sampled organisations. This firstly indicates that New Zealand businesses could be operating more

effectively and secondly, personnel are acknowledging ways to improve productivity, but are not actively following through with their concern. This observation aligns with research presumption that 'all individuals' possess naturalisms capable of generating innovative and productive ideas, however the capacity to do so is stifled by a 'corporate immune system' and a limited acknowledgment of intrapreneurial theory.

### **5.3 Unrealised innovative capacity**

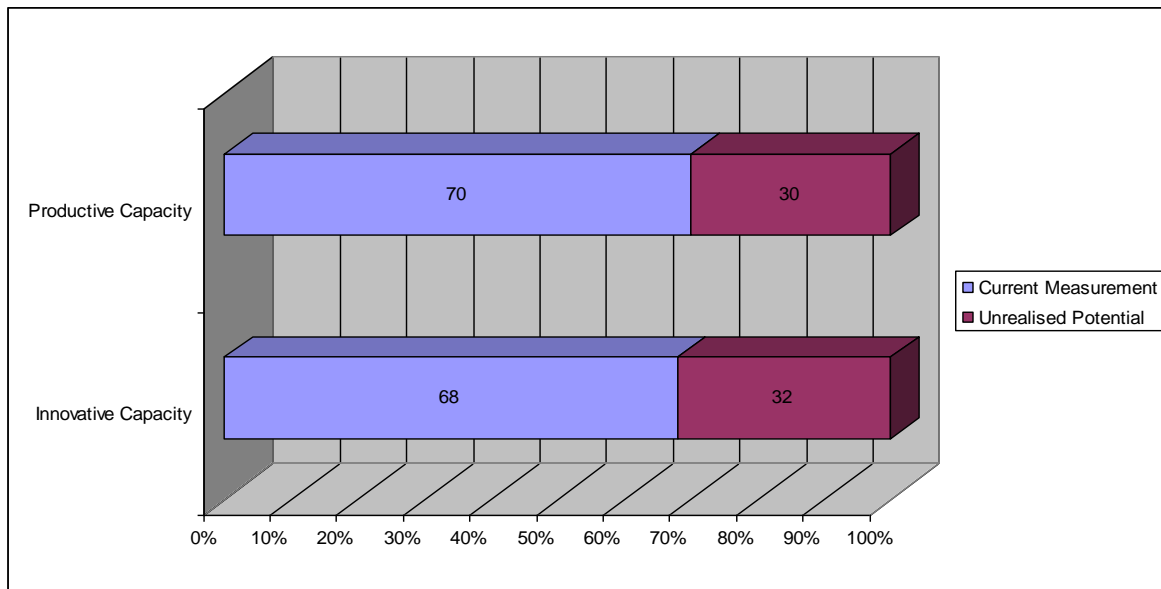
The results identify that personnel from the sampled organisations believe on average that their organisations are only operating at 68% of their potential innovative capability. This figure is demonstrated in Figure 5.2 and aligns with the research presumption that New Zealand companies are not fulfilling their innovative potential due to a sluggish adjustment to a knowledge-based form of management. If New Zealand organisations only are fulfilling two thirds of their innovative potential, it is furthermore suggestive that underlying issues in the way New Zealand organisations are structured and managed in New Zealand. Additionally If New Zealand is to grow a knowledge-based economy, it needs to utilise this untapped potential in order to create value-added products and services.

Harvey (2003) notes that New Zealand managers have not been proven to be particularly strong at designing work processes and managing personnel in a way to generate innovative outcomes. Harvey (2003) recommends that organisations need to strengthen their innovative managerial capabilities' within the context that they operate.

Gilberston et al (1995) suggested that organisations that have; (1) low incentives for idea champions, (2) management which is overly focused on the short term, (3) overly

centralised decision making, and (4) poor employee training, hinder their ability to be innovative. Notably all of these factors were alluded to within the intrapreneurial factor testing. Adair (2007) elaborated further noting that an over emphasis on rules, formalities, hierarchy and specialisation can hinder innovation.

**Figure 5.2. Results mean of innovative and productive capacity of surveyed sample**



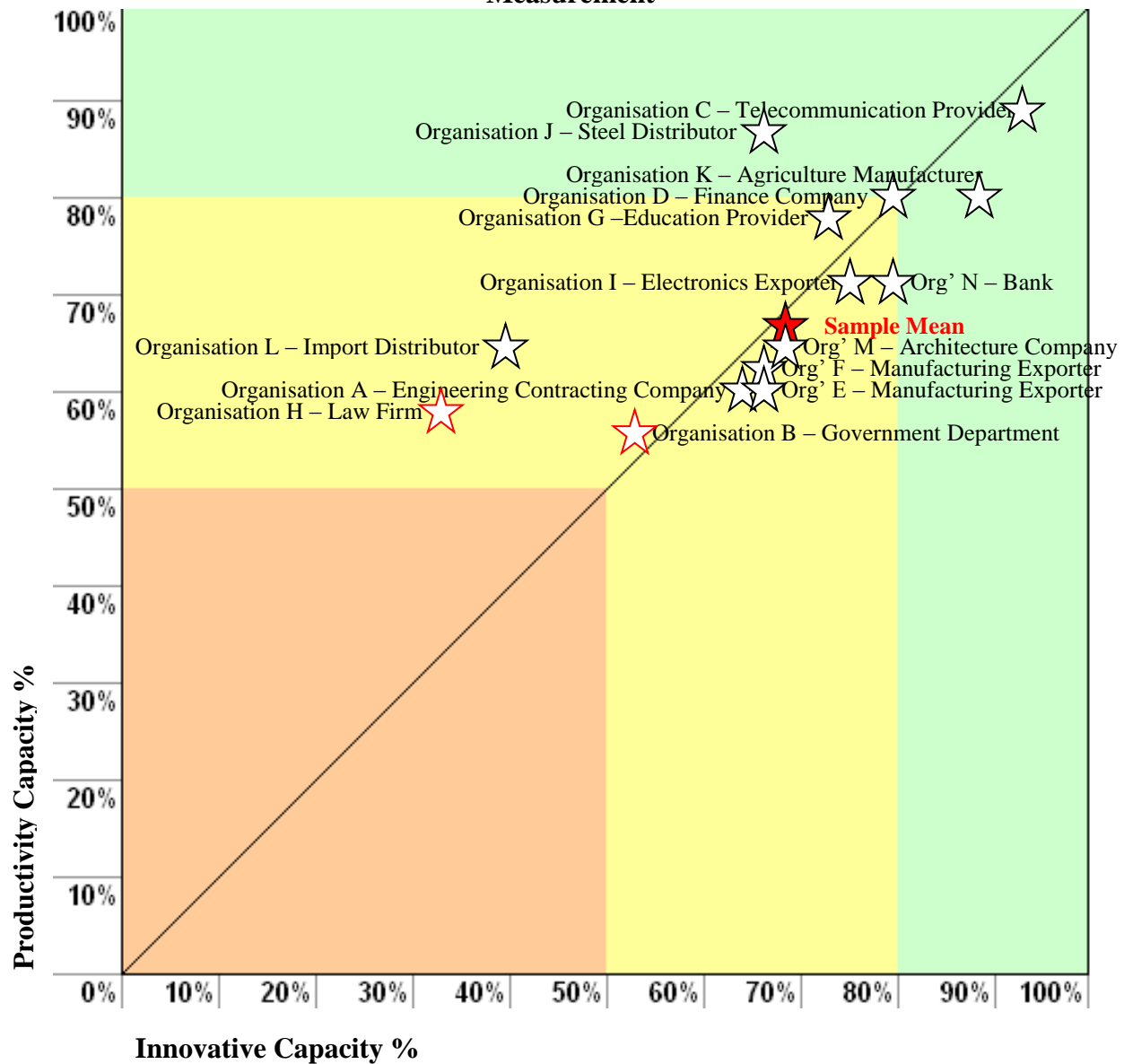
#### 5.4 Industry Comparison

The result section highlights a vast difference between the productive and innovative capacities of the sampled organisations. This result is not surprising due to the different contexts in which the sampled organisations operate in. Organisations operating in a more dynamic environment showed more prevalence to being productive and innovative, while the organisations operating in a stable, process based environment showed less prevalence to being productive and innovative. A telecommunications company that operates in highly competitive marketplace top scored in regard to productive capacity

(88%) and innovative capacity (90%), while a government department measured the lowest (productive capacity 56%, innovative capacity 52%). This can be compared to the sample mean of 70% and 'innovative capacity' and 68% 'productivity capacity'. From observing these results it is noticeable that the figures for innovative capacity and productive capacity don't deviate more than 10%. This alludes to a correlation between productivity and innovativeness. Two exemptions are however apparent. 'Organisation H' (a law firm) and 'Organization L' (an import/distribution company) both have a substantially lower innovative capacity reading's than that of its productivity capacity measurement. Organisation 'H' had a productive capacity rating of 57% and an innovative capacity rating of 33%. Conversely Organisation 'L' has a productive capacity rating of 60% and an innovative capacity of 40%. This is suggestive of both organisations 'machine like' structure (as previously alluded to by Morgan, 1998) stifling innovation. It should also be noted, that both organisations fall below the sample mean's innovative and productive capacity measurement. Figure 5.4 illustrates this observation and alludes to organisations which are heavily process based not being as productive in the long run because of a failure to allow innovative improvements to eventuate. This result also aligns with the research presumption that 'organisations are not realising their full innovative capacity due to poor acknowledgement of their own staff's intrapreneurial abilities'.



