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Developing a conceptual framework of strategic entrepreneurship

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Abstract

Purpose – This paper aims to examine the integration of entrepreneurship and strategy to develop a conceptual framework of strategic entrepreneurship. The framework is developed through an analysis of theory and refined through an examination of practice.

Design/methodology/approach – This framework is considered in the context of potentially entrepreneurial and strategic activity undertaken by 12 of the 17 state-owned enterprises (SOEs) operating in New Zealand in 2006-2007. Based on a review of documents, observation, and interviews with SOE executives, cases of 12 SOE activities were analysed to compare and contrast strategic entrepreneurship in practice.

Findings – The findings reveal distinct elements within the four activities classified as strategic entrepreneurship, activities, such as leveraging from core skills and resources from a strategic perspective, and innovation from an entrepreneurial perspective.

Originality/value – This study is one of the first to examine the nature of strategic entrepreneurship in practice and the associated financial returns.

Keywords Entrepreneurs, New Zealand, Management strategy, Public sector organizations

Paper type Research paper

Introduction

The importance and potential benefits of entrepreneurship are widely cited (Drucker, 1985; Gartner, 2001; Shane, 2003). Yet entrepreneurship's dynamic and volatile nature continues to pose obstacles for organisations seeking these benefits without wanting to assume the associated risks. Wealth creation (Hitt *et al.*, 2001), competitive advantage (Ireland *et al.*, 2001), product leadership (Porter, 1980), and financial and economic gain (OECD, 1998) are some of the many benefits referred to in the context of entrepreneurship. Entrepreneurship has also been associated with seizing opportunity (Kirzner, 1979), swift action (Bhide, 1994), and rapid economic change (Barth, 1969). However, not all firms are able to transform entrepreneurial activity into financial gain (Lumpkin and Dess, 1996). Accordingly, a more structured or strategic approach to entrepreneurship has been examined in a bid to achieve positive organisational outcomes such as wealth creation.

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The combination of entrepreneurship and strategic management has long been acknowledged as an important pathway for financial performance and growth (Ansoff, 1965; Burgelman, 1983; Mintzberg, 1973). Burgelman (1983) refers to the need for both diversity and order, suggesting entrepreneurial activity provides such diversity; strategy provides the necessary order. Venkataraman and Sarasvathy (2001) argue that entrepreneurship and strategy are conceptually inseparable: "two sides of the same coin" (p. 651), highlighting the complementary or interdependent nature of the two concepts. Only recently however, has research begun to consider the integration of these concepts. Hitt *et al.* (2001), presented the notion of strategic entrepreneurship as the intersection of entrepreneurship and strategic management. Since then, a small number of studies have explored and developed strategic entrepreneurship from concept to construct (Hitt *et al.*, 2001; Ireland *et al.*, 2003; Ireland and Webb, 2007; Ketchen *et al.*, 2007). Yet, literature on this topic acknowledged as important for both practitioners and policy-makers remains in its infancy (Kuratko and Audretsch, 2009). Research on strategic entrepreneurship is essentially theoretical, and its developmental nature has resulted in various inconsistencies in the models presented.

Drawing on entrepreneurship and strategy literature (in particular, the resource-based view), this paper presents a revised conceptual framework of strategic entrepreneurship. This framework is considered in the context of 12 of the 17 state-owned enterprises (SOEs) operating in New Zealand – recognised as a prime site for new public management (Hood, 1991). Commercial and profitable operations are expressly required of SOEs under the State-Owned Enterprise Act 1986; and entrepreneurial activity has been expressly encouraged in the SOE context (Mallard, 2006). Further, several SOEs have been publicly recognised as leaders in their respective industries at both a national and an international level in view of their entrepreneurial and strategic activity. Hence, a review of potentially entrepreneurial and strategic activity in these organisations provides the opportunity to consider strategic entrepreneurship in practice, and identify elements fundamental to this concept. The research question: "What elements are central to strategic entrepreneurship?", is examined in the context of New Zealand's SOEs in the manner outlined previously. Discussion focuses on associated financial returns. The contributions of this study are to the growing strategic entrepreneurship literature in particular, but also have relevance to public sector entrepreneurship advocates in policy and practice.

A review of strategic entrepreneurship frameworks

Strategic entrepreneurship was introduced as the intersection of entrepreneurship and strategy (Ireland *et al.*, 2001), and has subsequently evolved to become the integration of these concepts (Hitt *et al.*, 2001), a combination of exploration and exploitation (Ireland *et al.*, 2003). As this concept has developed, so too have associated theoretical frameworks, presenting both more detailed analyses, but also inconsistent and changing dimensions.

In foundational work, Ireland *et al.* (2001) identify six domains as central to strategic entrepreneurship: innovation (creating and implementing ideas); networks (providing access to resources); internationalisation (adapting quickly and expanding); organisational learning (transferring knowledge and developing resources); growth (stimulating success and change); and top management teams and governance (ensuring effective selection and implementation of strategies). Activity in these areas, they contend, can be jointly classified as entrepreneurial and strategic. However, there is a strong strategic emphasis, which arguably overlooks themes central to entrepreneurship. These domains were revised by Hitt *et al.* (2001) to include external networks and alliances, resources and organisational learning, innovation and internationalisation. While the two models have similarities (e.g. focus on networks and growth), Hitt *et al.*'s model projects an added emphasis on resources, competencies, and capabilities, thus strengthening the strategic aspects of the model. Nevertheless these models treat the entrepreneurial or discovery aspects lightly, raising questions as to the appropriateness of the frameworks.

Within the literature, three themes can be identified as central to entrepreneurship – innovation and opportunity identification as antecedents, and growth (financial and/or non-financial) as an outcome. Innovation is widely recognised as central to entrepreneurship (Drucker, 1985; Sonfield and Lussier, 1997), with references to creative destruction, novelty, and the importance of introducing something new to the market (Davidsson, 2006; Schumpeter, 1934). Opportunity identification is also promoted as central to entrepreneurship by various researchers (e.g. Bhide, 1994; Kirzner, 1979; Shane, 2003; Stevenson and Jarillo, 1990; Venkataraman and Sarasvathy, 2001), who contend entrepreneurs see opportunity not otherwise identified, or opportunity where others see risk (Sarasvathy *et al.*, 1998). Growth, financial and/or non-financial, is considered a central outcome of entrepreneurship (Drucker, 1985) in numerous contexts such as profit, gain, competitive advantage, recognition, and reputation (McClelland, 1962; Smith, 1776).

