VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o te Ika a Maui

Social Capital in Action: From Nought to Xero

MMIM590

by

Karen McKeefry
300065582

Supervisor: Professor Pak Yoong

Submitted to the School of Information Management

Victoria University of Wellington

In partial fulfilment of the requirements for the degree of

Master of Information Management

16 October 2009

Abstract

Typically internet start-ups (e-ventures) are innovative, independent, original companies that focus on information as their competitive factor. They are characterised by enormous growth potential, giving rise to technical and market risk. Resourcing these ventures can be daunting usually requiring significant financial and human capital and once the venture is formed they are subject to a liability of newness with no track record, legitimacy or endorsement for the product/service. Whilst entrepreneurs bring their own resources and skills to the business it is necessary to seek additional complementary resources through sustainable exchange relationships to ensure the ventures success.

This report has used a case study of a New Zealand e-venture to provide qualitative evidence of how resources were secured to start and initially grow the business. Using Napahiet and Ghoshal's (1998) three dimensional model of social capital it has analysed the evidence against scholarly theory to determine how social capital assisted the founders and the company to fulfil resource requirements and overcome the liability of newness.

Napahiet and Ghoshal define social capital as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by individuals or social unit" (p.243).

The report found that the high level of social capital the founders brought to the venture assisted in gaining quick access to finances, skilled staff, competitive information and potential customers. The social capital used to develop personal business relationships for the venture has been transferred into the company's organisational relationships that will provide future growth opportunities. The founders have benefited from having a diverse range of strong and weak contacts that provided referrals to new contacts and assisted in establishing a good reputation and trust, thus facilitating the exchange and combination of resources. Social capital has given the e-venture a uniqueness resulting in a competitive advantage that competitors would find difficult to imitate.

Keywords: entrepreneurship, e-venture, innovation, internet start-up, networking, software-as-a-service, social capital

Preface

This report is not confidential.

I wish to thank Xero's co-founders Mr Hamish Edwards and Mr Rod Drury for allowing the case on Xero to be conducted and making themselves available for interviews.

I would like to thank my supervisor Professor Pak Yoong, who provided tremendous support, guidance and advice during the six months it has taken to complete the study and resulting report.

I would like to acknowledge the assistance of Jackie Bell for proof reading the final copy and my husband Mr Patrick McKeefry for his enthusiastic encouragement and the hours he spent proof reading the report at various stages.

Finally I would like to thank my entire family for their support and motivation to get the report completed.

I certify that except as noted, the report is my own work and all references are accurate.

Karen McKeefry

Table of Contents

ABSTRACT	II
PREFACE	III
TABLE OF CONTENTS	IV
LIST OF TABLES	VIII
LIST OF FIGURES	IX
1 INTRODUCTION	1
2 THE CASE OF XERO	3
2.1 Getting off the Grid	4
2.1.1 Developing Useful Social Connections	4
2.1.2 Associates Assist to Formalise the Idea	5
2.1.3 Getting Prepared – Money, Contacts, Consultation	7
2.2 Complementary Skills and Shared Agreement of Ownership	9
2.3 Utilising Social Networks to Mobilise Resources	10
2.3.1 A New Zealand Start-up using Capital Markets	10
2.3.1.1 Leveraging Friends and Family	11
2.3.1.2 Good Relationships Help Subsequent Funding	12
2.3.2 Shoulder Tapping Potential Directors	13
2.3.3 Past Contacts Used to Establish Multi-disciplined Team	15
2.3.3.1 Motivation to Work for Xero	16
2.3.3.2 Leadership, Passion, Inclusiveness and Collaboration	16
2.4 Relationships, Learning and Product Development	18
2.4.1 Finding out What Small Businesses Want	18
2.4.2 Meeting Known Customer Needs	19
2.4.3 Community of Customers	20
2.4.4 Networking to Grow the Product Out	21
2.5 A Networked Company – The Eco-System	22
2.5.1 Partnering with Banks	22
2.5.2 Partnering with Telecommunication Carriers	23
2.5.2.1 Telecom New Zealand	23
2.5.2.2 Telstra Australia	24
2.5.2.3 British Telecom	24
2.5.3 Certified Professional Partners	25
2.5.3.1 Utilising Hamish’s Background to Promote “Certified Partner”	25
2.5.4 Partnering with Other Online Providers and Complementary Solutions	26
2.5.5 Open Relationships	26
2.6 SaaS Revenue Model	29
2.7 Australia and Beyond	30

2.8	Going to the United Kingdom – A Case within a Case	31
2.8.1	Aligning with London’s Kiwi Mafia.....	32
2.8.2	Then there was Two	33
2.8.3	Networking with British Accountants.....	34
2.8.4	Forming a SaaS Business Cluster	35
2.8.5	Connecting to the Beachheads Programme.....	35
2.8.6	The Kiwi Mafia Provides Critical Link for UK Bank Feeds.....	37
2.8.7	A “Chat” at the Beach Leads to UK Channel Partnership Deal	38
2.8.8	Founder Skill Set Needed for Further Globalisation	39
2.9	Find New Opportunities and Strengthen Relationships	41
2.10	Networking to Grow the Business.....	43
3	LITERATURE REVIEW	45
3.1	Introduction	45
3.2	Innovation, Entrepreneurship and Networks.....	46
3.3	Networks, Collaboration and Alliance.....	49
3.4	Social Capital	52
3.4.1	Structural Dimension of Networks	54
3.4.2	Relational Dimension of Networks.....	58
3.4.2.1	Trust	58
3.4.2.2	Norms.....	60
3.4.2.3	Obligations and Expectations.....	61
3.4.2.4	Identification	61
3.4.3	Cognitive Dimension of Networks	62
3.5	The e-Venture.....	64
3.5.1	Profile of an e-Venture and an e-Entrepreneur.....	65
3.5.2	The Experience of the Dotcom Shakeout	66
3.5.3	Success Factors for an e-Venture	67
3.5.3.1	Management.....	67
3.5.3.2	Product.....	68
3.5.3.3	Processes.....	69
3.5.3.4	Market Access	70
3.5.3.5	Finance	71
3.5.4	Growth Strategies.....	72
3.5.5	Going Global	73
3.6	Conclusion	76
4	INDUSTRY ANALYSIS	78
4.1	Introduction	78
4.2	Software as a Service	79
4.2.1	SaaS Definition and a New Zealand Context	79
4.2.2	Background.....	80
4.2.3	The SaaS Vendor.....	81
4.2.4	The SaaS Customer	82
4.2.5	What the critics say about SaaS.....	83

4.2.6	SaaS Enabled by SOA and Future Possibilities	84
4.3	Internet and Broadband	86
4.3.1	Internet Adoption	86
4.3.2	Broadband Adoption	87
4.3.3	Broadband Technologies	87
4.3.4	New Zealand Broadband	88
4.4	Small and Medium Enterprises (SME)	90
4.5	Accounting Software	92
4.5.1	More than an Accounting Solution	94
4.5.2	MYOB	96
4.5.3	Sage	97
4.5.4	Intuit	97
4.5.5	Web Based Accounting Services	98
4.6	Conclusion	100
5	CASE ANALYSIS	102
5.1	Introduction	102
5.2	Structural Dimension	104
5.2.1	Strong Ties Important in Early Phase of Start-up	104
5.2.2	Weak Ties Bring New Sources of Information	105
5.2.3	Network Configuration	107
5.2.3.1	Network Diversity and Weak Ties	107
5.2.3.2	Network Diversity through Strong Ties	108
5.2.3.3	Network Diversity for Business Growth	109
5.2.3.4	Network Centrality	110
5.2.3.5	Network Density	111
5.2.3.6	Structural Holes	112
5.2.3.7	Network Size	114
5.2.4	Transferable Social Capital	115
5.3	Relational Dimension	117
5.3.1	Trust	117
5.3.1.1	Building Trust in Xero's Customer Network	119
5.3.1.2	Trust Brokers and Roll-Over Trust	120
5.3.1.3	Trust Facilitates Gossip	121
5.3.2	Norms, Obligations and Expectations	121
5.3.2.1	Openness as a Norm	122
5.3.2.2	Reciprocal Expectations	123
5.3.2.3	Contractual Obligation	124
5.3.3	Identity	124
5.4	Cognitive Dimension	126
5.5	Conclusion	128
	REFERENCES	131
	APPENDIX A – TELECOM AND XERO MEDIA ADVERTISEMENT	141

APPENDIX B – NATIONAL DIFFERENCES ACROSS WORLD INTERNET MARKETS	142
APPENDIX C – ACCOUNTING SOFTWARE IN THE UNITED STATES.....	143
APPENDIX D – RESEARCH CONSENTS.....	148

List of Tables

Table 1 Accounting Software Available in NZ for Small and Medium Enterprises.....	93
---	----

List of Figures

Figure 1 The Xero Hockey Stick.....	27
Figure 2 The Launch of the Australian Version.....	30
Figure 3 Hamish (right) at ICAEW Small Practitioners Conference, Cambridge, April 2009	1
Figure 4 Success Factors for Establishing an e-Venture	67
Figure 5 Integration-Responsiveness Framework for a Global e-Venture	74
Figure 6 Broadband Subscribers by Technology per 100 Inhabitants (December 2008).....	88
Figure 7 OECD Average Advertised Broadband Download Speed, by Country, kbit/s (September 2008)	89

1 Introduction

The process of starting a business for entrepreneurs can be daunting, partly due to the need to successfully bring together all the necessary resources required to ensure the formation of the venture is successful. Even once the venture is formed it has no track record, and is subject to a liability of newness with inadequate bases of influence and endorsement, and weak perceptions of quality, reliability and legitimacy for its product or service (Baum, Calabrese, & Silverman, 2000). Whilst the entrepreneurs bring their own resources and skills to the business these may not be sufficient to overcome the venture's newness, and therefore it is necessary to obtain the required resources through the entrepreneur's ability to build sustainable exchange relationships with potential providers of these resources (Smith & Lohrke, 2008). It could even be said that it is through social relations, social interaction and social networks, that entrepreneurship is conducted (Anderson, Park and Jack, 2007).