**Figure 5.3. Organisational Comparison of Innovative & Productivity Capacity Measurement**

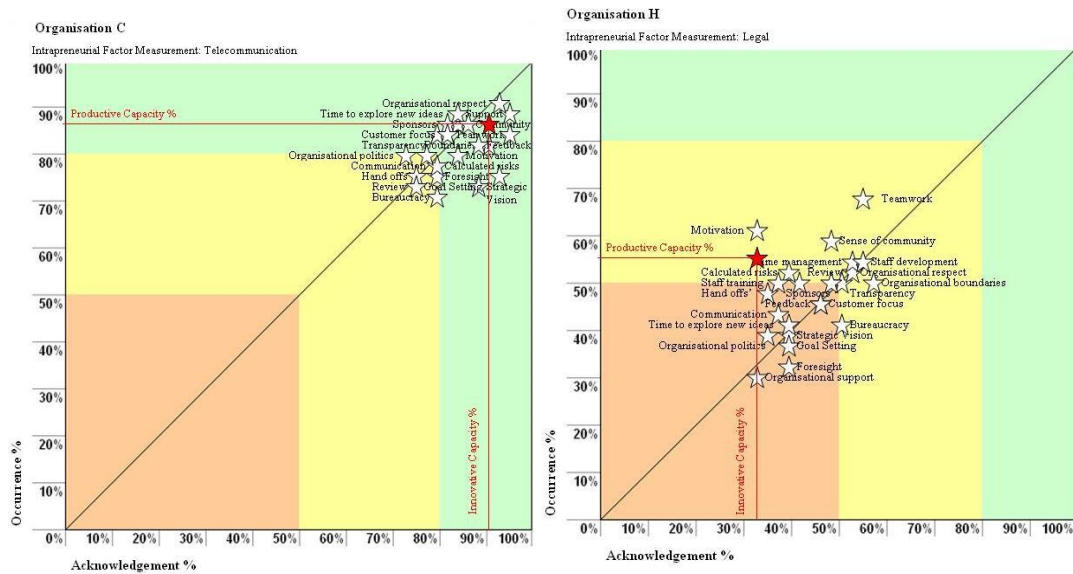


### 5.5 Correlation between intrapreneurship, productivity and innovativeness

A correlation between intrapreneurial factors, innovativeness, and productivity can be observed within this studies results. This is illustrated by the contrasting differences between 'Organisation C', 'Organisation H' as illustrated in Figure 5.4. Figure 5.4 demonstrates that 'Organisation C' (telecommunications) scored above 70% in all its 'intrapreneurial factor measurements', while both the innovative capacity and

productivity capacity readings were above 88%. Conversely ‘Organisation H’ (law firm) illustrates a low ‘intrapreneurial factor measurement’ (30%-70%) and a corresponding low 57% productivity capacity and a 33% innovative capacity reading. An additional correlation between a high intrapreneurial factor rating, a high productive capacity measurement and a high innovative capacity measurement can be seen in the sample means results (seen in figure 5.1). This connection strengthens the research presumption that New Zealand Organisations are not realising their full innovative capacity due to a poor acknowledgement of their own staff’s intrapreneurial abilities.’.

**Figure 5.4. Organisational contrast**



## CHAPTER 6. CONCLUSION

This research set out to test the application of intrapreneurial theory within a New Zealand workplace. This study met this objective by surveying sixty one personnel from fourteen varied organisations. Through this process, a wide range of literature was reviewed, a intrapreneurial measurement tool was further refined, and benchmarkable results were attained.

This research hypothesised that *‘organisations are not realising their full innovative and productive capacity due to a poor acknowledgement of their own staff’s intrapreneurial abilities’*. This presumption was confirmed by a strong correlation between the tested intrapreneurial factors, and the corresponding productive capacity (70%) and innovative capacity (68%) results. This matches Carrier’s (1996) suggestion that the managerial intention of cultivating intrapreneurial activity is commonly worlds apart from what eventuates. A second hypothesis was that *‘all individuals’ posses’ naturisms capable of generating innovative and productive ideas, however the capacity to do so is stifled by a ‘corporate immune system’ and a limited acknowledgment of intrapreneurial theory’*.

This hypothesis was confirmed by the existence of unrealised innovative capacity (32%) and productive capacity (30%) being acknowledged by participants, while the intrapreneurial factor testing verified the restrictive tendencies of ‘bureaucracy’ and ‘organisational politics’.

Overall, a generally weak acknowledgment and application of intrapreneurial factors were present within this studies results, as well as mediocre production capacity and innovative capacity readings. This aligns with the third research presumption that *New*

*Zealand companies are not fulfilling their innovative potential due to a sluggish adjustment to a knowledge based form of management.*

Out of the 23 intrapreneurial factors tested, particular weaknesses were found in the areas of 'organisational foresight', 'resistance to 'bureaucracy', 'time to explore new ideas', 'hand offs', 'staff review', 'staff development', 'strategic vision', 'feedback', 'transparency', 'time management', and 'goal setting'. Conversely the intrapreneurial factors of 'teamwork', 'motivation', 'community', 'sponsors', 'customer focus', 'organisational respect', 'support', 'organisational boundaries', 'training', 'organisational politics', and 'communication' scored more positively.

Through this research evidence suggests that New Zealand organisations are acting more re-actively than pro-actively and a lack of 'organisational foresight' is being outweighed by employee motivation. In addition the average 'innovative capacity' measurement of 68% and a average 'productive capacity' measurement of 70% alludes to a disconnect being present between what personnel believe, and what organisations are doing in order to be productive and innovative.

The relevance of this research is definitely becoming more apparent as the international business landscape evolves. It is hoped that this research can assist organisations in identifying ways to promote and foster innovative and productive ideas in all facets of business.

Further research is advised in the areas of improvement benchmarking of intrapreneurial factors and also in international comparisons. A qualitative research methodology would also be insightful into understanding how management felt about their respective organisations intrapreneurial abilities.



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## APPENDICES

### Appendix A Questionnaire

#### Workplace Research

Hello, thank you for taking the time to complete this questionnaire.  
It will take approximately 4-8 minutes to finish.

The questionnaire serves as part of a Masters of Management research project seeking to measure the degree to which academic theory is being used and applied in New Zealand businesses.  
Your confidentiality will be strictly protected. At no time will you need to identify yourself or others within your organisation.

Filling out this questionnaire is completely voluntary; however your participation is greatly appreciated.  
The only prerequisite is that you've been employed by the organisation in question on a full time basis for more than six months.

Thank you for your time.

#### Step (1) - Declaration

I understand the nature of this research and I am voluntarily participating.  
I also understand that strict confidentiality guidelines will be adhered to.

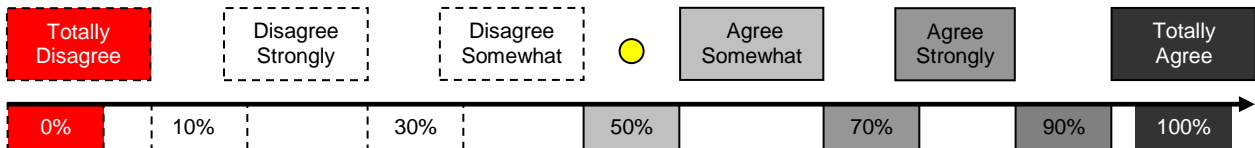
I Agree: ☐ (Please tick)

**Step (2) Please circle** the letter (A, B or C) that best describes your role within your organisation :

A	Customer or Product Focus / Service Delivery
B	Administrative Focus / Service Planning
C	Management Focus / Strategic

#### Instructions

- Please rate out of 100% how accurate you perceive the statements below to be.
- Do this by circling the percentage (%) score that best represents your answer.
  - The following illustration may be a useful in selecting your answers.



#### Example question

Our organisation understands the benefits of teamwork



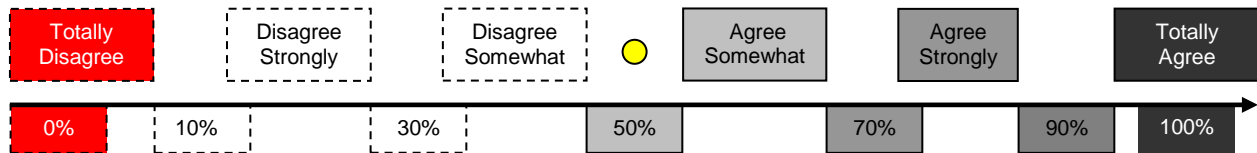
#### Further Information

Additional information, including the contact details of the researcher can be found at [REDACTED]  
If you would prefer to complete this questionnaire online, you may do so at [REDACTED]

For your reference, there is a list of definitions on the following page.

### Definition List

Qus. #	Term	Definition (Oxfordreference.com, 2008)
3	Vision statement	A statement that outlines the long-term dream. A message stating the core purpose and intention of an organisation.
5	Risk	The possibility of loss or misfortune. To expose something to loss.
6	Calculated risk	Done with awareness of the likely consequences.
7	Support	Bear all or part of the weight.
11	Teamwork	Work carried out by a group of people, contributing to a common goal.
9, 13	Innovative idea	New idea, creative in thinking.
15	Strategic planning	The component of a business plan that outlines what a business / organisation wants to achieve.
20	Inter-department support	Interactive support among more than one department.
	Support	Bear all or part of the weight, to help.
21	Community	A group of people with shared origins or interests.
	Mutual	Experienced or done by each of two or more parties.
22	Contributions	A gift or payment to a common fund or collection.
	Organisation	A social, administrative structure formed to pursue certain goals.
	Plan	A detailed outline, that sets out how something will be achieved.
23	Stakeholders	People who have an interest in an organisation, who do not, necessarily, have shares or ownership in that organisation. Examples of stakeholders may include employees, shareholders, the community, customers, the general public, neighbours, etc.
	Philosophy	A system or set of principles or values that we believe in or that guides our lives.
24	Politics	Any activity that involves gaining power.
	Internal	Situated on the inside.
25	Information	Facts or knowledge.
	Transparent	Being clear, open and easy to see and understand.
27	Respect	A feeling of admiration for someone or something.
	Irrespective	Not taking something into account.
29	Innovative	Make changes in something established. Introducing new methods, ideas, or products.
	Capacity	The maximum amount that something can contain.
	Perceive	Understand, realize, comprehend.
30	Motivation	The drive, inspiration and encouragement to act.
32	Bureaucracy	A hierarchical administrative system designed to deal with large quantities of work in a routine manner, largely by adhering to a set of strict and impersonal rules.
33	Procedure	A set way of doing something.
34	Productivity	The rate of output per unit of input, a measure of efficiency.
	Productive	Being able to produce something. having favourable results.
36	Communication	The exchange of information, ideas or beliefs.
	Hierarchy	Levels of authority within an organisation, where the top level is the most powerful.
37	Hindered	Hinder: delay, prevent.
38	Goal setting	The practice of setting individual performance targets.
39	Conscious	Aware of and responding to one's surroundings.
41	Appropriate	Suitable or proper in the circumstances.
42	Feedback	Someone's opinion of something.
43	Efficient	Working effectively with a minimal amount of waste and effort.
44	Effective	Successful in producing a desired or intended result.
46	Development program	An on-going effort to upgrade an employee's skills, knowledge and abilities.