The two strategic entrepreneurship models proposed by Ireland *et al.* (2001) and Hitt *et al.* (2001), however, emphasise other themes. Some of these concepts, such as internationalisation and networking, seem questionable. While each model has merit, it is difficult to accept that either one captures the nature of strategic entrepreneurship. A review of strategic entrepreneurship frameworks in practice reinforces these concerns. Given the diverse range of organisations which are recognised as entrepreneurial, it is difficult to conceive that internationalisation (Hitt *et al.*, 2001; Ireland *et al.*, 2001), or collaboration (Hitt *et al.*, 2001) are essential elements of all forms of entrepreneurship. While internationalisation is a valid strategic option for entrepreneurial firms, other options are available to ensure growth (Feeser and Willard, 1990). Further, many entrepreneurs value autonomy, independence, and self-reliance (Burgelman, 1983; Drucker, 1985; Lumpkin and Dess, 1996), prefering to develop an idea or product alone, rather than through external collaboration. There is also concern regarding the association between strategic entrepreneurship and wealth creation (Ireland *et al.*, 2003). A review of entrepreneurial activity in practice shows clear variation in the financial outcomes of such activity, with incidences of both financial gain and loss (Davidsson, 2006; Luke *et al.*, 2007). Thus, to draw a relationship between strategic entrepreneurship and financial gain, without condition or exclusion, suggests the association is over-simplified.

In 2003, a subsequent conceptual development introduced by Ireland *et al.* revised the dimensions central to strategic entrepreneurship to include an entrepreneurial mindset, entrepreneurial leadership and culture, strategic management of resources, and applying creativity to develop innovations. The integration of these dimensions, Ireland *et al.* (2003) contend, results in wealth creation. This model reflects a significant change in the direction of the literature, addressing many of the criticisms raised with respect to previous research on strategic entrepreneurship. Key differences include the four key dimensions of strategic entrepreneurship, being an entrepreneurial mindset (encompassing insight, alertness, and flexibility to use appropriate resources), entrepreneurial culture and leadership (where innovation and creativity are expected), strategic management of resources (including financial, human, and social capital), and applying creativity to develop innovations (both radical and incremental). Thus, Ireland *et al.* (2003) present a model, which reflects a more balanced view of strategic entrepreneurship, encompassing both entrepreneurial and strategic foundations. Arguably, however, the model lacks simplicity and clarity regarding how organisations may employ strategic entrepreneurship in practice. References to structuring the resource portfolio and bundling resources to exploit entrepreneurial opportunities offer little guidance on how strategic entrepreneurship may actually be achieved.

More recently, developments in strategic entrepreneurship literature have moved away from models and focused on specific conceptual details. In 2007, Ireland and Webb emphasised strategic entrepreneurship as a balance between opportunity-seeking (exploration) and advantage-seeking (exploitation) behaviours, highlighting the importance of continuous innovation. Later that year, Ketchen *et al.* (2007) reinforced the exploration and exploitation balance, promoting collaborative and continuous innovation. In particular, they distinguish between large and small firms as having different strengths and weaknesses (e.g. more resources in large firms; more flexibility in small firms), and highlight the liability of smallness. More work in this tradition continues to emerge with new models being presented (Kraus and Kauranen, 2009) and explored in the context of small firms (Kraus *et al.* 2011) for example. Table I summaries the main dimensions of the strategic entrepreneurship frameworks presented from 2001 to 2009, highlighting the developments from concept to construct.

Hence, while strategic entrepreneurship has been refined and developed, the emphasis remains theoretical, with little practical support or guidance. Further, concern emerges with respect to the need for alliances and collaborative innovation, and the practicality and viability of continuous innovation given the struggle some organisations face to be innovative at all. Thus a gap remains for the development of a more lucid and perhaps pragmatic framework of strategic entrepreneurship. How can organisations, for example, effectively bundle resources to exploit entrepreneurial opportunities in practice? For those organisations, which have undertaken strategic entrepreneurship, precisely how was it achieved and what did it involve?

Re-examining strategic entrepreneurship as the integration of entrepreneurship and strategy

Three elements were identified previously as central to entrepreneurship, namely innovation, identifying opportunity, and growth. A review of the strategy literature, which specifically incorporates an entrepreneurial focus, also reinforces the importance of these elements in a strategic context (Bhide, 1994; Ireland *et al.*, 2003; Mintzberg and Waters, 1982). Yet the question remains as to what characterises strategic entrepreneurship, as the integration of entrepreneurship and strategy.

Entrepreneurship has been associated with introducing something new to the market (Davidsson, 2006), dynamic, and destructive activity (Bhide, 1994; Kirzner, 1979; Schumpeter, 1934). Yet strategy is often associated with a more structured, planned, and deliberate approach towards the effective use of resources for competitive advantage and wealth creation (Eisenhardt *et al.*, 2000; Mintzberg, 1987). Thus, a more

Table I.
Comparison of strategic entrepreneurship frameworks

	Ireland *et al.* (2001)	Hitt *et al.* (2001)	Ireland *et al.* (2003)	Ireland and Webb (2007)	Ketchen *et al.* (2007)	Kraus and Kauranen (2009)
Innovation	Innovation	Innovation	Applying creativity developing innovation	Continuous innovation	Collaborative innovation Continuous flow Networks	
Networks/alliances	Networks Access to resources	External networks Alliances		Variations in organisational activity, e.g. Alliances Mergers and acquisitions		
Internationalisation	Internationalisation Expansion	Internationalisation				
Resources/ organisational learning	Organisational learning Transfer of knowledge Developing resources	Resources Organisational learning	Managing resources strategically Bundling resources Leveraging capabilities	Organisational structure Decentralised routines Flexibility Learning resources		Resources and capabilities
Growth	Growth Stimulates success and change					
Entrepreneurial leadership	Top management teams and governance Effective strategies				Managerial mindset for broader capabilities Distinction between small vs large firms	Entrepreneur
Entrepreneurial culture			Entrepreneurial culture and leadership Innovation Risk-taking Vision	Organisational culture Valuing experimentation Acceptance of uncertainty Tolerating failure		Organisational structure (as a reflection of culture)
Entrepreneurial mindset			Entrepreneurial mindset Recognising opportunity Flexibility to use appropriate resources	Balancing opportunity-seeking and advantage-seeking behaviour Emphasis on research and development	Balancing opportunity-seeking and advantage-seeking behaviour Must do both	Environment (as a reflection of opportunities identified)
Strategy						Strategy

structured approach to entrepreneurship potentially offers the benefits of entrepreneurship without having to assume the associated risks. Creativity remains central, but focused through leveraging from existing skills and resources. Another distinction between entrepreneurship and strategy is the focus on resources. Stevenson and Jarillo (1990), emphasise the notion within entrepreneurship that an organisation is not limited by the resources it controls. In contrast, literature on strategy often emphasises the importance of managing, leveraging, and co-ordinating resources appropriate to the organisation's strategy (Sirmon *et al.*, 2007). In the context of strategic entrepreneurship, Ireland *et al.* (2003) and later Ireland and Webb (2007) specifically refer to managing resources strategically as a key dimension of strategic entrepreneurship. However, what that means in practice is less clear.