This report describes the establishment of a new internet venture and examines how social capital has been beneficial to the founders and the new venture in its ability to satisfactorily build and utilise relationships to satisfy its resource requirements and overcome the liability of newness. Social capital is the goodwill that is available to individuals or groups from the structure and content of social relations, which is effected by the flow from the information, influence and solidarity available (Adler & Kwon, 2002).

The report is divided into four main sections, with the first section documenting the establishment of a New Zealand start-up internet business, Xero. Through interviews with its two co-founders this section outlines how they utilised and developed personal and organisational relationships that were important for taking an idea and building a global company to sell their online accounting product, demonstrating social capital in action.

Then a literature review is conducted to establish the theoretical and conceptual context of the case. Using the academic literature this section will explore the concepts of innovation and entrepreneurship, developing an understanding of networking for an entrepreneurial venture and the theory of social capital with its structural, relational and cognitive

dimensions. This section will also outline the nature of and considerations pertinent to an internet start-up venture termed an e-venture.

The third section will set the scene for a global internet company based in New Zealand. It will look at the software development model relevant to this case, Software as a Service (SaaS), review world internet and broadband adoption, the nature of small and medium sized businesses around the world, and provide an evaluation of the accounting software market for small and medium sized businesses.

The final section will carry out an analysis of the case within the theoretical underpinnings. It will evaluate the case according to social capital's three dimensions – structural, relational and cognitive – using Nahapiet and Ghoshal's (1998) model of social capital to ascertain how the benefits of social capital were an asset in the start-up, establishment and initial growth of Xero.

2 The Case of Xero

Arriving back in New Zealand after two years in the United Kingdom, Hamish relished the simplicity of working life in Wellington. A pleasant stroll from his apartment along the road and he was at work at the Old Bank Building right in the centre of town, great coffee at his fingertips and familiar faces on every street corner. Wellington was home, and the dream of building a global business from his hometown was now actually a reality. The milestones that he and business co-founder Rod Drury had set three years earlier had been realised and more; the business was established. But deep down he knew this was still the beginning, he knew there was still a lot of hard work ahead to take it to the next level. Yet there was a sense of satisfaction: what had been achieved to date provided an excellent foundation and model to take Xero forward. It was exciting; he knew this was a key message he wanted to tell shareholders, many of whom were old friends and colleagues, at the company's second AGM just two days away.

"I was having such a cool lifestyle before Rod said let's do Xero. Oh yeah, I was making pretty good money, I had a cool little practice, I was enjoying myself, I was the man about town, I was having fun and doing a bit of sailing. In reality I was probably only doing about two and a half days' accounting work a week. The rest of the time I was networking, lunching and hanging out with my cool clients. Then it all ended. I was working my arse off again doing 18 hour days. It is fun, but you can't sustain that forever."

2.1 Getting off the Grid

2.1.1 Developing Useful Social Connections

Hamish had worked as an Accountant for both Englefield Industries in Auckland and for BDO Spicers in Wellington before joining his father to run the family's 30 year old chartered accountancy firm in 1999. His father had been doing accounting work for small and medium sized businesses his entire professional career and this gave Hamish an excellent starting point for his own entrepreneurial endeavours.

Young and enthusiastic, Hamish wanted to grow the business aggressively; he wanted the family firm to become a leader in the field of small and medium business accounting. One of his clients, Murray Bridge, suggested to Hamish that he needed to build his networks and thought a good way to do this was to become the Treasurer of Wellington's Royal Port Nicholson Yacht Club. For Hamish this proved to be great advice:

"It was good for me to build personal relationships around sailing and the yacht club. To have a position of authority in the yacht club, meant people immediately understood that Hamish Edwards is the Treasurer and therefore a Chartered Accountant – maybe I should talk to him about helping me out with my business."

It was through this position that Hamish met Mike Upshon, a technology colleague of Rod Drury's who introduced Hamish to Rod: "Rod and I clicked pretty early on and so I started looking after Rod's various entrepreneurial activities." Whilst their relationship was strongly based around their client/accountant roles, common interests and shared values accelerated their relationship into a personal friendship very quickly.

Rod Drury is recognised as one of New Zealand's successful technology entrepreneurs, and also had his initial business grounding in accountancy. The son of an electrician, he completed a BCA at Victoria University in Wellington, majoring in accounting, but discovered a passion for and enjoyment of the information systems papers. He joined Arthur Young and worked on telecommunication billing systems both in New Zealand and the USA. Rod has been involved in a number of technology businesses and first received public note with the co-establishment of Glazier Systems, which soon became one of New

Zealand's eminent net software developers; that was acquired in 1999 by Advantage Group, when Rod continued as Advantage's Chief Technology Officer. In 2000, Rod co-founded Context Connect, a US-based company developing technology connectivity across different mobile networks. Rod was also New Zealand's first representative on the Microsoft MSDN Regional Director programme, where he achieved Microsoft MVP status for his work in the early days of Active Server Pages. Rod openly built networks and is constantly building relationships that may at some point be useful for a future endeavour:

"They are everything – it is how you get things done, well to get it started definitely. I am always networking. Networking is a bit of your personal value that transcends your businesses. So I am networking now for whatever I end up doing after Xero. Every little contact is useful for the next thing. You always pay it forward. I always try give contacts value back. So if I meet someone who is important – 'what can I do to help them?' – you might surprise them with an introduction or a lead some time later. Keep clocking up points – never know when they will be useful."

2.1.2 Associates Assist to Formalise the Idea

It was while working together in 2002 that Rod and Hamish had the idea of building an online accounting system. Hamish was the Chief Financial Officer for Rod's business ventures. Working remotely, he played this role for multiple clients from the offices of his own accountancy firm. It was a role Hamish had branded "Virtual CFO."

Frequently Rod and Hamish wished to share delicate financial information to make important business decisions, but as Hamish indicated, the existing IT infrastructure proved problematic. "If the information is locked on somebody's PC, in their office, only one person can get access to that information – the person sitting at that computer – unless you start sending information around the world, which is dangerous."

They wanted to collaborate on the same information dataset and share that information, but as Hamish recalled, none of the existing accounting software available to small businesses provided that service. "It was an inherent problem in all the existing software,

unless you had serious, serious money, like big dollars. So big dollars, big business, they get the intranet and all that stuff, but small businesses don't."

Once they realised they had a problem, they figured other businesses must be experiencing the same difficulties:

"We started to verbalise and communicate the problem with others and soon it was apparent they had the same problem. We looked internationally and realised all small business around the world had the same problem. So quite early on we realised we were sitting on a global opportunity."

Rod, with his passion for technology and enthusiasm for the idea, proceeded to build a prototype. Seeing the growing trend of the internet he saw an opportunity of doing something new in that space:

"Hamish and I looked at what all small businesses do, they all have bank accounts and the smart ones have accountants that they have a relationship with and they all have to pay tax. So we thought the big thing that the internet provided was the opportunity to start providing services at a cost effective level to this massive market that is happy to pay if you provide value."

Their experience told them there were already many different accounting products on the market and that the accountants were the gatekeepers and validators of that market. With Rod's experience in the software industry he knew they required smart people if they were going to build something special: "Rather than building a software company, we wanted to build a full service company, with great software, all the operational support, systems for scale, relationships with the eco-systems, such as banks and telecommunications carriers."

He also believed that small businesses were not gaining the full benefits of technology and saw the Software as a Service (SaaS)¹ model as a way to overcome this limitation: "The SaaS model increases the viability to sell to and support the enormous but fragmented small and

¹ Software as a Service as discussed in 4.2.

medium business marketplace and provides an opportunity to deliver enterprise level features to small business.”

2.1.3 Getting Prepared – Money, Contacts, Consultation

Whilst they were pretty clear on their business model for an online accounting solution, experience told them they needed adequate funding to do such a venture well, but they felt they did not have the level of personal wealth required at the time, so Hamish and Rod decided to put the venture on hold.

Rod was keen as part of his professional career to build a business for the purpose of sale and felt online accounting did not suit the model. “It is too sticky, working with small businesses didn’t seem like something you build up quickly and sell. It’s more of a long term thing, because it is a personal relationship with lots of small businesses.” Rod felt the enterprise software space was more suited to the model, so he co-established Aftermail, an email archive business, which was sold nearly three years later, with the proceeds from the sale providing “a substantial war chest to do lots of interesting things.”

Hamish filled the role of virtual CFO for Aftermail and continued to build Edwards Accounting’s client list. He developed stronger relationships with other accounting firms, through chairing the Wellington branch of a Tax Professional group for the New Zealand Institute of Chartered Accountants and also chairing a special board which advised the Inland Revenue Department (IRD) on enhancements for practicing accountants who act as IRD Tax Agents for businesses and individuals. He became well known in the media, with articles he published in newspapers and magazines and slots on the radio on topics specifically related to small business accounting.