Questions: Please rate the accuracy of the statements below :

#### Vision

(3) Our organisational vision and strategic motives are clear to me.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(4) Our organisational vision and strategic motives help me set my workplace priorities.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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#### Risk

(5) Our organisation acknowledges that it may need to consider calculated risks in order to grow the business.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(6) Our organisation suitably considers calculated risks.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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#### Support

(7) Our organisation acknowledges the importance of supporting new and innovative ideas.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(8) I'm confident that our organisation would provide an appropriate level of support if I believe something could be done better.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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#### Sponsors

(9) Our organisation acknowledges that employees may need to collaborate together or seek support to pursue an innovative idea.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(10) I'm confident that I could find someone within our organisation to support me in pursuing a new innovative idea.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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#### Teams

(11) Our organisation acknowledges the benefits of teamwork.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(12) I'm confident that if required, a team of individuals from different departments could be assembled to work together on a new project.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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#### Time

(13) Our organisation acknowledges that time may need to be made available for employees to explore new innovative ideas.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(14) I feel comfortable that time would be made available to me if I believe a new idea holds promise and should be followed up.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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#### Foresight

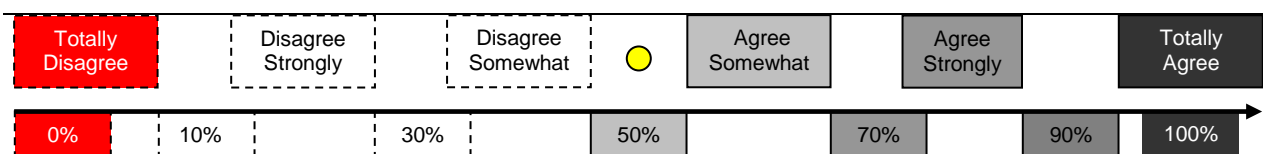
(15) Our organisation acknowledges the importance of a long term strategic plan.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(16) I clearly understand our organisations strategic vision for at least the next 5 years.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Hand offs'

(17) Our organisation acknowledges that when an idea shows promise and is to be implemented, the individual that had the idea remains involved.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(18) If one of my ideas was to be implemented, I'm confident I would remain involved and not just hand it over to some one else.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Boundaries

(19) Our organisation acknowledges that assisting other departments with time and resources may sometimes be required.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(20) I believe suitable measures are in place to allow for inter-department support.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Community

(21) A sense of community and mutual support is acknowledged as being important within our organisation.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(22) I feel a strong desire to make contributions to this organisation and to the people in it.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Customers

(23) A focus on how to serve our customers or stakeholders better is fundamental within our organisations philosophy, or way of thinking.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(24) Internal politics or 'defending one's turf' does not hinder our focus on serving the customer.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Transparency

(25) Our organisation acknowledges that information should be suitably shared and made available throughout the organisation.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(26) I believe that information is suitably shared and made accessible throughout our organisation

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Treatment

(27) Our organisation acknowledges the importance of respecting others, irrespective of their position.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(28) There is genuine concern and respect for all employees, backed up by supportive actions.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Capacity

(29) Please rate (out of 100) how **innovative** you perceive your organisation to be.

0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
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### Motivation

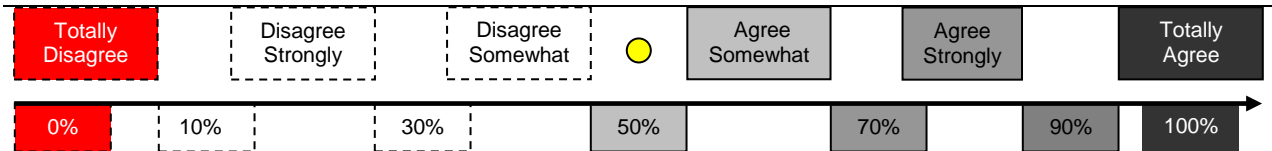
(30) Our organisation acknowledges the importance of employee motivation.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(31) I generally feel motivated to do my job as best I can.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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Your past half way, please continue on the next page...



### Bureaucracy

(32) Our organisation acknowledges the negative effect that too much 'red tape' or bureaucracy can have on productivity.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(33) Our organisation has suitable procedures in place that don't leave me 'caught up in red tape' or waiting for permission to act.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Politics

(34) Our organisation acknowledges the detrimental effect that internal politics can have on productivity.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(35) Organisational politics within our organisation doesn't effect how productive I am.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Communication

(36) Our organisation acknowledges the importance of a clear line of communication between all functions and levels of hierarchy within our organisation.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(37) I don't feel my ability to work productively is hindered by communication problems.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Goals

(38) Our organisation acknowledges the importance of goal setting in the workplace for each employee.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(39) I'm very conscious of my short and long term goals within our organisation.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Review

(40) Our organisation acknowledges that a review process to evaluate job suitability and performance is important.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(41) I feel comfortable that my job is appropriately reviewed and that it is not too difficult or easy for me.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Feedback

(42) Our organisation acknowledges the importance of providing constructive feedback to its employee's.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(43) I receive suitable levels of feedback to insure my job can be completed efficiently and effectively.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Training

(44) Our organisation acknowledges that staff training is important to minimise the gap between a persons abilities, and their work requirements.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(45) I'm confident that suitable staff training programs are in place, insuring I can do my job as productively as possible.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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### Staff Development

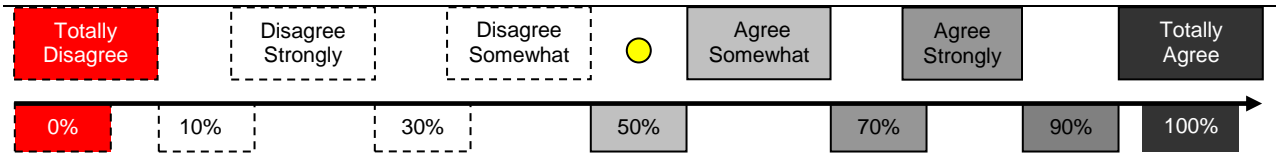
(46) The development of staff for future operations is acknowledged as being important within our organisation.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(47) I'm confident that suitable staff development programs are in place for me to increase my workplace ability for the future.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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**Time**

(48) Our organisation acknowledges the importance of using work time productively.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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(49) Our organisation has the appropriate systems in place to insure that our work time is used efficiently and productively.

0% True	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% True
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**Capacity**

(50) Please rate (out of 100%) how **productive** you perceive your organisation to be.

0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
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*Thank you for completing this questionnaire!*

## Appendix B

### Letter to Organisations requesting permission to conduct a survey.

Hello,

I'm writing to express my interest in conducting a survey within your organisation in order to fulfil the research component of a Masters in Management thesis.

My research is concerned with the concept of '*intrapreneurship*'. Intrapreneurship relates to the cultivation of innovative and productive practices within the workplace.

By participating, your organisation will attain a snap shot view of its capacity to acknowledge and apply factors that scholarly texts regard as becoming more important within a changing marketplace.

I propose to have your I.T or H.R department email a webpage link to staff members, asking them to take part in a 6-8 minute, single answer internet based questionnaire. Staff members would access the web page, where they'll find information regarding to the study.

Participation is voluntary and will remain entirely anonymous. At no stage will participants need to disclose personal or identifiable information. The name of your organisation will also remain anonymous. Instead your organisation will have a coded letter applied to it within any discussion papers.

In conclusion, this research will offer useful and timely information to your organisation regarding its ability to remain adaptable in a changeable market place. There is a vast amount of research and theory about how to facilitate an innovative and productive workplace. However it is questionable how much of this is actually being acknowledged or applied. This research will test for the application of such theory in a user-friendly and non-obtrusive way, while providing participating organisations benchmarks for future improvement.

If your organisation would be willing to discuss this proposal further, please email the researcher at [chris.burgess@xtra.co.nz](mailto:chris.burgess@xtra.co.nz) . Or, if you have any further questions, please don't hesitate to contact the supervisor or the researcher.

Thank you for your time.

Sincerely

Chris Burgess  
Masters in Management Student – Massey University  
[Chris.burgess@xtra.co.nz](mailto:Chris.burgess@xtra.co.nz)  
Phone: 021 537116

Supervisor  
Dr Andrew Cardow  
Dept of Management & International Business – Massey University  
[a.cardow@massey.ac.nz](mailto:a.cardow@massey.ac.nz)  
Phone: (09) 414 0800, ext 9582



## Appendix C

### 87 Intrepreneurial factors considered for testing

Intrapreneurial testing factors / variables	Hill (2003)	Pinchot & Pellman (1999)	Knight (1997)	Kuratko, Montagno & Hornsby (1990)	Eesley & Longnecker (2006)	Carrier (1996)	Maes (2003)	Antoncic & Hisrich (2001)
<b>Organisational actions</b>								
Rate of new service / product introductions	*		*					
Number of new / product introductions as compared to competitors	*		*					
Number of additional services	*							
<b>Motivation / desire to seek out untapped opportunity</b>	*							
Emphasis on new and innovative products and services	*							
Employee encouragement to do things in new and different ways	*							
Emphasis on continuous improvements in product delivery	*							
<b>Organisational vision and strategic intent is made clear</b>	*	*			*	*	*	*
Adaption of technologies developed by other companies or industries								*
<b>Employee</b>								
Ability to achieve objectives with few guidelines	*							
Comfort with breaking from tradition	*							
Refusal not to give up	*							
Enthusiasm to tackle problems	*							
<b>Enthusiasm to improve things</b>	*							
Excitement for new opportunities	*							
Ability to recover from a mistake	*			*				
Positive attitude	*							
<b>Employee initiative encouragement</b>	*	*		*				
<b>Systems</b>								
<b>Level of bureaucracy</b>	*							
resource sharing ability	*						*	
<b>Boundary crossing (supporting others outside normal role)</b>		*						
Workplace flexibility	*			*			*	*
Self selection of project teams		*						
<b>Suggestions of lower level employees are valued</b>	*							
Permission needed to do something differently	*							
job design flexibility	*			*				
Employee influence over job design	*							
<b>Decentralised decision making</b>	*	*		*				
Lines of authority	*							
<b>Cross-functional informal contact</b>	*							

Empowered <b>cross-functional teams</b>	*			*				
Project ' <b>hand-offs</b> ' following idea creation	*							
Choice of internal suppliers	*							
Internal critique of innovation / performance	*							
Problem solving time with co-workers				*				
Lines of communication are suitably open				*				
Simplicity of Organisational structures						*		
Identification of potential intrapreneurs						*		
Business unit autonomy / independence							*	*
Employee training								*
Coordination of activities among business units to enhance innovation								*
Procedures to solicit employee ideas for innovations								*
Procedures to examine new innovative ideas								*
Designation of an idea champion								*
<b>Availability</b> of resources for experimental projects								*
<b>Rewards</b>								
Value based compensation	*			*				
Earning potential	*					*		
Support for <b>idea exploration</b> that could benefit the organisation	*	*		*	*			
Evaluation of innovative / risky and proactive behaviour	*							
Criteria for supporting new initiatives	*			*				
Financial rewards for intreprenurial behaviour	*	*		*	*	*	*	*
Non-financial rewards for intreprenurial behaviour	*	*			*	*		*
<b>Recognition</b> for innovative ideas and suggestions	*	*			*			
<b>Leadership</b>								
Tolerance of <b>Risk</b>	*	*		*	*	*		*
Encouragement for calculated risks				*				
Charisma	*							
Ability to brainstorm	*							
Ability to examine new market opportunities	*							
Enthusiasm / <b>Motivation</b>	*							
Goal Setting	*							
Encouragement of open discussion	*				*			
entrepreneurial philosophy	*							
flexibility	*							
Top management experience with innovation				*			*	
New ideas are <b>followed up</b>					*			
Ability to trust employees and suitably delegate						*		
<b>Organisational Culture</b>								
Organisational vision	*	*			*	*		
Teamwork encouragement / organisational community	*	*		*	*	*	*	
<b>Encouragement</b> of different views	*				*			
How management treats employees	*							
How innovation is considered	*							
Expanding employee capabilities	*							
Tolerance of mistakes		*		*		*		