The development of resources and the resource-based view is also an important foundation within entrepreneurship (Alvarez and Barney, 2001). Theory on core competencies (Prahalad and Hamel, 1990) and dynamic capabilities (Eisenhardt and Martin, 2000) has emphasised resource development and renewal, and reconfiguring competencies to achieve ongoing fit within a changing environment (Thompson, 1999). The application of core strategic skills and resources in an entrepreneurial context focuses on the importance of alertness to opportunities with respect to existing resources (Alvarez and Barney, 2002; Shane, 2003), co-ordination and leverage (Ireland *et al.*, 2003; Ireland and Webb, 2007), and flexibility in using resources creatively. While core skills and resources must be managed and developed, there remains the ongoing task of achieving fit or position between such skills and resources, and the dynamic environment in which an organisation operates (Sirmon *et al.* 2007), or the environment the organisation seeks to create (Hamel and Prahalad, 1994).

Such challenges were also noted in a case study examination of strategic entrepreneurship (Luke and Verreynne, 2006), which highlighted that SOEs faced competitive environments in deregulated markets, in stark contrast to their former operations as government departments which had guaranteed contracts and financial support. In each of the three cases examined, SOEs successfully employing entrepreneurial activity in a strategic context undertook two key processes. First, they developed a expertise in the organisation's core skills or resources. Second, they leveraged from those core skills or resources by transferring and applying that knowledge to create new products, services, or markets.

A proposed framework of strategic entrepreneurship

Based on the previous, a refined framework of strategic entrepreneurship is proposed, comprising two key concepts, summarised in the following:

(1a) Strategic entrepreneurship is a distinct process, founded on bringing something new to the market; a combination of innovation, opportunity identification, and growth.

(1b) Strategic entrepreneurship is a process represented by four key aspects:

- entrepreneurial activity
- applied in the strategic context of businesses
- which develop expertise within their core skills and resources, and
- leverage from that by transferring and applying their knowledge of those skills and resources to new products, services, or markets.

Together, these concepts can be referred to as the foundations *of* strategic entrepreneurship (1a – the central entrepreneurial elements) and the foundations *for* strategic entrepreneurship (1b – the strategic context). The integration of these two concepts constitutes strategic entrepreneurship as a distinct concept.

Managing and maintaining strategic entrepreneurship

As noted by Porter (1980) and more recently Sirmon *et al.* (2007), refinement of both structure and strategy represent a continuous challenge to establish fit within a dynamic business environment and maintain competitive advantage. The ongoing management of strategic entrepreneurship and realisation of financial gain or wealth are considered to be a function of managing both internal forces and the external environment. An important feature of strategic entrepreneurship is maintaining a balance of the core elements, and ensuring they are appropriately applied in a strategic context.

By way of example, innovation by itself does not constitute strategic entrepreneurship, but together with the other core elements it can facilitate strategic entrepreneurship. Luke and Verreynne (2006) identified clear variations in the nature of strategic entrepreneurship in each of the cases they examined. Innovation ranged from incremental (through the gradual development of products within an organisation's existing market) to somewhat radical, bold, and risky (e.g. rapid expansion into a distinctly different and highly competitive market). Similarly, clear variations were also evident in strategic aspects, ranging from a deliberate focus on developing the organisation's business strategy around expansion within its existing market, to unplanned opportunities which evolved through circumstance. Thus, clear differences can be noted in the nature of innovation within strategic entrepreneurship. This notion represents an important departure from Ireland *et al.*'s (2003) framework of strategic entrepreneurship, which specifies a need to balance both incremental and radical innovation within strategic entrepreneurship. Based on the previous, a second concept is presented such that:

(2) The nature of strategic entrepreneurship may take various forms, ranging from incremental to radical innovations, with deliberate to emergent approaches.

This notion raises a number of related issues with respect to the financial benefits of strategic entrepreneurship, as considered in the following.

Strategic entrepreneurship and financial benefits

Within the literature, the association between entrepreneurship and financial or economic benefit is widely accepted (Dess *et al.*, 1997; Ireland *et al.*, 2001; Reynolds *et al.*, 2004). A more deliberate approach to entrepreneurial activity suggests the potential for enduring benefits and recurring rather than one-off or sporadic profits within a business (Venkataraman and Sarasvathy, 2001). Essentially, however, associations between strategic entrepreneurship and financial benefits such as wealth creation remain focused on conceptual contributions (Ireland *et al.*, 2003).

However, not all research concurs that entrepreneurial processes produce positive financial benefits (e.g. Dess *et al.*, 1997; Verreynne and Meyer, 2007)[1]. Morris and Sexton (1996), suggest performance differences arising from entrepreneurial activity are attributable to a firm's entrepreneurial orientation or entrepreneurial intensity, and refer to frequency and degree variables as determinants of entrepreneurial intensity. Mintzberg (1991) and Venkataraman and Sarasvathy (2001) highlight the importance and ongoing task of managing activities such as entrepreneurial ventures to realise and sustain successful performance and financial reward. Mintzberg (1991) emphasises responding to changes in the external environment, maintaining a balance of both internal and external forces. Accordingly, it may be argued that while the financial benefits of strategic entrepreneurship may be a reflection of degree and frequency (Morris and Sexton, 1996), these forces alone are unlikely to determine the associated financial implications and outcomes. Rather, once strategic entrepreneurship is established or created, it must be managed effectively within the organisation, and within the context of an external environment, which continues to change. Figure 1 shows these forces as four dimensions or determinants of strategic entrepreneurship's financial benefits.