Hamish and Rod worked on developing their business and marketing plans and continued to bounce the online accounting idea off interested friends and family who they thought could add value. Rod discussed the idea with friends Alastair Grigg and Phil Norman who would later become investors and take critical roles in Xero. For Rod it was important “to get an idea of what you would face, get their perspective on it.”

In 2003 Rod was concerned that the internet and broadband services in New Zealand were not advancing quickly enough. He lobbied the Government about the problems he saw and in particular his view that the free market had failed, stating a need for the State to get involved, a controversial stance considering Rod's very public free market position. In 2006, the Telecommunications Amendment Bill was announced, which would provide for the unbundling of the local telephone loop, which the Government indicated "was to allow vigorous competition between internet service providers for the home and business market" (Cunliffe, 2006).

The impending improvement of the New Zealand broadband situation and the successful sale of Aftermail around the same time provided the catalyst to take the online accounting vision further and in July 2006 Rod Drury and Hamish Edwards registered the New Zealand incorporation of Xero Limited.

2.2 Complementary Skills and Shared Agreement of Ownership

From past experience, Rod wanted this company to be his own; as a visionary leader he considers it critical to have the control to play out the venture as he foresees it. He had found his previous experience with Aftermail with six equal shareholders frustrating and difficult to achieve his vision when working by consensus:

“When you are an entrepreneur it is really tiring having to bring everybody along all the time. You just want to say, this is the way it is. I’ve seen it all before and I think the benevolent dictator model is much more efficient. Because my financial circumstances meant I was able to out-chequebook everybody, be the biggest shareholder and drive it more like my company and not have to apologise for it.”

Hamish was perfectly happy with this arrangement:

“He should hold the major shareholding, because he’s the technologist. I could not do Xero on my own, but he could. I was the bit of the puzzle that really helped but I wasn’t necessarily completely essential to making Xero start.”

So right from the start they had a shared agreement of ownership and control and the blend of skills suited all the parties. For Rod this was the ideal situation:

“I’ve always found that the best businesses I have done, are when you do them in partnership with people with different skills. For this one I needed an accountant and Hamish is the most entrepreneurial one. He’s a wee bit younger, not as broad experience, but he has been really good, he has different skills and he has the base domain knowledge. I have got the basics but he just brings all this insight as to how the accounting industry works because he has been one in practice – that is really important.”

2.3 Utilising Social Networks to Mobilise Resources

It was agreed very early on that with Rod's previous business experience and his public profile he would take the position of Chief Executive Officer. Hamish, with his financial knowledge and experience, stood down from the family's accountancy firm and took the role of full time Chief Financial Officer.

Together they needed to mobilise the resources to get Xero operational, they required a team of talented individuals who could develop a saleable product, and to define and establish their market strategy. Overall they needed to ensure they were in a strong financial position to achieve the vision.

The contacts and public profile they had developed during the three year wait proved extremely useful in achieving this.

2.3.1 A New Zealand Start-up using Capital Markets

Hamish invested \$NZ 300,000 and Rod \$NZ 1.2 million to initially start Xero. Eight to nine months later they had a second round of investment from staff and directors who came in to the business and then in June 2007, 12 months after incorporating Xero, they listed on the New Zealand Stock Exchange following a successful IPO of \$NZ 15 million. The capital raised was earmarked to grow the development side of the business, to begin sales and marketing activities and to make a start at developing their overseas markets in Australia and the United Kingdom.

Before Xero was formed it was always Hamish and Rod's intention to list the company publically, and in particular Rod saw the benefits that a public listing would bring to their SaaS based global company:

"We believe that software as a service, where you want to build a long-term relationship with your customers, suits a public company, in that it would be difficult to gain traction in overseas markets as a small private company. This is in part due to the acquisition cadence we are seeing in the software industry but also for us, we wanted to drive this business for a long time."

Although they had decided to go public early in the company's formation, Hamish highlights the initial challenge of engaging a brokerage company to handle the share offer:

"It was very, very hard to convince a firm to do what we wanted to do. First of all \$15 million is not a lot of money, it's a small IPO. Therefore their fees wouldn't be that great. What we were doing was massively risky. We started talking to various firms six months after we formed the company – we didn't have any product, or any customers. We had nothing – we just had an idea – and a reputation."

Hamish and Rod believed the concept of having an IPO early in the start-up would be good for New Zealand and as Hamish indicates they used this belief to promote the IPO to brokers, "'this is good for New Zealand, New Zealand needs an IPO, this kind of start-up sets an example for other technology companies to use the capital markets to raise money'." In the end one of New Zealand's larger stock broking companies, FirstNZ Capital, decided they liked the idea and believed it would be good for New Zealand. They believed Hamish and Rod were capable of achieving what they said they were going to do and that the lower fees were offset by the publicity of a company raising seed funding through an IPO.

2.3.1.1 Leveraging Friends and Family

By the time they launched the IPO offer document they had secured \$NZ 2.7 million from staff and directors. They had also received \$NZ 100,000 in Government grants and were awarded a further \$NZ 750,000 of Government funding to be drawn down over the following five years to assist with research and development and entry into the United Kingdom market.

The IPO saw over 1,200 investors subscribe to Xero. Of the \$15 million obtained through the IPO, 70% came from Hamish and Rod's contacts:

"The way Rod and I did it, was unique, it was successful. Through our personal networks, we just shoulder tapped to get the money. We needed to raise \$15 million, so we went out and talked to friends. When you think about a typical normal small business growing and evolving into a larger business, normally they would raise their money from friends and family to start with and then they go into angel

investment, venture capital, then maybe capital markets. What we did was use the capital markets to do the friends and family round.”

Hamish and Rod had many personal and professional contacts that were capable of financially supporting their venture, and they found Rod’s track record proved very popular with potential investors:

“We were able to lever off Rod’s good reputation and get our family, friends and employees to invest... A lot of my clients invested in Xero, which was a great network. I have 400-500 clients – not all invested but some of them did – who I knew was capable, who had an appetite for risk and understood the opportunity.”

All the while Hamish reiterated the risk of such an investment and that people should only invest what they could afford to lose: “If this thing tips over, and it could, we don’t want you coming back to us and saying ‘I’ve lost my house and my marriage has crashed’.”

Rod had over the years established some very good relationships with major investors Sam Morgan and David Kirk, who he knew through the TradeMe Advisory Board, and Shayne Hodge, known to both Rod and Hamish through his previous investment in Aftermail.

2.3.1.2 Good Relationships Help Subsequent Funding

Early in 2009, less than two years after the IPO, Xero raised a further \$NZ 29 million.

In May, around 70% of existing shareholders showed continued support and satisfaction with Xero’s progress, and subscribed to an existing investor share purchase plan which raised \$NZ 5.8 million.

In April, Xero announced a strategic placement of \$NZ 23.2 million which they stated would be used to accelerate its growth plans in the UK, Australian and US markets. The funding came from existing shareholders, the Bank of New Zealand, directors Sam Morgan and Graham Shaw, an unnamed institution and a new investor – Craig Winkler.

Craig, who was well known in accounting circles as the founder and ex-CEO of MYOB, was someone Rod wanted to meet as part of building his personal network:

“I try to think ‘who is the craziest person I can meet today?’ I always target –‘it’d be good to know that person’. I actively work towards that. You just know who’s around who are ‘important people’, and over the course of quite a short time in New Zealand you can get to know people.”

Rod, who always keeps his eye on business activities, was watching MYOB who were subject to a share buyout from a private consortium:

“I was watching what MYOB were doing and thought ‘I would really like to meet the founder of our biggest competitor’. So I was watching them and when they sold, I made it known to a few people I was trying to find his email address or phone numbers. He must have heard I was trying to get hold of him, and he flicked me an email, so I rung straight away. Within about 2 minutes I knew he would be really fun to work with. So suggested I come over to Melbourne and we could have some lunch. It ended up he put \$NZ 18 million into us. It was a big coup for us in Australia as it gives us a lot of credibility.”

Craig’s investment places him as Xero’s second major shareholder ahead of Hamish Edwards and behind Rod Drury.

Following the investment, Craig was appointed as a non-executive Director to the Xero Board.

2.3.2 Shoulder Tapping Potential Directors

Up until Craig’s appointment, Xero’s Board comprised of four independent directors – Phil Norman, Graham Shaw, Guy Haddleton and Sam Morgan – as well as the two founders Rod Drury and Hamish Edwards.

At the outset, it was considered important for Xero to have a Board of Directors that would demonstrate a good balance of skills and experience in order to strengthen their position for

the IPO. All directors were chosen and approached by Hamish and Rod who sought not only particular skills but also a financial investment in Xero.

Rod's past board experiences had given him a very clear view as to what type of person needed to fill the Chairman's role: "I wanted to have someone that understood me and wouldn't slow me down or clip my wings too much." Phil Norman, who Rod had known from his earlier company Glazier Systems where they had established what Rod considered "a good working relationship," fitted this bill.

Graham Shaw, a Chartered Accountant with 30 years commercial experience, was a business friend of Hamish's who had helped him to grow Edwards Accounting.

Rod had met Guy Haddleton, a successful technology entrepreneur in his own right, some years earlier and Rod believed his international business experience and marketing knowledge would be useful.

Sam Morgan, who is well known in New Zealand as the founder of TradeMe, provided a public profile that proved useful for the IPO. Known to Rod through his position on the TradeMe Advisory Board as well as being a personal friend, Sam also used Hamish for his personal accounting needs.