<b>Tolerance</b> of failure	*	*	*	*
<b>Support</b> for new ideas	*	*	*	*
Employee <b>sponsorship</b> (support, coach, protect, find resources)		*	*	
If its not broken, why fix it philosophy	*			
Desire for <b>incremental</b> improvements				
Attention on the future / <b>foresight</b>		*		
<b>Focus</b> on customers	*	*		
<b>Transparency</b> and <b>truth</b>		*		
Good <b>treatment of people</b>		*		
Social, environmental and ethical responsibility		*		
Avoiding the home run philosophy		*		
Mistakes treated as learning experiences			*	
Avoidance of turf protection / <b>political activity</b>			*	*
<b>Support and engagement</b> of employees at all levels				*
*Yellow represents the variables selected to be researched				

## Appendix D

### 38 Intrapreneurial factors considered for testing

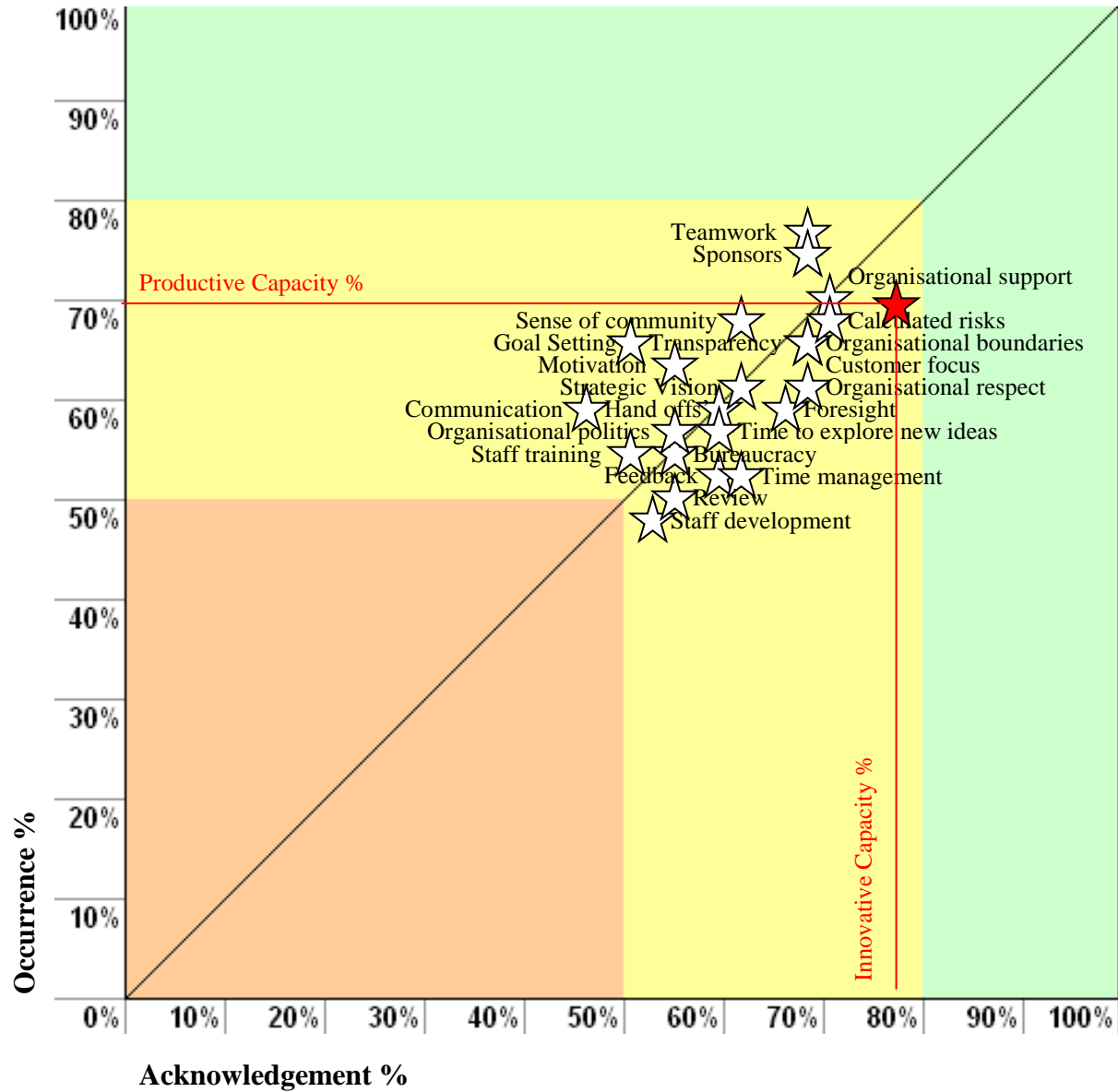
Intrapreneurial testing factors / variables	Hill (2003)	Pinchot & Pellman (1999)	Knight (1997)	Kuratko, Montagno & Hornsby (1990)	Eesley & Longnecker (2006)	Carrier (1996)	Maes (2003)	Antoncic & Hisrich (2001)
<b>Motivation / desire</b> to seek out untapped opportunity	*							
Organisational <b>vision</b> and strategic intent is made clear	*	*			*	*	*	*
Enthusiasm to improve things	*							
Employee <b>initiative</b> encouragement	*	*		*				
Level of <b>bureaucracy</b>	*							
Boundary crossing (supporting others outside normal role)		*						
Suggestions of lower level employees are valued	*							
Decentralised decision making	*	*		*				
Cross-functional informal contact	*							
Empowered <b>cross-functional teams</b>		*			*			
Project ' <b>hand-offs</b> ' following idea creation		*						
Internal critique of innovation / performance		*						
Lines of communication are suitably open					*			
Employee training								*
<b>Availability</b> of resources for experimental projects								*
Support for <b>idea exploration</b> that could benefit the organisation	*	*		*	*			
Evaluation of innovative / risky and proactive behaviour	*							
Financial rewards for intrapreneurial behaviour	*	*		*	*	*	*	*
Non-financial rewards for intrapreneurial behaviour	*	*			*	*		*
<b>Recognition</b> for innovative ideas and suggestions	*	*			*			
Tolerance of <b>Risk</b>	*	*	*	*	*		*	*
Encouragement for calculated risks				*				
Enthusiasm / <b>Motivation</b>	*							
Goal Setting	*							
New ideas are <b>followed up</b>					*			
Organisational vision	*	*			*	*		
Teamwork encouragement / organisational community	*	*		*	*	*	*	
How management treats employees	*							
<b>Tolerance</b> of failure	*	*		*	*			
<b>Support</b> for new ideas	*	*		*	*			
Employee <b>sponsorship</b> (support, coach, protect, find resources)		*		*				
Desire for <b>incremental</b> improvements		*						
Attention on the future / <b>foresight</b>		*						
<b>Focus</b> on customers	*	*						
<b>Transparency</b> and <b>truth</b>		*						
Good <b>treatment of people</b>		*						
Avoidance of turf protection / <b>political activity</b>				*	*			
<b>Support and engagement</b> of employees at all levels					*			