Activity emphasising an entrepreneurial focus for example, without maintaining a s focus on the organisation's core competencies, may lead to difficulties in managing the activity. Other internal forces and contextual variables (e.g. openness to change and innovation, confidence to enter new markets) will also influence the effective management of strategic entrepreneurship and the resulting financial benefits. Similarly, and perhaps most importantly, changes in the external environment such as competition and regulation will also impact on the financial returns and must be responded to strategically in order to preserve and maintain any financial benefits created.

While Ireland *et al.* (2003) maintain radical and deliberate approaches to strategic entrepreneurship are likely to result in higher financial gain, contingency theory suggests strategic entrepreneurship must be managed internally (i.e. maintaining a balance) to achieve an appropriate and ongoing fit with the changing external environment. This notion is similar to the system of forces Mintzberg (1991) refers to in the context of effective organisations, and the factors, which influence the effectiveness of firms. Thus, a third concept arises:

(3) Strategic entrepreneurship offers the potential for financial benefit, subject to managing changes in both internal and external forces (e.g. the external environment).

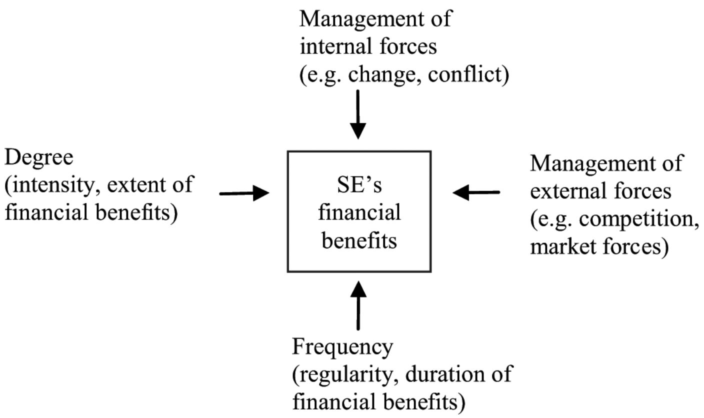

Figure 1.
Determinants of strategic entrepreneurship's financial benefits

Accordingly, a conceptual framework of strategic entrepreneurship has been established and illustrated – developed through an analysis of the foundational literature on entrepreneurship and strategy, and refined through preliminary observation of strategic entrepreneurship in practice (Luke and Verreynne, 2006). The three concepts comprising this framework are summarised in Figure 2, and provide the basis for a more comprehensive examination of strategic entrepreneurship in practice.

Method

This study involved examination from the outside and inquiry from the inside (Evered and Louis, 1981). Examination from the outside included a review of publicly available texts, legislation, ministerial announcements, annual reports, and corporate and government web sites on the nature and operations of New Zealand's SOEs. New Zealand's SOEs are government-owned but commercially-focused organisations, operating in deregulated markets. They have express profit-making requirements and are expected to pay regular dividends to the government shareholder (Taggart, 1992). A review of secondary data indicated various SOEs had been publicly recognised as leaders in their respective industries and undertaken activity recognised as entrepreneurial and strategic. Most SOEs were classified as large firms in a New Zealand context (OECD, 2007)[2]. In 2006 SOEs represented approximately 11 per cent of the New Zealand Government's total revenue and 12 per cent of their total profits (with revenue of $8.4 billion and profits of $1.4 billion from the SOE sector).

Inquiry from the inside involved interviews with senior executives in 12 of the (then) 17 SOEs in New Zealand, in two phases over a two-year period during 2006 and 2007. Senior executives of all 17 SOEs were contacted and invited to participate in this study. Executives from 12 SOEs accepted, and initial discussions with SOE executives together with background research resulted in one activity considered to be entrepreneurial and/or strategic being selected and examined in detail within each SOE. Semi-structured interviews were conducted at each SOE's premises (located in Auckland, Wellington, and Christchurch) in 2006 and again in 2007. Initial interviews focused on the SOE's operations in general, the entrepreneurial and/or strategic activity under examination, and the elements central to that activity. Subsequent

1a. Strategic entrepreneurship is a distinct process, founded on bringing something new to the market; a combination of innovation, opportunity identification, and growth

1b. Strategic entrepreneurship is a process represented by four key aspects:
i) entrepreneurial activity
ii) applied in the strategic context of businesses
iii) which develop expertise within their core skills and resources, and
iv) leverage from that by transferring and applying their knowledge of those skills and resources to new products, services, or markets

2. The nature of strategic entrepreneurship may take various forms, ranging from incremental to radical innovations, with deliberate to emergent approaches

3. Strategic entrepreneurship offers the potential for financial benefit, subject to managing changes in both internal and external forces (e.g. the external environment)

Figure 2.

interviews focused on developments within the organisation and the activity being examined, as well as financial returns from that activity. Interviews were tape-recorded and transcribed, with transcripts returned to interviewees for approval prior to formal data analysis. Coding of approximately 400 pages of transcripts was done both manually and using NVivo. Collectively, interview and other data were analysed for recurring themes and content, to identify underlying commonalities and differences between the 12 SOEs, and their respective activities examined.

This triangulated data collection design with data collection in two separate phases allowed developments and changes to be viewed from a valuable longitudinal perspective (Low and MacMillan, 1988). The analysis procedure at times resembled the "critical mess" approach (Gartner, 2006). The conceptual framework was compared with the data during data collection and analysis, such that a refined framework gradually evolved from the data while also highlighting previously developed dimensions. As such, the analysis process facilitated an evaluation of previous frameworks and provided the opportunity for extension and reconceptualisation (Eisenhardt, 1989).

The activities reviewed ranged from three-dimensional weather graphics software to lease-in lease-out arrangements, and are detailed in Table II. Based on requests for anonymity from executives in three SOEs, individual SOEs are generally not identified by name.

Examination of each activity considered its entrepreneurial and strategic nature, and resulted in activity being classified in four categories as shown next.

Findings

The elements identified as central to entrepreneurship and strategy from the extant literature formed the basis of codes for analysis. Based on these codes, findings revealed activity in each of the four categories: entrepreneurial (one activity), strategic (six activities), strategic entrepreneurship (four activities), neither entrepreneurial nor strategic (one activity). These findings are summarised in Table III, with the key entrepreneurial and strategic elements indicated.