Because of Sam's financial success through the sale of TradeMe, Rod had an initial concern about Sam's involvement in Xero: "I was in two minds about Sam because it was like, how can I catch up if you're in." But Sam's analytical persistence and his ability to stand back and see the picture objectively has provided a valuable asset to Rod and the Board:

"He keeps our feet to the fire, he is one of the few people that really challenges me, not so much on strategy but more 'are we seeing the wood for the trees', 'is the evidence telling us that', 'have we done this', 'are we focusing on the really big things'."

Rod believes the Board's function is pivotal for their operational performance. "Good governance makes the business better and forces rigour and disciplines that are good practice. This is especially good for the entrepreneur as this creates the platform for the operational excellence needed for success."

2.3.3 Past Contacts Used to Establish Multi-disciplined Team

Hamish and Rod's goal was to build a long-term global business from New Zealand that would attract the country's best people. Rod believes that from within New Zealand it is easy to build a team of talented individuals that can rival any competitor:

"Our competitive advantage, in Wellington, in a small country, is that we can form multi-disciplined teams, because Wellington is such a good networking place. Trying to do this in San Francisco would be really hard; you just don't network out of your 'circle'. Wellington is like a warm Petri dish."

Prior to the IPO in June 2007, Xero employed 27 staff; once the IPO was successful staff numbers were increased to 50. The majority of Xero's initial senior management team and development staff were recruited through being personally known by either Hamish or Rod.

Craig Walker, who took the Chief Technology Officer position, was well known to Hamish and Rod, and both had high regard for and trusted his capabilities. Rod and Craig had worked on a number of projects together, and Rod at one time had paid Craig to be his personal programmer, to do "fun projects."

Their Chief Operating Officer, Alastair Grigg, had worked with Rod at Glazier Systems and they were originally introduced to each other by Phil Norman, now Xero's Chairman.

Anthony Bishop, who was the Sales Director, was a friend of Hamish's. Kate McLaughlin, who was employed as their Marketing Communications Manager, had been working at the *National Business Review* when Rod met her: "I tend to collect people – people I really like working with – for the next one."

Hamish Carter, Xero's Relationship Manager, sought for his 'wow' factor through his participation at the recent Olympics games, was not known directly by either Hamish or Rod, but through a friend of a friend of Rod's.

Early software developers, Fletcher Brown and Kurt Jettson, were known to Alastair and Rod from Glazier Systems. Rowan Simpson was known through Rod's association with TradeMe and Phil Fielinger and Alastair were previous business colleagues.

2.3.3.1 Motivation to Work for Xero

All the staff that were recruited prior to the IPO were invited to buy shares in the company. Most took up the offer, which to Rod was an indication of how committed they were to getting Xero operational: "They all wanted to buy. It is quite cool; some people give shares, but we made them buy them, which puts much more skin in the game."

The Xero Board has continued with an employee share plan facility, which they see as a method of attracting and retaining staff of a high calibre. The share plan is a component of the remuneration for all Xero employees, which the Board believes aligns the interest of staff and shareholders. From 2008 shares have been allocated to employees who purchase them from funds loaned to them by Xero.

2.3.3.2 Leadership, Passion, Inclusiveness and Collaboration

As a visionary leader Rod can see and own the whole project in his head and finds it important that his staff works with a shared vision and style:

"To go and explain all that can be quite hard and for people that don't think like that and see it all in little steps, it is hard. Because I am playing this out 24/7, I really have thought of a lot of the angles. There are really quite a lot of patterns – which you just know, so I am very rarely surprised. "

With such depth of focus it is not surprising how much importance Rod places on building a passionate team to deliver successful results:

“The software is about responsibility. It is really hard to delegate to a whole bunch of people who aren’t passionate about what they are doing. So we have got passionate people, who are passionate about doing it and make sure it works. They are actually very motivated on the outcome – that it is a working system.”

Being a staff member of Xero means being involved and knowing what is going on around them; inclusiveness across the whole group is important. As the company spread its wings opening offices in Auckland, Christchurch, Sydney, Melbourne and London, to keep the sense of the “water cooler” chat environment alive they implemented an electronic solution that facilitates an online corporate social network, discussion board, and knowledge base. All staff are encouraged to use the product and get a sense of what is happening in development and the progress “behind the scenes.”

2.4 Relationships, Learning and Product Development

Initially operating from an apartment in Willis Street before sharing office space with Openside Accounting (Hamish's rebranded family business) in the Old Bank Building in Wellington, their first task was to carry out in depth industry research. Rod believed it was critical that from the outset they had a product that would stand the test of time and be better than any of the competitors. He wanted to utilise the latest technology. He needed a framework that would allow them to test software within it and be able to release new versions quickly. They had to perfect the structure of a single code base for a global product, operating in multiple countries. The product had to be efficient and have very fast web pages. "So we had all these base things to build which I knew in a few years' time would give us sustainable competitive advantage."

2.4.1 Finding out What Small Businesses Want

In November 2006, four months after incorporation, Xero released their beta version. The product was built around two streams: Rod's knowledge of smart business processes and Hamish's understanding and experience of what accountants need to see and do. It was going to enable small businesses to better collaborate with their accountants and it was going to be the "easiest accounting system in the world to use."

The initial accounting product aimed at providing the accounting basics within a robust database and a framework to support double entry book keeping principles, and a chart of accounts. Their friends and contacts of Hamish's through his accounting company assisted:

"They were just excited to be a part of it and influence it. They did it because they wanted to do it, they wanted it to work, and didn't mind giving up their time to do it. We didn't pay anybody – it's just a 'nice guy' thing."

They confirmed the top ten things a small business needed to operate on a day to day basis. Using interactive design, prototypes were developed and feedback was sought until they had a model of functionality customers liked – then they took it to code.

Around 140 users beta tested the product, and after ongoing product development and refinement they put the product into a "limited release" market for sale in April 2007. Their

aim was to have 100 paying customers before the issue of the IPO document in May. At the time 100 customers seemed a major milestone, but the switch by a high number of their beta users onto the paying version helped achieve this goal as well as providing positive endorsement of the product.

Xero went to general release in August 2007, 13 months after the company's incorporation.

2.4.2 Meeting Known Customer Needs

One of Rod's mantras is that "the server runs the business." He believes this will enable Xero to achieve "real scale", by making the system support the customers and enabling the system to facilitate customers to help each other. It alleviates the need for large help desks and support staff: "our model was to put 50 people in place to support tens of thousands of customers." So, as part of the initial product development they also built a back office operational support system (BOSS), and although it is, "not as large an application as the accounting system, it is a significant application to run the whole business." BOSS is a scalable, automated back office infrastructure that enables provisioning, billing, customer support and analytics of activities in the accounting system and marketing website.

BOSS collects and categorises information, such as suggestions made, problems reported, the monitoring and metering of the customers' online behaviour, as well as determining stumbling blocks for sale closures, which Xero uses to prioritise and ascertain future enhancements, features and functionality for product development that should achieve the greatest customer satisfaction. As Hamish highlighted:

"We are evolving the product in a way the customers like – it is what they want and how they want to use it. We do small incremental changes and see what the customers do, change it a little more and see what they do."

They also believe that by releasing customer driven features every few weeks it accelerates their trust relationship with customers and partners.

Since February 2007, there have been 42 new releases of the Xero product. By the middle of 2009, Hamish and Rod considered Xero met, and even out performed, the accounting features of any of the incumbent accounting products, and was capable of fulfilling the accounting needs of most small businesses. They have aimed to take advantage of the online model and provided unique features, such as including automatic bank transaction feeds from supporting banks to enable easy bank reconciliation and fast automated entry of coded items to the ledger. The multi currency feature has up to the hour exchange rates and for virtual workers they have developed a version of Xero that works on Windows mobile devices, iPhone and Blackberry.

In addition to enhancing the customer experience, product development has also aimed to meet global market opportunities, in particular region specific versions to suit the accounting practices of that area. Xero currently has four regional versions: New Zealand, Australia and UK, that meet those countries' legal and tax reporting requirements and a Global version that allows the user to set the sales tax requirements for their country. All Xero versions are delivered from the same code base under the SaaS model.

2.4.3 Community of Customers

In March of 2009, Donna Wylie, an ex-employee of Xero, formed the Xero user group in Auckland and Wellington. Donna was involved with the initial product development and training for the first Xero customers, and formed her own consulting and training company (Xuru) to service Xero accountants and business users around New Zealand. The user groups are designed to assist with learning how other people are using Xero in their business and to give the opportunity for Xero users to meet each other at periodic meetings. She views the group as a medium to pass on information about the future Xero product developments and provide tips from the experts at Xero.

Donna announced the user group to all Xero users through the Xero Blog which generated some interest, including a certified partner from the UK, Adrian Pearson who to complement the user groups, established xerousers.com, as an independent online community for Xero users anywhere in the world at the end of August 2009. After ten days

they had twenty members including staff from Xero. As stated, the site is independent of Xero and the New Zealand user groups offer members the opportunity to set up and join forums and discussions.

2.4.4 Networking to Grow the Product Out

Along with interfacing with banks for data feeds, their product development includes partnering with other online products through the use of application programme interfaces (APIs) within the SaaS model. This is not intended to generate revenue, but rather to add value for the customer, by using technology to provide integrated solutions to small businesses previously considered by Rod as restricted to the Enterprise Domain.

Xero has also created a specific version for accountancy practices. The “Xero Accountants Edition” allow accountancy firms to subscribe to Xero and on-sell the service to their customers. The Accountants Edition includes a full version of the Xero product and also a scaled down cheaper “Cashbook” version that is only available to small business customers of the Accountant. The concept of the Accountants Edition is to enable the accountant to work with their client, sharing accounting information remotely as conceived at the outset and discussed in section 2.1.2 regarding the Virtual CFO.