## Appendix E

### Graphical illustration of each organisations intrapreneurial factor measurement

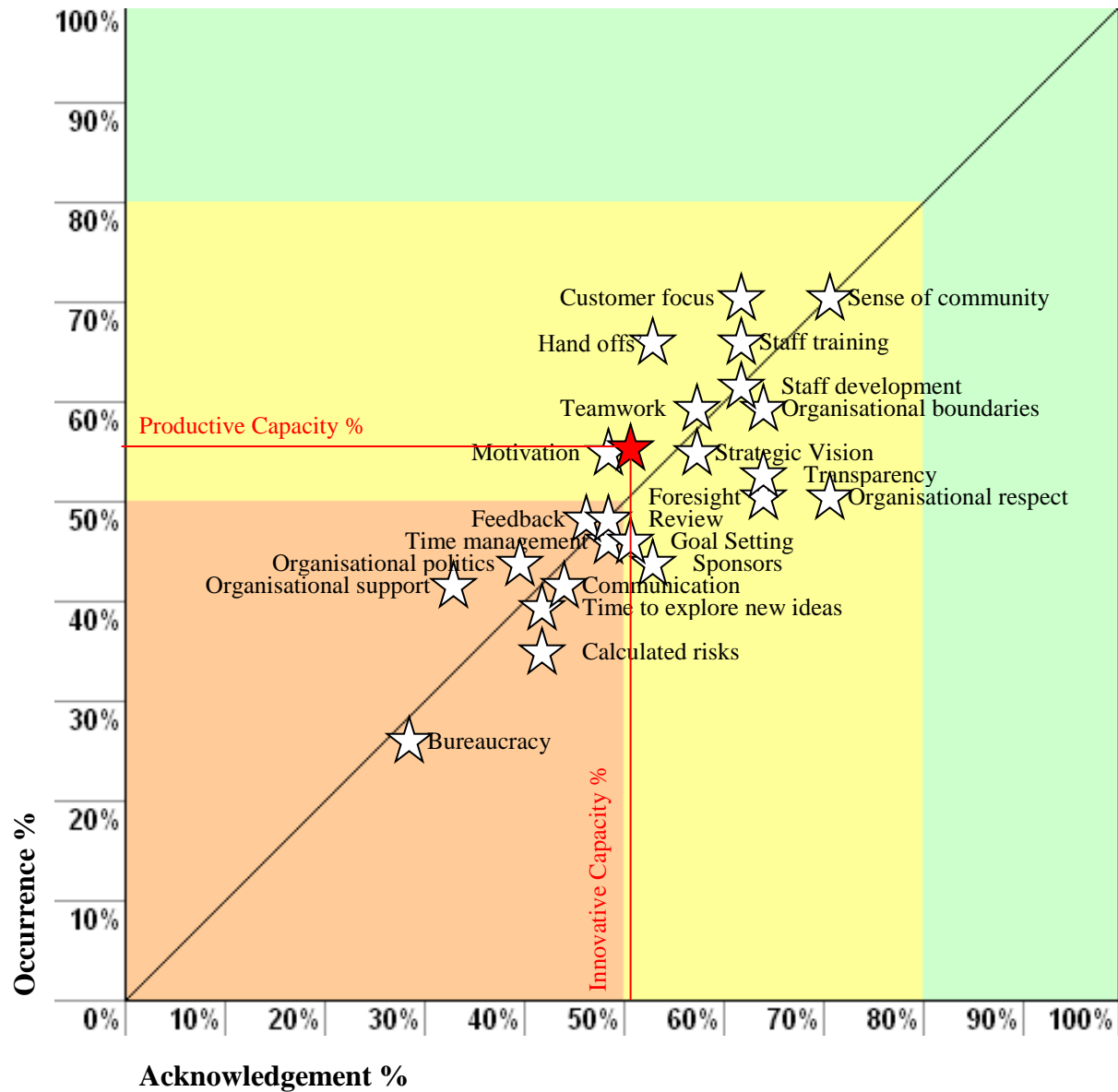
#### Organisation A

Intrapreneurial Factor Measurement: Engineering



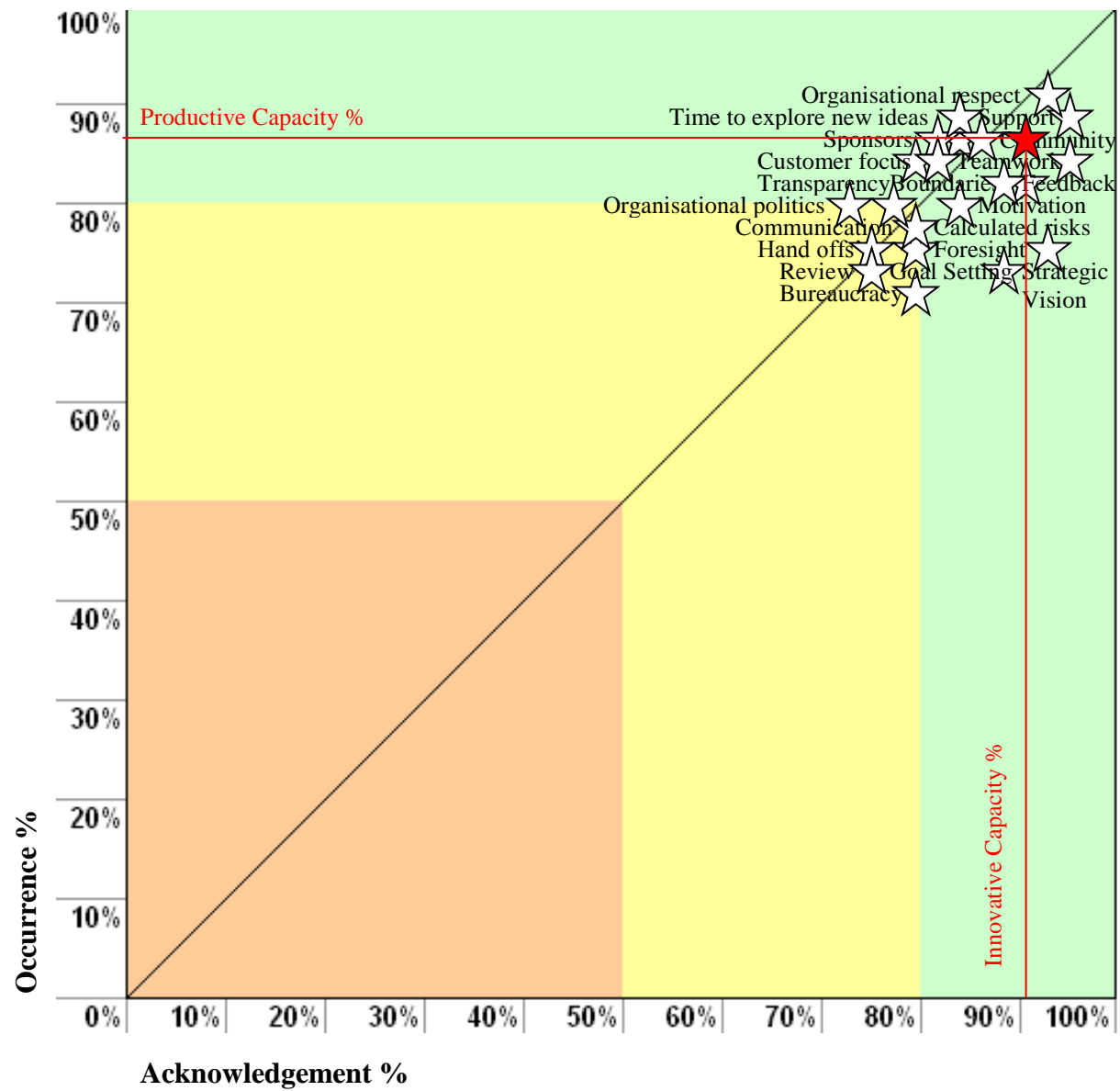
## Organisation B

Intrapreneurial Factor Measurement: Government department



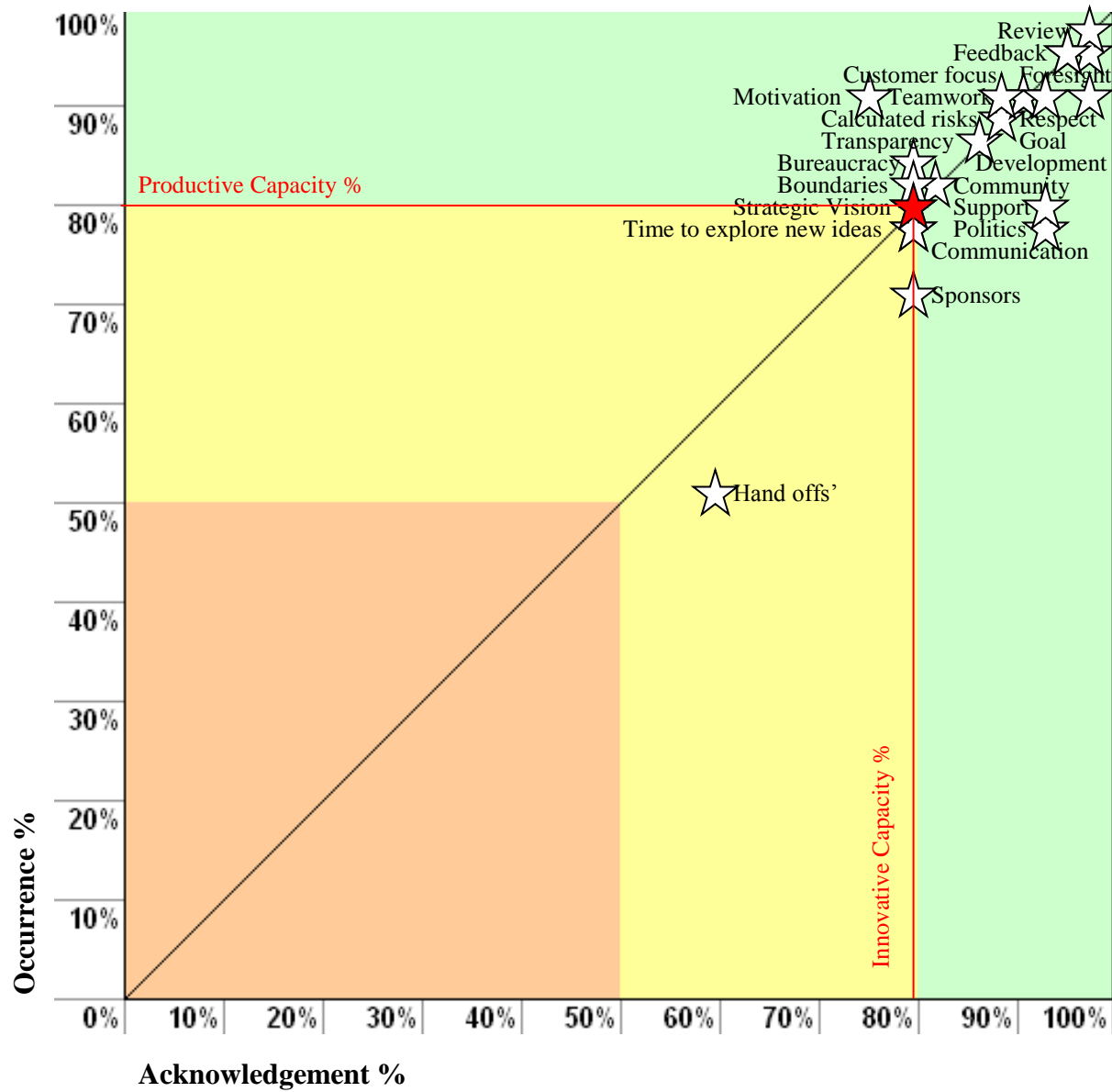
## Organisation C

Intrapreneurial Factor Measurement: Telecommunication



## Organisation D

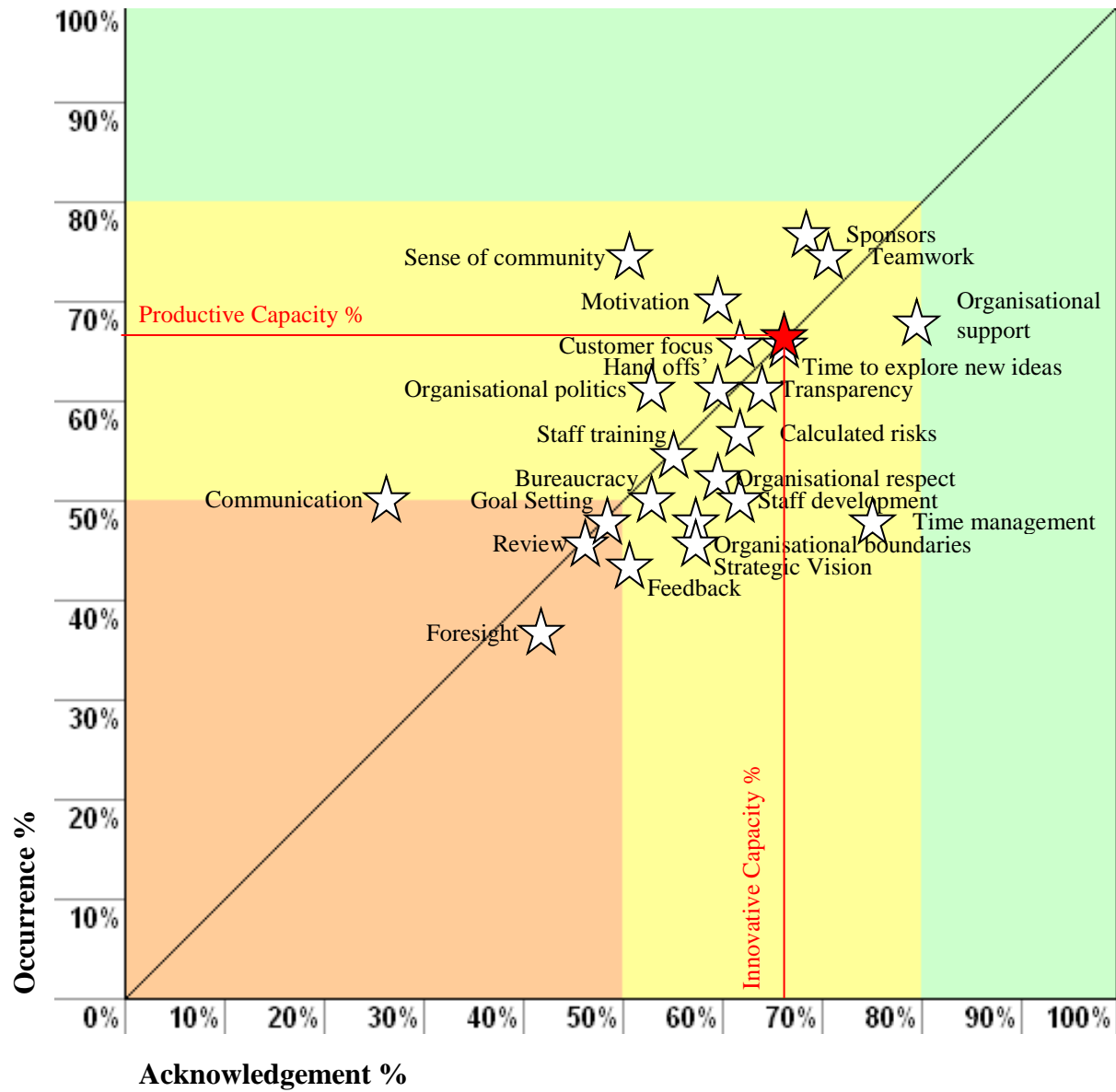
Intrapreneurial Factor Measurement: Finance Company