Activity	Project details
1	Automated laboratory services for testing of food samples, and online release of results
2	Training simulator software for air traffic controllers
3	Business management software for an organisation's policies, procedures, and controls
4	Energy generation plant located in a regional district of Auckland
5	Leasing and cultivating land for farming
6	A programme of operational and financial arrangements (i.e. equipment and supply) tailored to large-scale organisations based on their individual energy requirements
7	Innovative graphics software which presents three-dimensional images of landscapes and weather systems
8	Geothermal exploration and development
9	Repurchasing New Zealand's railway network (previously privatised)
10	An immediate, online valuation programme encompassing any property in New Zealand
11	Company restructure and plans to manage networks for various organisations
12	Entering into cost-effective and tax-effective financing arrangements (e.g. lease-in lease-out and structured loan arrangements)

Table II.
Summary of SOEs' activities examined

Table III.
Summary of activities' entrepreneurial and strategic nature

Activity	Project details	Inn	Opp	Gro	E	CC	Exp	S	SE	Not E or S
(a) Entrepreneurial										
3	Business management software	✓	✓	✓	E					
(b) Strategic										
1	Automated laboratory		✓	✓		✓	✓	S		
4	Energy generation plant		✓	✓		✓	✓	S		
6	Tailored energy arrangements		✓	✓		✓	✓	S		
8	Geothermal exploration and development		✓	✓		✓	✓	S		
9	Repurchasing railway network		✓	✓		✓	✓	S		
11	Company restructure		✓	✓		✓	✓	S		
(c) Strategic entrepreneurship										
2	Training simulator software	✓	✓	✓	✓	✓	✓	✓	SE	
5	Leasing and cultivating land	✓	✓	✓	✓	✓	✓	✓	SE	
7	Weather graphics software	✓	✓	✓	✓	✓	✓	✓	SE	
10	Online valuation programme	✓	✓	✓	✓	✓	✓	✓	SE	
(d) Neither entrepreneurial nor strategic										
12	Financial arrangements		✓	✓						N
Total^					1			6	4	1

Notes: ✓ = relevant; E = Entrepreneurial; S = Strategic; SE = Strategic entrepreneurship; N = Neither entrepreneurial nor strategic; ^ = Total treats each category (E, S, SE, N) as mutually exclusive; CC = utilise or leverage from core capabilities; Exp = activities in an area where the organisation has developed a level of expertise, familiarity, and sense of confidence

Specifically, Table III summarises the nature of the activities examined in terms of the central elements of entrepreneurship (discussed previously), and strategy. With respect to the entrepreneurial nature of the activities, it should be noted from the earlier literature review that all three elements were considered necessary to constitute entrepreneurial activity. Where any one of those elements was absent (e.g. innovation), the activity was not classified as entrepreneurial. With respect to strategy, consideration was given particularly to the resource-based view (Alvarez and Barney, 2002; Barney, 1991), as the activities were examined in terms of their nexus with the SOEs' core capabilities (i.e. core skills and resources), and whether the SOEs had developed and leveraged from expertise in the area of their core business.

Nature of strategic entrepreneurship

With respect to the nature of strategic entrepreneurship, it was argued such activity might take various forms ranging from incremental to radical, with deliberate to emergent approaches (concept 2). Variations in the nature of the four activities characterised as strategic entrepreneurship were noted as in Figure 3.

Thus, while it is argued that strategic entrepreneurship may be radical in nature (such as the establishment of a national banking network, Kiwibank, by SOE New Zealand Post Limited in the early 2000s), of the four strategic entrepreneurship activities in this study, two are considered to be incremental and deliberate; two being incremental and emergent (based on their core or dominant attributes).

Financial returns from strategic entrepreneurship

An examination of the financial returns from each activity reveals a number of interesting findings. Table IV presents an overview of the financial returns of each activity in terms of:

- whether it has created wealth;
- the profit range of the activity in terms of the respective SOE's total profit for the 2006 year;
- the start date, being the date the activity was (or will be) launched as commercial; and
- the development stage of the activity in terms of whether it is in the preliminary stage (P = not yet complete), early stage (E = a relatively new activity with significant growth potential), mature stage (M = more modest potential for growth), or decline (D = negative growth expected).

Findings highlight financial returns for each of the four categories of activity. Further, substantial returns are noted for one activity classified as strategic and one activity

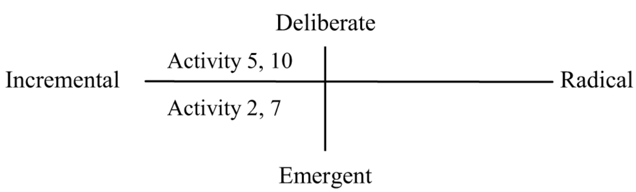

Figure 3.
Nature of strategic entrepreneurship

Table IV. Financial returns from the activities under review

Activity	Wealth created	Profit range	Start date	Development stage	Nature of the returns
(a) Entrepreneurial					
3	✓	<5 per cent[a]	2002	E	R
(b) Strategic					
1	✓	>50 per cent	2005	E	R
4	–	–	2010	P	
6	✓	<5 per cent	1993	M	R
8	–	–	2009	P	
9	–	–	2004	E	
11	–	–	2006	E	
(c) Strategic entrepreneurship					
2	–	–	2006	E	
5	✓	<5 per cent	2006	E	R
7	✓	5-10 per cent	c2004	E	R
10	✓	nd	c2002	M	R
(d) Neither entrepreneurial nor strategic					
12	✓	20-30 per cent[a]	c2003	D	O

Notes: Profit range indicates profit attributable to the project in 2006, as a percentage of the SOE's total profit for 2006. Start date refers to the time project was (will be) launched as commercial (where a specific project is identified). c = circa. [a]denotes an element of one-off (as well as recurring) profits. nd = not disclosed. Development stage of the project: P (preliminary), E (early growth), M (mature growth), D (in decline). Nature of returns R (recurring), O (one-off)

classified as neither entrepreneurial nor strategic. Thus, an analysis of these findings shows some support for concept 3 (strategic entrepreneurship is associated with wealth creation), but also highlight that this association is neither exclusive nor conclusive.

Discussion

Entrepreneurial activity. The one activity classified as entrepreneurial, activity 3, involved business management software, which was developed initially as an innovative in-house system to bring structure and organisation to the SOE's own operations. Further developments, however, indicated the project had commercial application, and was subsequently licensed to other firms in the industry. The project represented an innovative and tailored service, but was not related to the SOE's core business activity.