In late 2008, Xero formed a strategic partnership with Acclipse. Through API technology, Xero interface with Acclipse’s Practice Management system which can provide client management services to subscribers of Xero’s Accountants Edition.

2.5 A Networked Company – The Eco-System

Hamish and Rod found the first customers were the hardest to get because of the need to have existing customers to create the word-of-mouth effect. They found that accounting software is not a whim purchase and potential customers tend to validate a decision to change accounting software with other people and therefore word-of-mouth endorsement is vital.

Initially they took a hand-to-hand approach, with events, presentations, and phone calling. They experimented with newspaper and radio advertising, but found the personal approach generated more comments. Advertising that was tailored to a specific industry sector saw a better response than generalised offline advertising. They found it was very hard to get people to make an online response to an offline message, with online advertising getting a much better hit rate.

Up until March 2009, figures showed that just under half of Xero's early customers had not previously had any accounting software. Of the 52% that did, 41% had switched from MYOB, 19% from Quickbooks, 0.3% from Sage, 0.7% from Banklink, 24% from other desktop solutions and 0.6% from other online providers.

Whilst establishing themselves as a listed company provided them with some public profile and branding, as a small company Rod considers it is very expensive and time consuming to build a brand alone, so Xero focused on building what Rod calls an "eco-system" by partnering with telecommunication carriers, banks, other online companies and accountancy practices. This approach enabled Xero to build a link with trusted organisations that opened up their customer contact base which in turn assisted Xero to accelerate an awareness of the company, the product and what Xero was doing.

2.5.1 Partnering with Banks

The product was developed to accept bank feeds to provide the customer with an easy and quick bank reconciliation process, and loading of bank transactions to the general ledger. The benefit of this facility is two way: the bank is able to offer a service to their customers,

which in most cases is provided at no cost, and it opens up an opportunity for Xero to access and communicate with the bank's small business customers.

All the major trading banks in New Zealand, four Australian and one in the United Kingdom provide bank feeds. Hamish and Rod see this as an opportunity to endorse and promote both banks and Xero's products and services. For example, in March to May of 2008 they ran a promotion in conjunction with Visa, where any customer who signed up to Xero and paid with their Visa card was automatically included in the draw to win an Olympic Games package for two.

2.5.2 Partnering with Telecommunication Carriers

A logical connection is for the telecommunication carriers that provide broadband to support the companies who have applications that use their networks. Telecommunication carriers around the world have seen this opportunity and are promoting these businesses at different levels and in various ways. For Xero, this was seen as an important foothold to reach a wider market in the countries where they were actively seeking to establish a customer base.

2.5.2.1 Telecom New Zealand

Through access within Rod's personal networks, Xero established a marketing partnership with Telecom New Zealand in October 2008. This gave Xero visible support through Telecom's national media advertising and through their Business Hub portal. For Xero, this was seen as a great way to leverage Telecom's sophisticated marketing and gain exposure to Telecom's small business customers. Appendix A gives an example of Telecom advertising that has included Xero. Looking at the hub nearly 12 months later, Telecom only promote three companies, although Rod is philosophical about the opportunities this channel brings: "I don't think anyone has been spectacularly successful there, but you have to do it, so we made sure we were there."

2.5.2.2 Telstra Australia

Telstra, Australia's largest telecommunications provider has a "T-Suite" service. This is their Software as a Service offering, which markets hosted applications to its Australian business customer market. At the time Rod indicated Xero had no real inside contacts that may have helped them secure this partnership:

"We had to come in through the front door, which is rare for us, but interestingly when we got there, after asking around to ascertain who the key influencers were and who we should try and talk to, they said 'It's Xero, we have been waiting to talk to you guys'. It was quite cool!"

The Xero-Telstra partnership went live in late July 2009, and gives Xero exposure to Telstra's 700,000 small business customers, who are able to order and pay for Xero on their T-Suite bill.

2.5.2.3 British Telecom

In May of 2009, they secured a reseller agreement with British Telecom (BT), going live on their cloud services business applications portal in July of 2009. This meant the Xero product would be promoted with NetSuite, Salesforce and BT Smart Marketing along with a number of other well regarded online solutions that would see them have access to 1.7 million small business customers in the United Kingdom. As Rod describes, "The deal gives us a lot of brand credibility in Britain. Rather than us having to do the massively expensive in-country marketing, we're able to use a piggyback marketing strategy."

Xero shareholders considered the announcement of the BT deal significant, with Xero's share price rising to a \$1.70 peak from \$1.30 before closing that day at \$1.45. Because of the extent of the market that BT has in the United Kingdom, Hamish and Rod have been able to make a strategic decision to put more focus on building certified partnerships with accountancy firms and use the BT portal for all direct sales in the UK.

Section 2.8.7 discusses the establishment of the deal and Xero's entry into the UK market in more depth.

2.5.3 Certified Professional Partners

Very early on it was recognised that accounting software is often purchased by customers on the recommendation of their accountant or financial advisor and that developing strong relationships with these people and their companies was critical for market access.

Xero has established two methods by which accountants can have a relationship with the Xero product. Either their clients who subscribe to their own version of Xero can assign them to be their financial advisor, or the accountants can subscribe to the Accountants Edition, enabling them to on-sell the Xero service to their customers as discussed in section 2.4.4. Certified partners can be accountants, bookkeepers, business consultants, and people that can provide setup and conversion of Xero services or act as Xero trainers. As at August 2009, there were 149 certified partners in New Zealand, 27 in the United Kingdom, eight in Australia and one linked to the global version of Xero.

2.5.3.1 Utilising Hamish's Background to Promote "Certified Partner"

Initially the concept of the partnership programme was promoted by using Hamish's company Openside Accounting as their first "Certified Partner." Hamish also found that his professional reputation as a practising Chartered Accountant was associated with Xero and its accounting product and many accountants were intrigued to find out more.

Through Hamish's roles as Chairman of the New Zealand Institute of Chartered Accountants (NZICA) Wellington Tax Professional Group and as advisor to the IRD for Tax Agents enhancements, he had developed "a pretty good network", with a number of contacts who were partners of accounting practices. This assisted Hamish greatly with initially being able to approach accounting firms about the product. Hamish's father was also able to assist with introductions by leveraging the network he had established through his long working association with many of the Wellington based accountants. Whilst these introductions broke the ice and gave Hamish the opportunity to tell accountants about Xero, he considered the decision "was always in the end, up to them."

The Partnership programme is now promoted through themed road shows targeted at accountants around New Zealand and Australia. In November 2008, Xero was selected as sole accounting partner in the NZICA Catalyst Programme. This partnership allows Xero to reach more than 20,000 New Zealand based accounting practitioners at NZICA events and activities.

2.5.4 Partnering with Other Online Providers and Complementary Solutions

Launched in March 2008, the “Xero Network” enabled providers of complementary solutions and providers of online software services to integrate with Xero through Application Programme Interfaces (API). Whilst Rod considers APIs in themselves do not generate revenue, they do provide a point of difference to a potential customer, keeping other competitors out of the market and providing wider market opportunities. “We are just covering more and more of the market and it’s a really good way to talk to other people’s customers who have already had a good experience with online software and therefore a high affinity.”

As at August 2009, Xero had 17 partnering solutions providing API interfaces in CRM, website development, payroll, workflow management, travel booking, hardware and software retail, credit card processing, and email and texting facilitation.

2.5.5 Open Relationships

Rod stated Xero uses openness as a source of competitive advantage, and discussed the sharing of information that many companies hide from the public:

“A lot of companies are very protective of numbers and customers. We are a public company so we have to publicise them. So we get them out the day we can, talk about it, we tell them more than we need to, because this is part of our open brand. You get it back tenfold. A good example of that is we blog our numbers when we do our monthly, so you can see the hockey chart, you see a nice graph, that becomes interesting news in the industry. It gets posted everywhere.”

Figure 1 gives an example, the “hockey stick” graph that Rod blogged at the end of March 2009. This drew 27 comments, many of them complimentary and demonstrating good public relations for Xero, as one comment indicates: “Great news. Thanks for the transparency – from a very happy customer and shareholder” (Riddell, 2009).

They have also taken this philosophy and introduced a tri-meter facility in the form of smiley faces for users to indicate how they feel about the system: happy, sad, or indifferent. Rod stated the idea was based on the recommender model, “where the ultimate customer satisfaction would be for them to tell somebody else about Xero.” The results are then blogged to the public website for all visitors (customers and non-customers) to see: “The cool thing was that it started to become a story. We were getting a positive buzz, ‘man you guys actually know how all of your customers feel at any time’, – isn’t that cool?”

Figure 1 The Xero Hockey Stick

Source: Xero Blog (Drury, 2009, March 31)

Hamish considers “transparency” very important to the way they work: “You can’t lie to customers, and you definitely can’t lie to staff.” Rod believes openness is an important aspect of the Xero partnership programme: “We have a kind of open philosophy; if we can be good to other partners, they’ll be good to us and we’ll create an eco-system around us.”

Rod promotes a philosophy of all partners working together for the benefit of the customers:

“It will be the case that we have multiple partners doing the same things. We also know that our partners will work with multiple accounting systems so I think the best approach is be open and up front with all partners and let customers decide what combinations of solutions suit their needs.”

2.6 SaaS² Revenue Model

Under the Xero SaaS revenue model of monthly subscriptions, Phil Norman indicated at the 2009 AGM that at current cost levels the breakeven for Xero was around 30,000 customers.