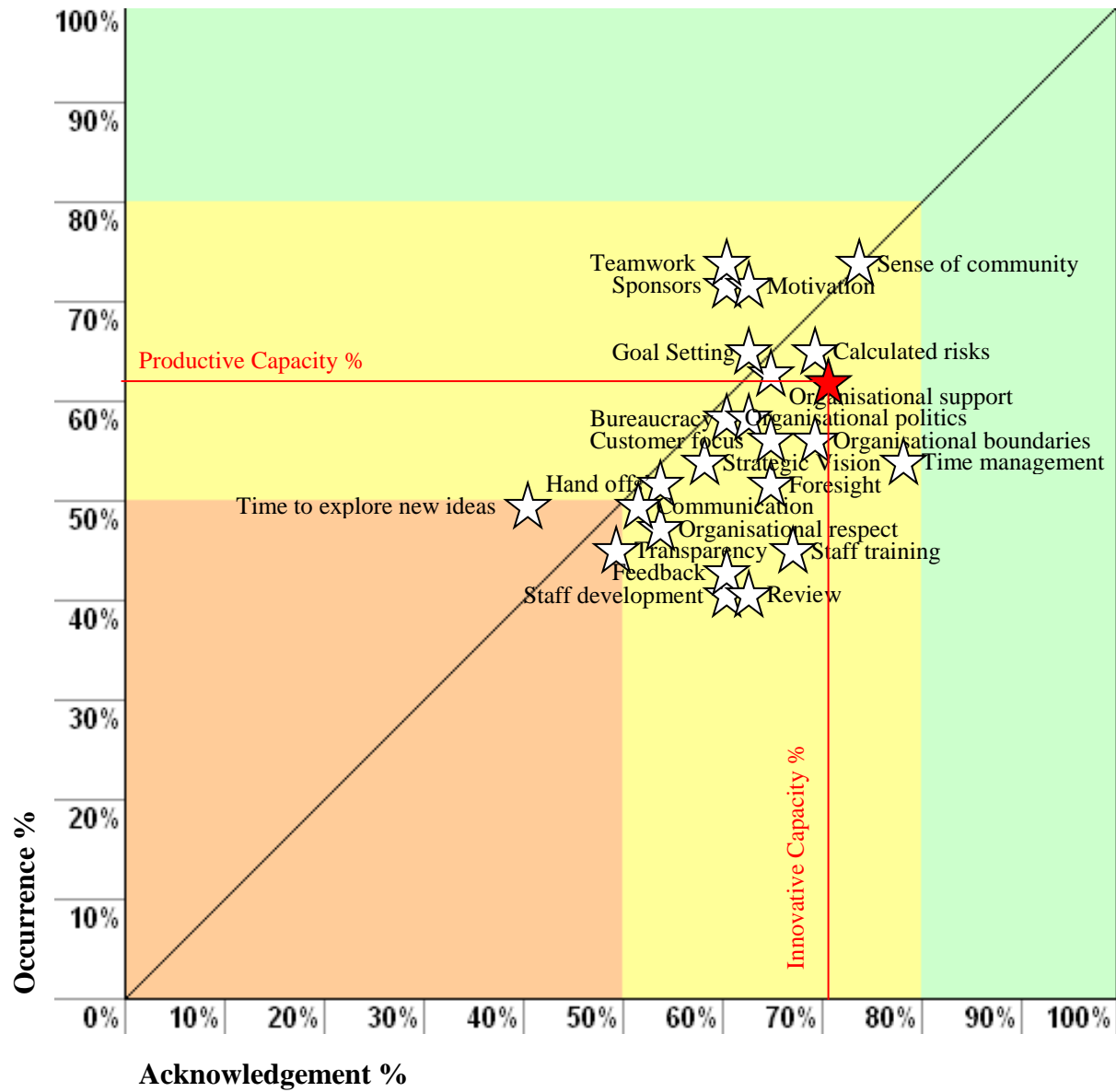
## Organisation E

Intrapreneurial Factor Measurement: Manufacturing



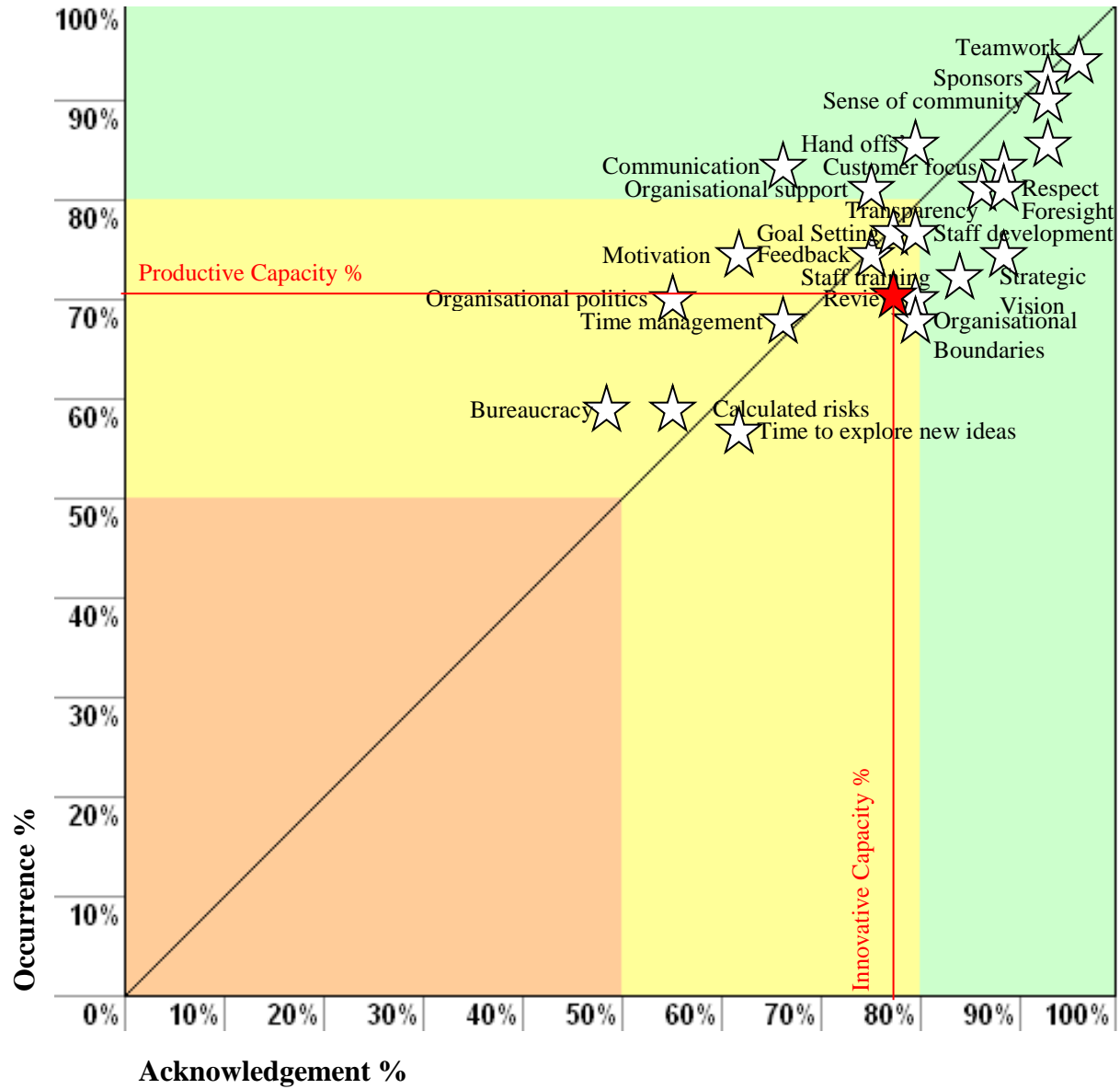
## Organisation F

Intrapreneurial Factor Measurement: Manufacturing



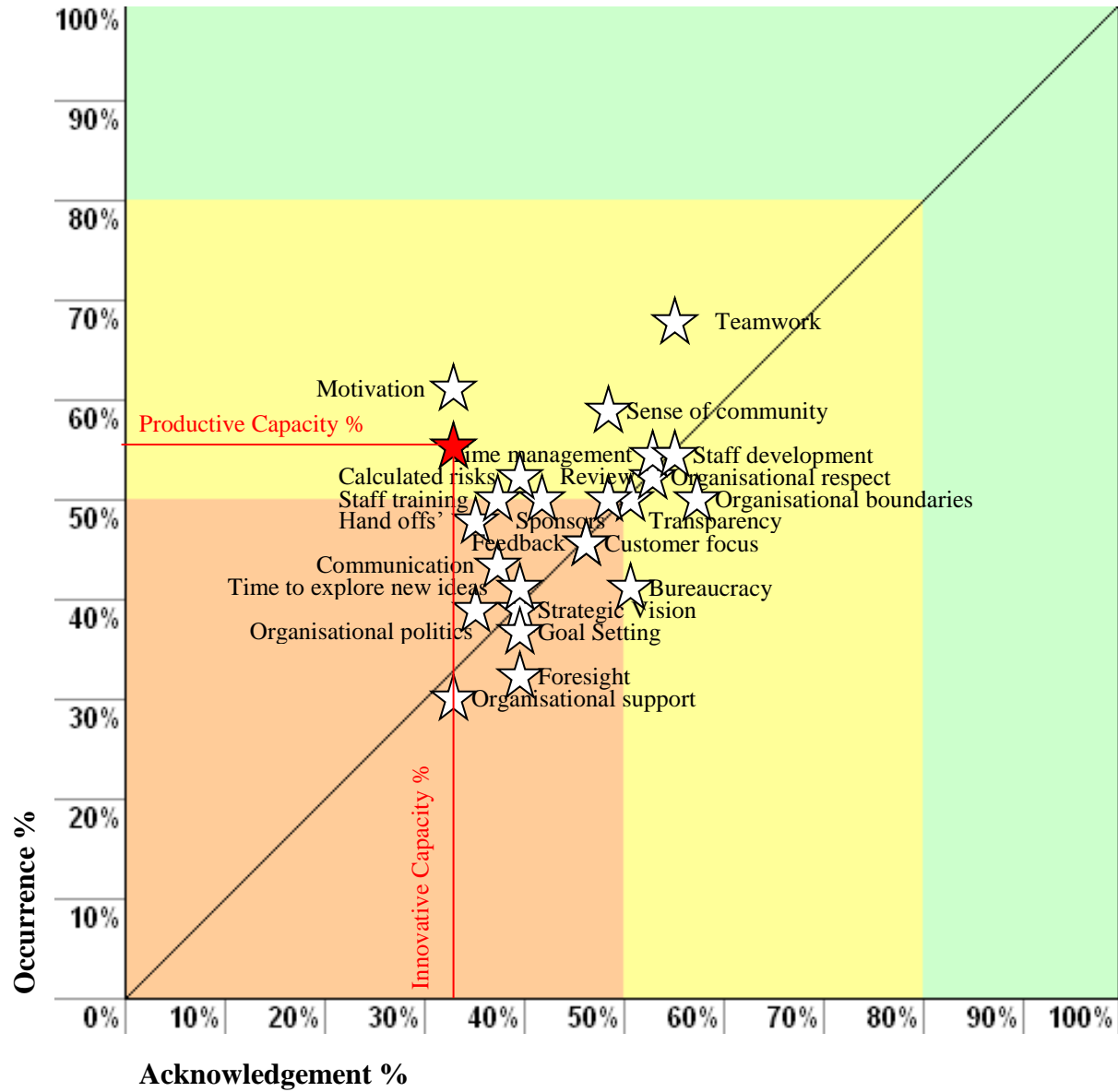
## Organisation G

Intrapreneurial Factor Measurement: Education