> [It was] developed in-house, for our personal use. And then we realised it had some commercial potential and applicability to any business. And so we went to [others in the industry] and they had a specific need at the time for national risk management programmes, and we said "we can build you risk management programmes electronically using [this programme] as the entry port".
>
> It was a small initiative in among a whole lot of larger initiatives. The interesting thing about it was that it was completely non-core (senior executive, activity 3, 2006).

Strategic activity. Of the six activities classified as strategic, each clearly lacked the combination of innovation, opportunity identification, and growth. In several cases, some of these elements were evident; however there was a distinct strategic emphasis in the context of those activities (i.e. strategic opportunity and growth), as they were directly linked to each organisation's core business activities. Further, in each case there was no innovative aspect, indicating perhaps that innovation is at the heart of entrepreneurship – a notion promoted by Drucker (1985). Activity 1, for example, involved purchasing equipment used in overseas laboratories to automate the SOE's processes and significantly increase its capacity and efficiency. Hence, while the project strengthened the strategic position of the organisation, it involved replicating existing technology rather than introducing something new to the market.

Strategic entrepreneurship. Of the four activities classified as strategic entrepreneurship, each project exhibited clear elements of innovation, opportunity identification, and growth. Further, each activity directly leveraged from the respective SOE's core skills and resources. Activity 2, for example, training simulator software, represented an innovative and flexible program, which the SOE developed initially for its own use. The advanced features of the software subsequently generated interest in the industry, and the respective SOE found the software had strong commercial potential. Activity 5, leasing and cultivating land, represented an innovative alternative for a SOE in the industry of farming, which was restricted in increasing the amount of land it owned under the Treaty of Waitangi[3]. The leasing arrangement utilised the SOE's skills in cultivating land, and provided growth through new revenue streams resulting in new business divisions. Activity 7 involved the development of innovative weather graphics software, resulting in the respective SOE being awarded the world's largest weather services contract, and subsequently generated a series of new revenue streams, and an international reputation for the organisation. And activity 10, an online property valuation program, was the first of its kind in New Zealand, providing immediate and updated valuations for any property in the country. The project represented not only an innovative service to New Zealand's property market, but also provided the respective SOE with valuable new revenue streams, using existing skills and resources.

Neither entrepreneurial nor strategic activity. In contrast, activity 12, classified as neither entrepreneurial nor strategic, represented transactions neither innovative nor aligned with the SOE's core skills and resources. In particular, the two transactions within activity 12 involved a structured loan arrangement and a lease-in lease-out arrangement. The first transaction entailed borrowing a higher amount ($700 million) than required ($200 million) at a lower interest rate, and then on-lending the remaining $500 million. The second transaction was effectively a tax avoidance scheme involving overseas companies (based in the USA and Cayman Islands), and the SOE's assets. The latter transaction, which provided the SOE with a one-off receipt of $36 million, was subsequently made illegal under USA tax law. Both transactions provided a short-term financial gain to the SOE, but cost the organisation dearly in terms of extensive public criticism for going outside its area of expertise, and entering into transactions seen as risky and unconventional (and perhaps morally questionable), with public sector assets. Further, the arrangement involved replicating recognised financing transactions, rather than introducing something new to the market. Thus, the absence of innovation, disassociation with the SOE's core skills and resources, and the costs potentially exceeding the benefits, indicates these transactions are neither entrepreneurial nor strategic.

Examining the nature of strategic entrepreneurship

Comparing the various categories of activity, a distinction can be made between activity 3 (entrepreneurial), and activities 2, 5, 7, and 10 (entrepreneurial and strategic) in that the entrepreneurial activity is not aligned with the SOE's core skills and resources (activity 3). This distinction was increasingly evident from the discussions with the senior executive involved with activity 3. Inquiry into the implications of this separation between entrepreneurial activity and a business' core skills and resources, revealed significant difficulties.

> *So was there a conflict there or a trade-off between where you're going to devote a limited amount of resources to; focusing on the core business or allocating resources to fringe areas?*[4].

> Yes, that's right. And even as we develop our other business, we're still not really in the IT business, so we're trying to develop in other areas, and this didn't really fit there either. And so we had to do something with it, because otherwise it would just sit there and be an in-house system, and we wouldn't extract any value out of it (senior executive, activity 3, 2006).

Thus, the difficulty of managing entrepreneurial activity not related to (or supported by) an organisation's core skills and resources is highlighted.

Examination of the activities one year later in 2007, revealed a number of interesting developments. Of particular note, is that the activities classified as both entrepreneurial and strategic, activities 2, 5, 7, and 10, had each progressed, grown, and in several cases resulted in additional (spin-off) projects. Reflecting on the developments in activity 7, for example, the SOE executive noted spin-off projects and growth in a number of areas.

> It's really grown into two systems now [. . .] So there's two different markets as such.

> We've actually now made our first mobile sales as well, with [organisations] in the UK.

In contrast, activity 3 (entrepreneurial) was in the process of being sold by the respective SOE, due to the difficulties experienced in managing the project.

> We're actually working through a sale process at the moment, to sell the whole thing, and then become a licensed re-seller for it.

Examination of the risks relevant to activity 3 reveals a number of different dimensions, including financial, operational, and reputational. These dimensions subsequently extend to a broader range of risks such as political and public accountability risk, in the context of SOEs.

> So we saw this as probably the best option to extract some value without exposing ourselves to risk and allowing us to concentrate on the other areas of business. I mean there's risk in a number of factors. You look at financial risk as one thing, and then you look at the risk to your reputation, and that's the other thing. And yes, then there's a whole range of risks associated with the fact that it's an unfamiliar area of business for us [. . .]

> Over here we've got our core business that we're really confident and comfortable with. It's a field that's not our core business, and so it becomes a lot harder to calculate the risk. If we have a failure with this product, what is the ramification for our reputation in our core business? And there's also political aspects. I mean people say SOEs are commercial

> organisations, well, they are, but there's also a political aspect of any public failure [...] (senior executive, activity 3, 2007).

Thus, strategic entrepreneurship – entrepreneurial activity which is directly aligned with and leverages from a business's core competencies – has a number of benefits. These benefits include the activity being easier to manage, supported by existing skills and resources, and creating the potential for spin-off projects. Such findings lead to variations in the associated financial returns from each project and are considered further in the following.