Managing costs to be within budget is important for Xero. As Hamish highlighted, keeping costs low enables them to be competitive:

“We want to remain a low cost operator and we haven’t seen any other SaaS companies that make us think ‘that’s the model for us’. The whole thing about our business is when you look at our cost base a month. Even if our cost base is one million per month, it’s tiny – we are still a tiny business. So we don’t actually need a huge number of customers to become profitable.”

The Xero subscription price is \$NZ 49.00, \$A 49.00, £19.00 or \$US 29.00 per month plus taxes depending on whether they are signing up for the New Zealand, Australian, United Kingdom or Global version respectively. There is an incentive discount with each version if the first year is paid in advance. Whilst some commentators consider it may be too expensive and others too cheap, Rod does believe they will be reviewing pricing structures and indicated initial pricing was based on “what the market would bear and looking at existing products. I don’t think we had to get the price right, yet. It has been a useful kite and it has become an anchor for other products being put out.”

Now they have the core accounting features in Xero, Rod considers they have a “software asset”, and intend to implement a small, medium and large pricing offer to achieve revenue maximisation. As they develop and release more features within the SaaS model, they will look at options to cover different aspects of the market:

“We can slice and dice in a bunch of ways. We can turn the knobs to manage our number of customers, our revenue per unit and revenue equations – so we can do a lot of tweaking. That is the benefit of software as a service – it is one asset that we can present in a number of different ways.”

² Software as a Service as discussed in 4.2.

2.7 Australia and Beyond

As stated in the IPO document, it was always the intention of Xero to enter the Australian and United Kingdom markets straight away.

The approach taken for market entry into Australia was fairly straightforward as they were able to do most of the business from New Zealand. Initially they sought to establish relationships with some accountants, arrange data feeds from the banks, and get some small business customers on board to validate the system.

Figure 2 gives an example of the advertising they used when the Australian version of Xero was launched. It uses humour leveraging off a well known Australian Government tourism advertising campaign being run at the time to attract people to visit Australia.

The Australian version of Xero was released after the United Kingdom version in September 2008. Hamish indicated that up to July 2009, market entry was limited, but that they were now in a strong position to accelerate that business.

Figure 2 The Launch of the Australian Version

Source: Xero Blog (Fierlinger, 2008)

In December 2008 they launched the Global version of Xero, which allows the user to set the sales tax requirements for their country.

At the end of March 2009 the Xero customer base covered 20 countries, and potential customers trialling Xero were located in 47 countries.

2.8 Going to the United Kingdom – A Case within a Case

In contrast to Australia the approach for the United Kingdom (UK) was somewhat different. It was not going to be possible to run it from New Zealand so they needed a solid presence to create their foothold.

Hamish indicated the UK was chosen for market budget factors: “The market is absolutely huge, 4.4 million small businesses – just huge. There are 26,000 accounting firms. It is a market dominated by Sage with 650,000 customers, and then a few others that take up 400,000 customers after that.”

In the UK the accounting rules are almost identical to those in New Zealand and the way in which they do small business accounting in the UK is almost the same as the way it works in New Zealand, with accounting practices looking after small businesses. There was also a belief they could draw on internal knowledge, with many of the Xero team having lived or worked in the UK at some time, and thus had an understanding of the market.

Hamish, who had taken the CFO role and initially been responsible for the IPO, was keen to do something new. He had been an accountant most of his career and he wanted to use these experiences and do something else. The UK opportunity fitted this ambition: “Go to England and completely start the business again.” Fortunately Hamish’s wife is British, which meant a spousal work visa was simpler, cheaper and quicker to arrange. In addition Hamish’s “founder” skill set was considered useful for giving credence to building effective relationships.

Once the IPO was complete he knew there was going to be a lot of effort put into building out the product and decided he could be more effective going to the UK to “Build some relationships, find some opportunities and get the ball rolling. As the product gets better, we will be in a good position having done all the pre-work and then bang – launch!”

Hamish was in fact in the UK for five months without a saleable product, spending the time researching, talking to people, understanding the lie of the land, making contact and meeting with accountants, showing people Xero, doing pre-sales work and generally getting everything set up.

Before Hamish left, he and Rod agreed on some milestone goals:

- Try and get a bank feed in terms of data transfer from one of the UK banks
- Try and form a telco partnership
- Get the run rate of total sales at about 100+ per month
- Have 1,300 customers by March 2009

2.8.1 Aligning with London's Kiwi Mafia

Before arriving in the UK in September 2007, Hamish spent six weeks researching the UK market, making early contacts, setting up meetings, and looking into accounting professional bodies. Hamish's approach was the same as it had been in New Zealand, to find customers who could validate the product:

"Just try and find people that we knew who had a business over there and get a few customers on board and make sure the product was right. Then we'd start to build our networks around that and find opportunities. It's almost like oil exploration – throw the drill down and see if you can find oil. Decide how far to dig before giving up and trying again."

When Hamish arrived he actively worked at building networks that would be useful in the future, and initially was very generous with his time:

"I did things to try and help other people, it wasn't just about my business – it was what I can do to help you – things we can do together. It was part of becoming known as a 'good guy' – accounting skills, ideas, knowledge about New Zealand, even introducing other people. Immediately I was able to give, not just receive. This way I was able to build relationships and win some favours that people owe you."

After Christchurch, London is the next largest city of New Zealanders, and Hamish quickly attached himself to this scene in London – or as he termed it, "the Kiwi Mafia." Many Kiwis have built up their careers in the UK and in Hamish's opinion have "infiltrated senior levels of most businesses there." The London chapter of KEA (Kiwi Expats Abroad) was particularly active and a great place to meet other Kiwis. KEA's mission is to "connect New

Zealand with its large global talent community, and contribute to the growth, development, and future prosperity of New Zealand by facilitating the sharing of knowledge, contacts and opportunities around the world” (KEA, 2007). Hamish went out of his way to attend events and network and got Kiwis he met to invite him to other business events. Initially he attended everything he could, until he knew which events were worthwhile. Promoting Xero and getting it known was important, and Hamish used the corporate arm of KEA to let all the Kiwis in London and the UK know that “Xero had arrived.”

2.8.2 Then there was Two

They did not set a large budget for the UK entry. As Hamish indicated, they wanted to make sure their investment was going to provide returns and that the Board would be comfortable with the level of investment: “We had to be sensible. We couldn’t just put 20 people on the ground and go crazy, we had to be careful.”

At first Hamish worked virtually, with a mobile broadband laptop, mobile phone, and “a couple of suits and ties,” supported by visits from Rod. But not long after he arrived, Mark Hallett, who was an old business colleague and friend of Alastair Grigg (Xero’s COO), approached Hamish indicating he would like to come and work for them, as “he liked the product and he liked our story.” Attracted to Mark’s prior accounting software sales experience, Hamish employed Mark as Xero’s Business Development Director for the UK, “we had a good time for two years – building our business in the UK. He knew a lot of people and was able to open a lot of doors. He had the business networks, from an accountant’s standpoint and small business as well.”

Keen to get customers, to get their feedback and understand the market, Hamish tried to sell to everyone he met because he wanted to get the word out there, but it was Mark’s contacts who provided the breakthrough. A relative of his who was a self employed plumber became Xero’s first UK customer. Whilst Hamish did not like to pigeonhole the early adopters, he did tend to think they were “more entrepreneurial, probably younger, who had a mobile business and were open to using technology to make their business better.”

The other area Hamish was keen to develop and that Mark's network contacts would assist with was the certified partner strategy. With 26,000 accounting firms in the UK, Xero concentrated their focus on the large top 25 accounting firms, knowing that even if they could secure just 1% of their small business market users that would provide an excellent basis for Xero to scale the opportunity. By August 2009 Xero had secured 26 certified advisors in the UK.

2.8.3 Networking with British Accountants

As co-founder, Hamish complemented Rod's technology drive with his accountancy drive and felt it "absolutely essential" they seek accounting software accreditation from the Institute of Chartered Accountants in England and Wales (ICAEW), one of the few organisations that offer this type of endorsement in the world.

Figure 3 Hamish (right) at ICAEW Small Practitioners Conference, Cambridge, April 2009

Source Xero Blog (Edwards, 2009)

This was an expensive exercise, that fortunately their balance sheet strength allowed them to do, costing around £7,000 and taking over three months to complete. Xero was only the second online software company to have received it. Hamish believes the exercise was invaluable, as it provided Xero with a global badge, signifying the software as fit for purpose and removing any barriers to Xero's credibility with the accounting profession.

Following accreditation, their relationship with the ICAEW has grown and Xero has been given a number of opportunities to increase awareness of the company and its product to ICAEW members. In February they were invited to have a stand at the Chartered Accountants' Hall in London for the Accounting Practitioners Conference. Xero also attended the Small Practitioners Conference in 2009, wrote an article for the ICAEW newsletter and made a presentation on SaaS at the 2009 Practitioners Conference.

The photo in Figure 3 shows Hamish (on the right) at the Small Practitioners Conference. The picture attracted a couple of comments regarding Hamish's attire and his assimilation of the City of London financier dress code: "You've moved onto the 3-piece then, Hamish?" and, "Amazing how 'the city' suits you Hamish."

2.8.4 Forming a SaaS Business Cluster

Hamish upon arrival made a point of going to see his competitors to let them know Xero had arrived in the UK and to have a "cup of tea" with them. This gesture was received favourably and as a result, a number of them formed the Accounting SaaS Group. Meetings were held every couple of months at the aptly named Counting House Pub in the City of London, where they informally shared their experiences over a couple of beers.