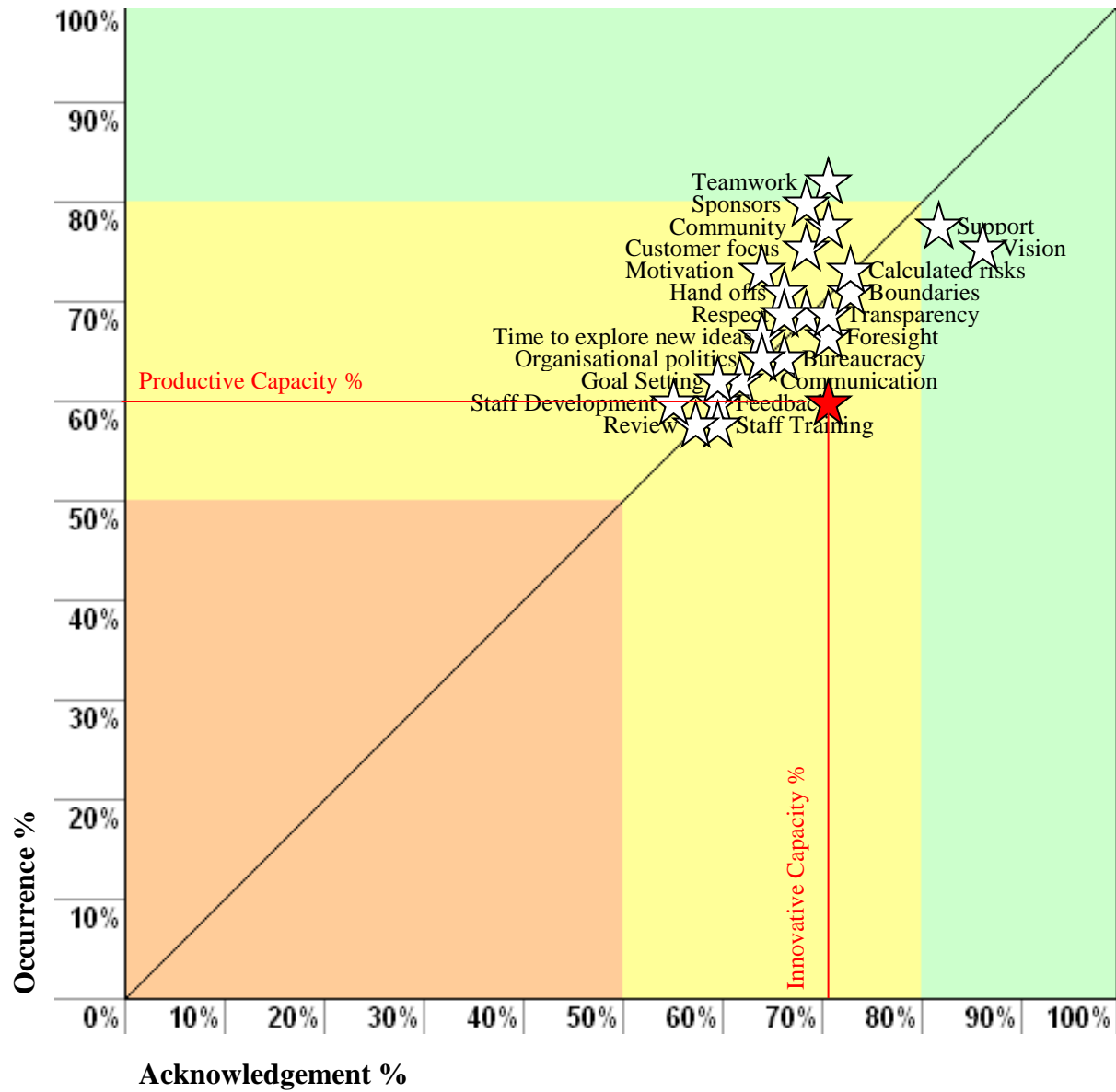
## Organisation H

Intrapreneurial Factor Measurement: Legal



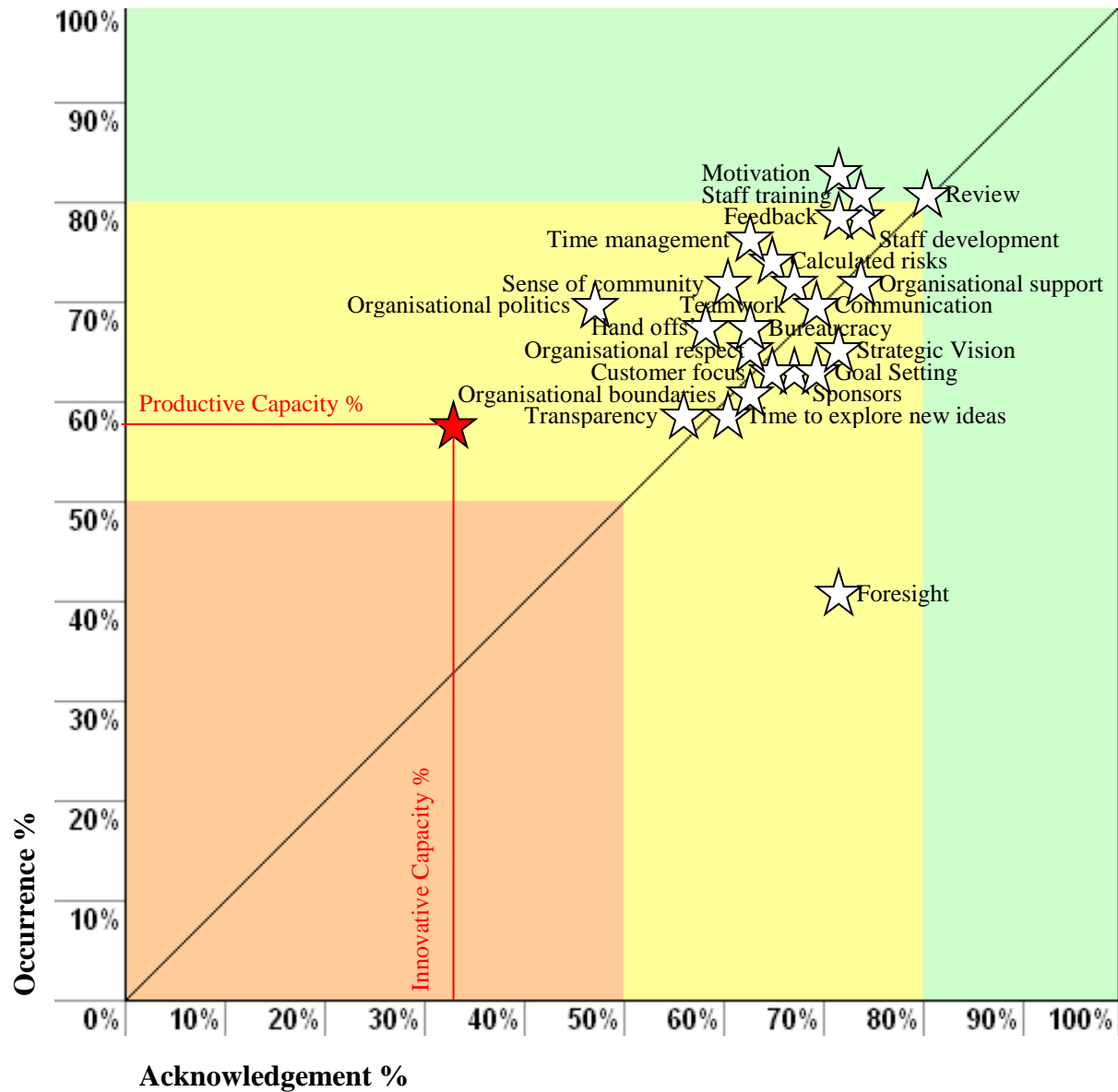
## Organisation I

Intrapreneurial Factor Measurement: Manufacturing



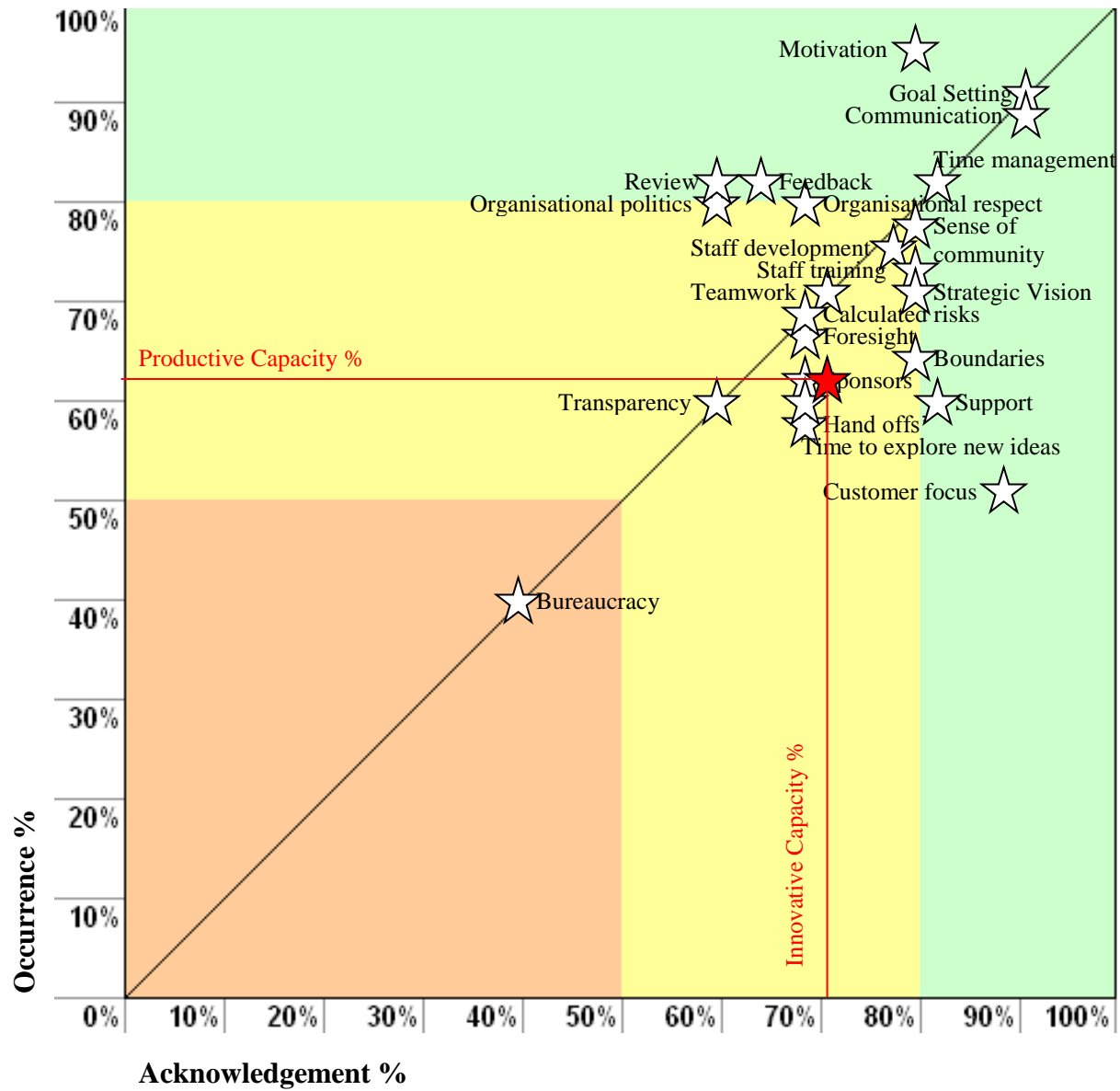
## Organisation J

Intrapreneurial Factor Measurement: Manufacturing