Financial returns from strategic entrepreneurship

Entrepreneurial activity. The one project classified as entrepreneurial in nature (activity 3) did create wealth with modest returns (<5 per cent) through licensing revenue. Further, given the subsequent sale of the project one year later, activity 3 had the potential to generate ongoing revenue for the SOE based on direct licensing revenue, as well as commission revenue under the sale agreement with the local information technology company.

Strategic activity. Of the six projects classified as strategic, two had created wealth; one with substantial returns (activity 1 with >50 per cent), and the other with more modest returns (activity 6 with <5 per cent). Notably, the returns were recurring in nature, and both activities had the potential for increased returns in the future; activity 1 in particular.

> In New Zealand we're forecasting a 10 per cent volume increase, we'd certainly like it to be more overseas (senior executive, activity 1, 2007).

The remaining four projects in this category had not yet realised financial returns for various reasons, including the timeframe, development stage, and maturity of the project (activities 4, 8, 9, and 11). While the potential for returns was noted by interviewees, uncertainty (and in one case unexpected support) was also acknowledged. In particular, the direction and progress of activities 4 and 9 were significantly impacted by changes, both positive and negative, in the political environment, highlighting the vulnerability and sensitivity of financial returns to external forces.

> There are risks around public opposition to the project, council opposition or indifference. The other risks are around securing [inputs] for the [project] and at this stage, I'm not entirely sure whether we've got [input supply secured] (senior executive, activity 4, 2006).

Other factors which emerge as an important influence on the financial returns are the management of changes in internal variables (e.g. organisational issues) and external variables (e.g. market forces) relevant to each activity. With respect to activity 11 for example, both factors were noted as important to the activity's financial development (and challenges) during the 12 month period from 2006 to 2007. In 2006, the SOE planned a significant change in culture as part of its restructure to increase activity and profits.

> The main drive is actually creating this [group] concept [...] pushing the day-to-day stuff further down into the operations. And that will drive performance. The bloke at the top [will be] responsible for his revenue, his costs, and his profit. So there's a huge culture shock, from just being someone who goes out and [does maintenance work], now they've suddenly got a

little business. So there's huge change-management involved.

It's the whole change in structure and culture and ownership and accountability [. . .] the whole way we run the business, is the change.

And are the staff comfortable with that?

Some are. Some are not. It's all a culture thing. Some feel very nervous about it (senior executive, activity 11, 2006).

One year later, changes, both financial and non-financial, were noted.

We had a number of people who left the company, but then we also managed to attract a lot of new people [. . .] maybe younger, more dynamic people, since we've rebranded actually. So it's really just in the last 12 months. We had a really good year last year [financially]. So whether that's a cause and effect relationship, I'm not sure. But we had a very good year.

Ok, so you can recognise that there are financial benefits starting to accrue.

Yes. But the downside of that is there is increased risk, and there has recently been a downturn in that business's operations, which is really just the nature of the business and the market that they operate in (senior executive, activity 11, 2007).

Thus, findings from a review of activity 11 highlight issues underlying financial returns include ongoing management of changes in both the internal and external environment (e.g. employees, culture, competition, and branding).

Strategic entrepreneurship. With respect to the four activities classified as strategic entrepreneurship, three of the four had realised financial gain by mid 2006. The vulnerability or sensitivity of financial returns from these activities however, is also noted as important, with executives highlighting the dependency of future recurring gains on market forces (e.g. competition) and effective management of internal costs.

Ultimately [this] is very much a fixed cost product with very low variable cost, so additional volume converts quickly to the bottom line. However, as we've discussed, our opportunity with it is around awareness, and so we've tracked our promotional spend against the variable cost of [the] product. So yes, it's got very significant profit margins and it is a very profitable product. But I guess competition and promotional costs will effectively eat into those profit margins (senior executive, activity 10, 2007).

Despite these issues, however, modest recurring gains (in the range of 0-10 per cent) from two of the four activities classified as strategic entrepreneurship was noted, with expectations of increased financial gains in the future. Further, financial gains from a third activity in this category (activity 10) were confirmed by the respective SOE executive, but not expressly disclosed in terms of a dollar amount or profits as a percentage of the SOE's total profits for 2006. Thus, three of the four activities in this category had generated recurring financial returns with increased returns expected in the future.

Neither entrepreneurial nor strategic activity. An examination of activity classified as neither entrepreneurial nor strategic also reveals significant financial gains, primarily non-recurring in nature, as they were based to a large extent on a one-off cash receipt as a result of the activity. Thus, while the magnitude of the gain is substantial in terms of the SOE's total profits (in the range of 20-30 per cent), essentially it is a non-recurring and therefore non-sustainable financial gain for the SOE's ongoing business operations.

> There was a one-off payment, so there's no active part of the [cash] arrangement. The lease conditions themselves continue but have no real impact or substance (senior executive, activity 12, 2006).

While an initial review of these findings suggests entrepreneurial, strategic, and neither entrepreneurial nor strategic activity has the potential for financial returns, obviously any classification with a population of one warrants cautious interpretation. It should be noted that financial gain is not exclusive to any one of the four categories of activity. Further, a review of the limited number of activities within each the categories suggests financial gain is not consistently applicable within a particular category..

Findings also reveal that realisation of such benefits is not necessarily dependent on the nature of an activity, but rather on its development stage and maturity, together with ongoing management in response to changes in the internal and external (political and commercial) environment. These elements emerge as important factors contributing to the respective financial returns realised. By way of example, activity 4 (strategic), not planned for commissioning until 2009, had obviously not realised financial returns by 2007. Similarly, activity 2 (strategic entrepreneurship), as a relatively new project, had not generated sales revenue by 2007, but was considered to have valuable future potential, with purchases being considered by two prospective customers, each transaction representing substantial (millions of dollars) revenue and profit.

> I think 2007/2008 is the make or break [period]. We did a quiet launch of it [in 2006], presented it at industry expos and got quite a lot of interest (senior executive, activity 2, 2007).

Interestingly, while the existence of financial returns may not be dependent on the nature (or classification) of an activity, the nature of the returns may be. While a population of one activity within a classification warrants cautious interpretation, findings show a key difference between the financial returns from activity 12 (neither entrepreneurial nor strategic) and financial returns identified from activities in other categories. In particular, benefits from activity 12 are essentially temporary, compared to returns identified from the other three categories of activity, each of which was recurring in nature. While further examination is necessary to support this finding, the contrast between activity 12 and the other activities examined is evident.