Hamish then instigated formalising the Accounting SaaS Group under the guidance of Intellect, an organisation set up to represent the UK's technology industry to government and the media, providing a code of conduct for members. The Intellect SaaS Group is a business cluster whose members represent a wider business area than just accounting. The aim of the group is to put aside any competitive element and work together to promote awareness of the SaaS topic and collectively address problems they are all experiencing individually. Through the Intellect organisation they have access to industry leaders, the media, government and other Intellect members to communicate and build SaaS awareness. The group is currently about to publish a SaaS guidebook for small business owners, through the Institute of Directors in the UK. From there they plan to run events with invited guest speakers.

2.8.5 Connecting to the Beachheads Programme

Charles Ward is the Chief Operating Officer of Intellect and is a member of the Beachheads Board in the UK. Hamish learnt about Intellect through Charles, whom he met as result of Xero being a member of the Beachheads Programme run by New Zealand Trade and Enterprise (NZTE).

Xero was accepted for the UK Beachheads Programme prior to the issue of their IPO document. The two year programme is designed to assist high-growth companies to grow internationally. The programme connects participating companies to a well connected network of advisors who can provide detailed insights into doing business in specific international markets, giving advice and willingly providing access to their extensive personal and business networks.

As part of the programme they established a Beachheads UK Xero Advisory Board which Hamish met with on a monthly basis, and after two years Hamish felt their relationship had developed into one of “good friends.” Eric Tracey and Bernard Cazenove were appointed to the Board. Eric, a New Zealander, is a director of a number of UK companies, and a Chartered Accountant who has had extensive business experience working in England and Wales dating back to the 1970s. Bernard, whose wife is a New Zealander, is a fund management expert. His earlier experience had been as a commissioned officer in the Coldstream guards, serving in the UK, Germany, Northern Ireland and New Zealand and being Aide-de camp to Governor General Sir Arthur Porritt in 1971.

The Beachheads Programme was well known to Hamish and Rod, as Rod sits on the board in New Zealand. Hamish considered the programme very worthwhile, as it provided invaluable networking opportunities and advice:

“It was one of the best things we did. Any New Zealand business going overseas would be crazy if you don’t go and talk to NZTE. They put together in-market people, and various other people that provide assistance and introductions and open their personal networks to you.”

It was also through Beachheads that Hamish learnt about UK Trade and Investment (UKT&I) which is similar type of organisation to NZTE and the regional development agencies. Xero managed to establish a relationship with SEEDA (South East Economic Development Agency) who assisted Hamish with introductions to banks.

2.8.6 The Kiwi Mafia Provides Critical Link for UK Bank Feeds

Everyone told Hamish “you’ll never get data feeds out of a bank in the UK,” and he admits it was hard work, but with the help of the Kiwi mafia it happened. Sarah McCourtie, a contact Rod had made through Aftermail, worked in London as the Inward Investment Account Manager for the Hong Kong and Shanghai Banking Corporation (HSBC), whom Aftermail had banking arrangements with. Sarah was very involved in the Kiwi scene in London and described by Hamish as “pretty well connected,” was able to provide Hamish with an introduction to the Chief Operating Officer (COO) at HSBC, along with endorsing Hamish, Xero and the product. Hamish found the COO to be a “key influencer,” who had not heard of Xero, but liked what Xero was doing and saw an opportunity for HSBC to make money out of the deal.

One of the frustrating things Hamish found in dealing with the UK banks was the frequent position and role changes that occurred with contacts he had established, which required a lot of perseverance on Hamish’s part. That occurred with the HSBC COO: “He moved on but championed us to the new guy. The thing was to just keep the fire lit and keep blowing on it and eventually it will take. We just kept nurturing that relationship.”

Eventually this approach paid off and HSBC now provide bank feeds to Xero’s UK customers. HSBC have one million small business customers in the UK alone, and because it operates a single technology platform over its global group, this will in the future allow Xero access to its worldwide network. “We are the only accounting system in the world that has done this type of deal with HSBC, pretty cool I think and the fact the feeds are global is even better!”

Whilst Hamish admits the process is a little manual, it does get the feeds to the customers, who must pay a fee that Xero on-charge from HSBC.

HSBC was Xero’s first bank feed in the UK and discussions are underway with other banks. To date they have not secured any introductions similar to that which Sarah was able to provide. Whilst some Australian contacts and SEEDA have helped out, Hamish has found that his experience to date has given him a better understanding of what banks want to know and the best way to approach them with the proposal.

2.8.7 A “Chat” at the Beach Leads to UK Channel Partnership Deal

As discussed in section 2.5.2, Xero signed a channel partner agreement with British Telecom (BT) in May of 2009. For Hamish this was a significant achievement: “We did it in eight months – from first meeting to launch. The average time a deal takes to put together with BT is 24 months, so to do it in eight months is pretty impressive!”

Stu McIntyre, a Kiwi farmer originally from the Hawkes Bay, has been living and working in the UK for a number of years. When back in New Zealand catching up with friends and family, he would often end up spending time at the family bach, which happens to be four doors down from Rod’s bach. Over a couple of summers Rod and Stu chatted and Stu offered to get Rod a meeting with the “right people” at BT.

As the Head of Strategy & Business Development for BT Wireless Broadband, Stu arranged introductions to Chris Lindsay who was Head of BT Business Applications and Paul Blacker who was Head of Strategy for BT Business. Meetings were held and Rod went over from New Zealand. Chris Lindsay turned out to be the “right person.” He liked what Rod and Hamish were offering and arranged for them to meet Bill Murphy, the Head of BT Business. As Hamish recalls it was a critical meeting:

“It was a pretty high powered meeting – we came out of that pretty excited after Bill had outlined the possibilities. You let Rod talk – he is quite a good evangelist. Rod and I do quite a good tag team, we have been doing it for quite a while – we did it to raise \$15 million, so it’s kind of natural for us. Rod really understands this space better than anyone I have ever met and Bill Murphy certainly picked up on that. Bill Murphy is a very smart and capable individual. In his heart he is a salesman, so he was looking at what we were saying about our product and thinking ‘can I sell this?’ We cracked a couple of Kiwi jokes. Kept it quite formal and businessy, and at the end Bill had a huge smile on his face. He turned to his colleague and said ‘let’s do business with these guys.’ That was the big tick we needed!”

After that they were referred back to Chris Lindsay who arranged for Xero to go through the rigour of BT's due diligence – checking market suitability, sales feasibility and how well the Xero product was priced. Once they had managed to get through that hoop, contract negotiations began. It wasn't until the contract was signed that Hamish and Rod knew they had a deal.

Xero went live with a “soft” launch in July 2009. The “full” launch will occur once the back end integration with BT's billing and back end platforms are complete. As BT is such a large company with many rules, Xero has needed to conform to BT methods and processes. For customer billing, this had meant a deviation from the way the system handles the process for Telstra and New Zealand Telecom.

Even though Xero has needed to be flexible in the relationship with BT, wider opportunities have already been experienced, with relationships being built with other SaaS application providers on the BT Business portal. Whilst Rod has had a technical integration relationship with Salesforce.com for some time, now through the BT portal Hamish has built a wider relationship with them also, and together they are looking into the possibility of co-marketing and sales opportunities.

2.8.8 Founder Skill Set Needed for Further Globalisation

In July 2009 Hamish and his family, which had grown by one in the intervening two years, returned to New Zealand to assist with the Globalisation Strategy of Xero. “Principally the business got to a point where it no longer needed my ‘founder’ skill set; it needed someone who was an experienced UK business person, CEO, MD if you like, to grow the business to the next level.”

To replace Hamish, Xero appointed Gary Turner as UK Managing director. Moving from Microsoft UK where he held the position of Product Group Director, Gary had previously been Managing Director of Pegasus Software, a small business accounting software vendor, for 12 years. Gary was seen as having the necessary experience and UK knowledge to take

Xero out of the UK start-up phase and had a reputation for his ability to exploit new sales channels and partnerships.

For Hamish the UK was an enormous success story, “We have almost got as many customers in the UK as we have in New Zealand now. We have done that in half the time.” By December 2008 they had 700 customers in the UK; four months later (the milestone target date to have 1,300 customers) they had actually signed up 2000 customers, and by June 2009 they had exceeded 4,000 customers. They had a UK telco partnership and a bank feed from a UK bank. Michelle Templar, who is the London Trade Commissioner for NZTE, and has since become a good friend of Hamish’s, has also indicated to Hamish that NZTE are very pleased with how things have gone.

Yet it has been hard work and at times what Hamish describes as “an emotional roller coaster,” filled with long hours and a lot of determination to make it happen.

“Rod and I are eternal optimists and we believe we will be successful and when you are not, it hurts. You have a bad month, and to not make the sales – that is horrible. Sometimes it was disastrous and nowhere near what we thought we were going to do. We had to make decisions. Are we going to stay or go? Adapt really fast – change and be dynamic.”

For Hamish it was important the UK was a success; it was his region, his responsibility, and it was his neck on the line, which in the end provided some valuable lessons.

“We didn’t want to come back from the UK and fire everybody and say we are not having a product in the UK. That would be a failure. But all the little things that didn’t work out were just mini failures that enabled us to get the overall strategy right and get the overall focus we needed. Certainly what we have done in the UK and the lessons we have learnt has really set us up nicely to go into the US.”

2.9 Find New Opportunities and Strengthen Relationships

On July 23 2009, Xero had more than 10,000 customers worldwide, which was a ten-fold increase since March 2008. At the AGM Rod noted, “What’s exciting about the milestones we are hitting now is: we are really coming to the end of the beginning.”