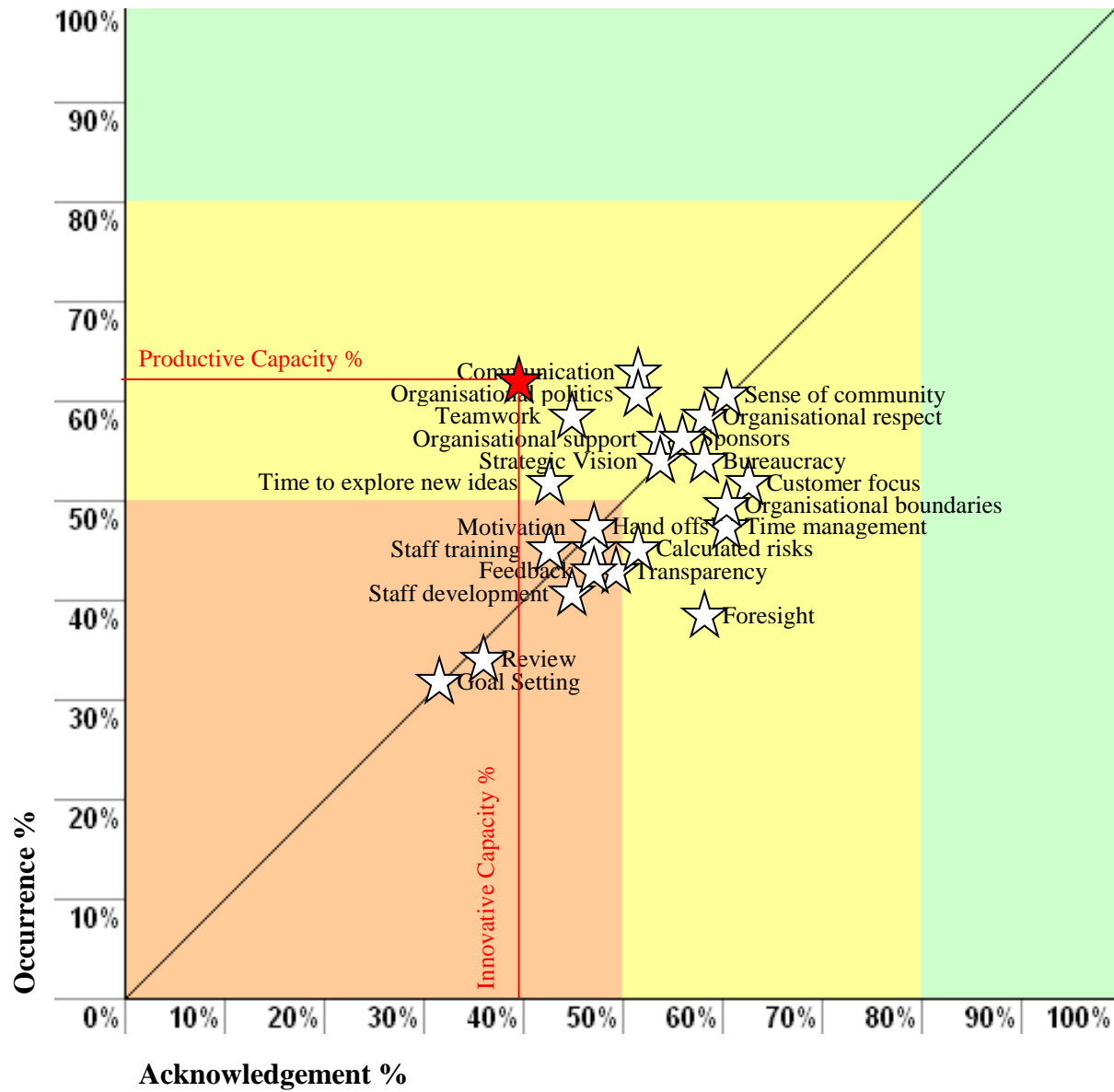
## Organisation K

Intrapreneurial Factor Measurement: Manufacturing



## Organisation L

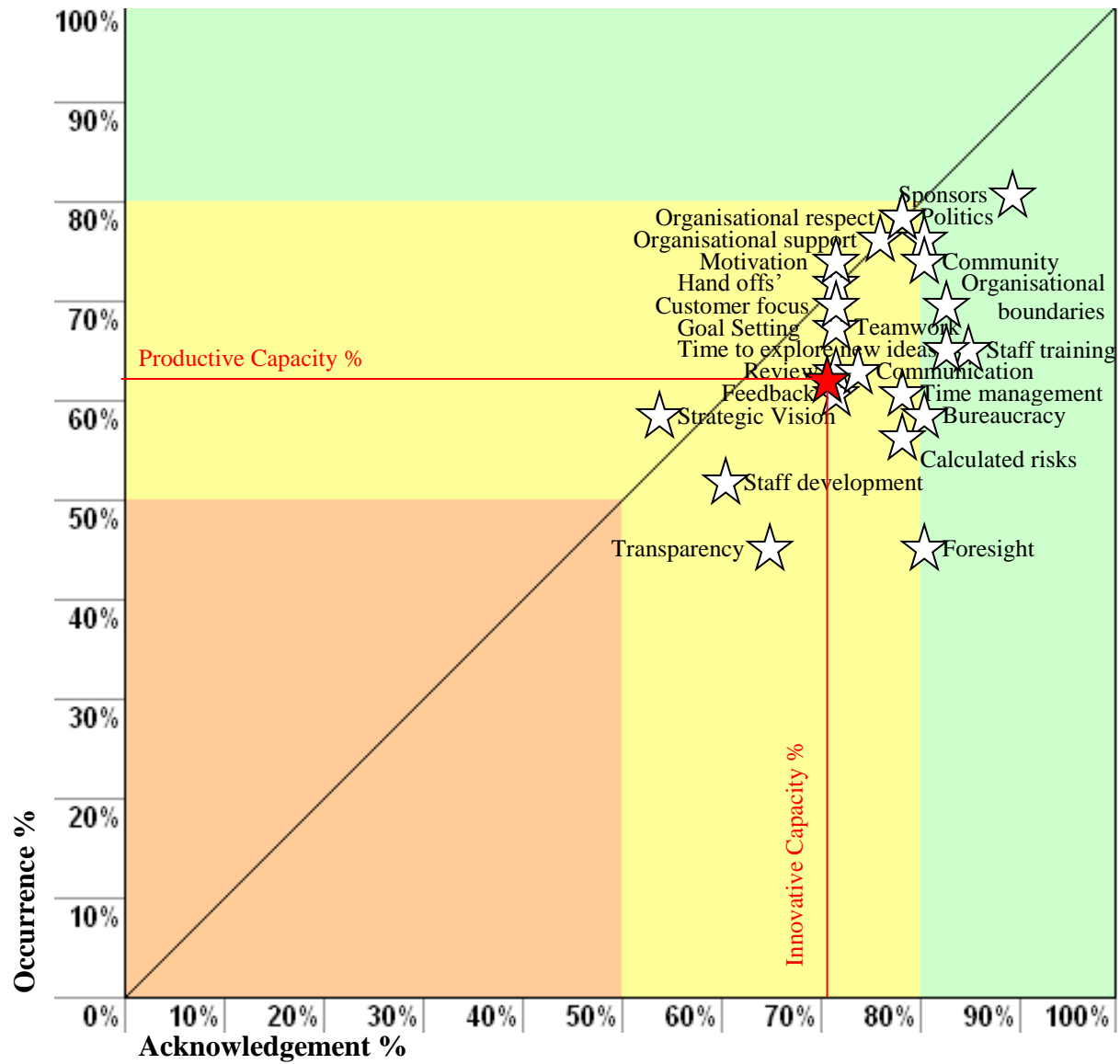
Intrapreneurial Factor Measurement: Manufacturing





## Organisation M

Intrapreneurial Factor Measurement: Architects



## Organisation N

Intrapreneurial Factor Measurement: Bank