Researchers have argued that innovation within strategic entrepreneurship must be both incremental and radical (Ireland *et al.*, 2003). However, findings from this study do not lend support to this notion. Each of the four strategic entrepreneurship activities examined was predominantly incremental in nature, indicating incremental innovation is a viable pathway for strategic entrepreneurship. Further, even where activities begin as incremental (activity 5, 7) and emergent (activity 7), they may gain momentum and change the way businesses or industries operate. Thus, the nature of strategic entrepreneurship activity is not bound by its roots, and can change from incremental to radical, emergent to deliberate.

Implications

A review of potentially entrepreneurial and strategic activity in the public sector context of New Zealand's SOEs reveals clear incidences of strategic entrepreneurship, with four of 12 SOEs undertaking strategic entrepreneurship according to our conceptualisation. While a review of these activities highlights their innovative and entrepreneurial nature, of particular note is the strategic approach to each project – leveraging from core skills and resources to create new products, services, and markets. The systematic approach shown by these SOEs in undertaking entrepreneurial activity suggests a specific form of entrepreneurship is particularly well suited to conservative, risk averse, or highly accountable organisations (e.g. such as SOEs) pursuing increased returns, but not wanting to assume the associated risks. In particular, where organisations have been recognised as skilled and highly competent in their core business area, innovative and entrepreneurial undertakings are perhaps a natural progression or goal. The implication of this finding is such that entrepreneurship is not inconsistent with a risk-averse context (e.g. public sector), an important message for public sector organisations, private sector competitors, and policy-makers.

The implications for policy-makers are that strategic entrepreneurship is relevant to commercial organisations pursuing profit or wealth creation in both the public and private sector. While the concept of wealth creation is commonly associated with the private sector, New Zealand's SOE reforms (and the principles of NPM) suggest this approach can also be applied in the public sector. Hence, it is important that policymakers, understand the potential for strategic entrepreneurship, in the public sector, and encourage, and monitor this approach through appropriate reforms and regulations, balancing monitoring mechanisms with freedom for SOEs (or other public sector organisations) to engage in entrepreneurial and strategic activity.

As noted previously, the alignment of entrepreneurial activity with an organisation's core skills and resources effectively assists in managing the associated risks by decreasing the liability of newness. Thus, through familiarity with the required skills and resources, and established competencies in the relevant area, an enhanced sense of confidence is established within the organisation to undertake such activity. The implications for practice are such that organisations operating in risk-averse environments should undertake a more deliberate search for opportunities which are both strategic (i.e. aligned with the organisation's core skills and resources) and entrepreneurial, rather than random entrepreneurial opportunities where the risks are harder to manage. This approach raises the notion of strategic entrepreneurship as both an activity and perhaps an orientation, particularly as organisations undertake a more deliberate approach to strategic entrepreneurship, as depicted in Figure 3.

The issue of what drives such activity appears to be a combination of several factors. Entrepreneurial activity within organisations, which have developed a level of expertise in their core business area, and the ability to leverage from that expertise into new products and markets emerge as two central aspects. Further, a number of supporting elements are identified including an open, flexible, and progressive culture, a sense of confidence in the SOE's capabilities, and an awareness of cost minimisation.

> We realised we didn't need to be too frightened of things not working out, because we had the skills in getting things to work once we analysed them. We're able to solve a range of problems, not the least of which is cost (senior executive, activity 7, 2006).

In particular, an environment where regular experimentation (involving modest expenditure) is encouraged, rather than a more formal and capital-intensive approach to research and development, provides valuable support (both financial and operational) for pursuing innovation.

Conclusion

The examination of strategic entrepreneurship in both a conceptual and a practical sense is the central focus of this paper. The development, of a conceptual framework, based on empirical data, are both an important development, within strategic entrepreneurship, and a central contribution of this paper. A strategic approach to entrepreneurship involves the promotion of activity which is both entrepreneurial, and leverages from an organisation's core skills and resources. Strong capabilities within the organisation's core business represent an important foundation for expanding the scope of operations to include entrepreneurial activity, introducing something new to the market. Such developments have been noted, and are again changing the competitive landscape, with implications for businesses in the public and private sector, and global markets. While the focus of this study is on SOEs, the nature of these organisations as both commercial, and competitive, reinforces the importance of strategic entrepreneurship to a broader organisational context.

Strategic entrepreneurship is a viable pathway for wealth creation through increased financial returns in SOEs. Further, such activity may present the opportunity for recurring returns, and need not be radical in nature. Yet the association between strategic entrepreneurship and financial gain is one, which must be managed in terms of changes in both the internal and external environment. Certainly there is the potential for profit from entrepreneurial activity. However, while the potential for entrepreneurial profit is acknowledged, uncertainty regarding the financial outcome of entrepreneurial activity remains (Davidsson, 2006).

This study points to the potential for further practice of strategic entrepreneurship in both the public and private sector. Strategic entrepreneurship – whether identified as such or not – will likely be met with heightened levels of interest and attention, for those organisations pursing financial returns and growth through entrepreneurial activity, but not wanting to assume the associated risks. Developing clearer concepts and moving towards a theory of strategic entrepreneurship not only enhances an academic understanding of this concept, but also allows academicians to communicate with and educate practitioners more widely on how to adopt such activity, using actual examples which highlight strategic entrepreneurship's value.

Given this study has been limited to strategic entrepreneurship in New Zealand's SOEs (as commercial for-profit organisations in the public sector), limitations arise with respect to the transferability of these results to for-profit organisations in the private sector. As such, the uncovering of this concept in the context of New Zealand's SOEs presents an invitation for future investigation of similar activity in other sectors and regions, particularly through the use of quantitative-empirical surveys.

Notes

1. Although not all entrepreneurial activities pursue financial gain (representing one form of success), given the association between strategic entrepreneurship and wealth creation presented in the literature, it is this association, which we expressly explore.
2. The New Zealand Ministry of Economic Development classifies SMEs as firms with up to 19 employees. The New Zealand Centre for SME research at Massey University defines SMEs as firms with six to 99 employees (OECD, 2007).
3. A treaty between Maori and the British Crown signed in 1840, which enabled the British to cede sovereignty to the Crown without conquest, and also acknowledged the rights of Maori.
4. Quotes in italics refer to questions and comments made by the researcher.

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