Whilst Rod is sharing this view with shareholders he knows they are always ready for the next stage: “...we are always building the business for next year’s growth.” Having employees running the business enables Hamish and Rod to seek growth opportunities, and utilise their founder skill sets, as Hamish highlights:

“As we are building Xero out, the key roles we need in the business are now being taken up by people other than Rod and I, which frees us up to do other things. It frees Rod and I up to go out there and find where the opportunities are, and build the relationships. For example if we want to do something with Salesforce.com, it makes sense for Rod and I to go and talk to them, because we understand inherently the business. I am not saying an employee can’t do that, but we really want employees to do the jobs and do the business. At important meetings they may not be as giving if you aren’t the founder. If they know you are one of the guys who can make decisions, they immediately know they are talking to the best people.”

Hamish’s new role is to assist with the globalisation strategy of Xero. Hamish believes this is not simply opening an office in a new country and attempting to find a customer base, but leveraging off an opportunity that provides a base to market to:

“We need to go for opportunities, not go for regions. It is not the US or Japan or California, it is what are the opportunities in these places that we can go after. For me it’s about identifying opportunities that we can successfully do now, and implement and work on.”

Over the past three years they have established many new relationships and strengthened and managed others already in place. These relationships Hamish sees as opportunities to explore:

“I am interested to develop the HSBC global relationship some more. We are in about 30 countries around the world, but we only have bank feeds in Australia, UK,

NZ, but with HSBC, they can go anywhere in the world with the same technology, which opens up a global customer base to Xero. We haven't disclosed that to the market yet. The guys at Blackberry are starting to get quite interested in what we are doing. So I want to work on that relationship some more. The Microsoft relationship is the one that Rod works, and one we need to develop some more. BT globally is an interesting opportunity for us. The other day, a guy in Russia contacted me and wants to do some stuff. So we will have a look at that, I'll spend some time on that and see whether or not it makes sense to do anything in that area. Let's open the door up to opportunities and go and find opportunities."

2.10 Networking to Grow the Business

Having experienced a rapid expansion of business through business relationships and the eco-system of business partners, Hamish has come to the realisation he needs to have a more focused approach in establishing relationships and needs to have a more selective network strategy:

“Start up is about making sure you have got a business. Then you can start being a lot tougher with your time and your network. I am not going to just throw hooks in the stream and hope that a fish comes along. I want to see it in my sights before I bother to go and look at it.

As your network becomes bigger and your business requirements become bigger, and there is so much demand on your time, it is really hard to just put all your energy into developing your network. It is good when you are young; you can just do it, like sport, business, and social – it is all as one.”

Hamish knows they need to focus on the institutional networks, not personal networks, seeking individuals who through their own eco-systems will build and strengthen Xero’s business eco-system:

“Business networks, those are the guys that I perceive that I need to stay in touch with, and build a relationship with. Not personal at all, nothing to do with going down to the yacht club for a beer, we are just trying to get more sales for this company ‘can you help me do that?’”

Rod’s entrepreneurial experience enables him to recognise the importance of developing a business network for a business purpose, which is separate to his personal life. These carefully selected individuals may at some time be able to provide a resource that may help in his entrepreneurial endeavours.

“I don’t think you know them intimately, but you know them well enough to flick them an email a couple of times a year and go and have coffee with them, or push opportunities to them. They are people with shared interests. My close friends are around the kids and where we live.

Just recently we had a couple of good staff go and do something else as part of their career development. That's a nice jelly bean you have. You can go tell someone, 'you have a really good staff member,' completely vouch for them, because everyone is looking for good staff, especially ones that have been pre-validated. For me that's a networking opportunity. I then go to people who I am actively building a relationship with – who I know would value that. That's a great thing to do – it's throwing jelly beans in the jar!"

3 Literature Review

3.1 Introduction

This literature review explores the concepts of innovation and entrepreneurship and the role that networking plays for entrepreneurs in the attainment of resources for establishing an innovative venture. The review includes the theory of social capital and how social networks develop social capital as an asset to an innovative venture. It concludes with an outline of the nature of and considerations for an internet start-up venture (e-Venture).

3.2 Innovation, Entrepreneurship and Networks

Innovation begins with someone sensing a new need and then developing new methods, products or services that will meet that need (Kanter, 2002). Drucker (1985) links innovation with entrepreneurship, describing innovation as a specific tool of entrepreneurs, which they use to exploit change as an opportunity for a different business or a different service. Entrepreneurs see the opportunities that other people did not realise existed (Casson & Della Giusta, 2007). Entrepreneurship can be described as a dynamic process of vision, change and creation that requires an application of energy and passion towards the creation and implementation of new ideas and solutions (Kuratko & Audretsch, 2009).

These entrepreneurial leaders need to possess a good market focus, sound financial foresight, and the ability to build an appropriately skilled management team to achieve the vision with a clear appreciation of what their own role should be, objectively considering their own strengths and abilities, and how they should best be utilised to meet the needs of the new and evolving venture (Drucker, 1985). Innovating leaders need to obtain sources of power to mobilise the necessary people and resources to bring the innovation to life (Kanter, 1985). Kanter indicates these sources of power are derived from three commodities: firstly *information* such as data, technical knowledge, political intelligence, expertise; secondly *resources* that include funds, materials, space, staff, time; and thirdly *support*, such as endorsement, backing, approval and legitimacy.

Yet such commodities or resources are not always immediately available to a fledgling venture and need to be acquired and developed (Brush, Greene, & Hart, 2001; West III & Noel, 2009). Each entrepreneur brings to a new venture a personal resource portfolio such as education, experience, reputation, knowledge of the industry and network contacts (Brush et al., 2001; Witt, 2004). Research has shown that “founding teams” which bring complementary skills and further network contacts are more likely to achieve success because of the wider diversity of resources initially available to the new venture (Brush et al., 2001; Gilbert, McDougall, & Audretsch, 2006).

As such, mobilising resources for the entrepreneur is inherently a networking activity where the entrepreneur must ask others to raise money, seeking labour and effort for a venture

with an uncertain future (Dubini & Aldrich, 1991). Entrepreneurs seek legitimacy for their venture from well regarded individuals and organisations, to help alleviate the perceived risk (Hoang & Antoncic, 2003). Research has shown a positive correlation between belonging to a business network and advancing the start-up process, which assisted in achieving sales and therefore profitability (Davidsson & Honig, 2003).

The reliance on networks is not constrained to starting up, as an entrepreneur's venture develops and grows, the entrepreneur still relies on networks for business information, advice and problem solving (Hoang & Antoncic, 2003). Some argue that the survival of entrepreneurs is their ability to network (Huggins, 2000). Jack et al. (2008) state that the phase the business is in will affect the types of networks the entrepreneur uses, the level of exchange that occurs, and how much time they spend on maintaining and developing their networks.

Hoang and Antoncic (2003) who cite the work of Larson and Starr (1993) describe the networks that an entrepreneur develops in a three stage sequence. In the first stage or early start up the key activity is to identify the contacts that will provide critical resources to start the venture, from family, friends and existing business contacts. During this stage the entrepreneur will spend a significant amount of time maintaining existing network relationships (Greve & Salaff, 2003).

Larson and Starr's (1993) second stage is building on the first and focuses on the establishment of the venture, when they indicate a social dimension is added, enriching the network relationship which focuses on ensuring the exchange results in higher quality information. In this stage entrepreneurs are endeavouring to increase sales through the development of marketing networks and cooperation networks (Lescher & Dowling, 2003). The entrepreneur spends a significant amount of time developing the network and less time maintaining the existing network, effectively making contacts that will meet the practical needs of the business (Greve & Salaff, 2003).

In the third stage where the venture is growing, Larson and Starr (1993) indicate relationships become deeper, more complex, and tend to operate at an inter-organisational as opposed to a social level. Existing relationships are explored more during this stage and less time is spent growing the network (Greve & Salaff, 2003). Hoang and Antoncic (2008) state relationships are driven in part by the resource requirements of the venture, where a critical mass of relationships is established and interaction between contacts becomes routine. They state that because of the inter-organisational nature of the relations, the direct involvement of the individuals that established the relationship is no longer required to sustain it.

Actively maintaining, pursuing and developing social relations has been found to be important for both the nascent and experienced entrepreneurs (Davidsson & Honig, 2003). Anderson, Park and Jack (2007) argue that through social relations, social interaction and social networks, is really how entrepreneurship is conducted. Dubini and Aldrich (1991) have encapsulated this thought in their holistic description of a networked approach as “emphasising the threads of continuity linking actions across a field of action that includes individuals, organisations and environments as a totality” (p. 306).

It is from this starting point that this review will look at the concept of networks in innovation and the benefits these bring to the entrepreneur with particular emphasis on the social capital that is developed for the entrepreneur and the new venture through networking.

3.3 Networks, Collaboration and Alliance

Unlike established firms which have already achieved a level of viability and survival, new ventures are subject to a liability of newness and smallness, with a lack of stable relationships, insufficient resources, inadequate bases of influence and endorsement, and weaker perceptions of quality, reliability and legitimacy for a product or service (Baum et al., 2000). A new venture's connections to outsider competencies are beneficial for its growth, and thus crucial to a new venture's ability to survive and obtain viability (Gilbert, McDougall, & Audretsch, 2006). A study of alliance networks for high technology start-ups by Baum et al. (2000) concluded that effective alliance networks formed at the start enable access to social, technical and commercial competitive resources which would normally require years of operating experience to accumulate. They state that this protects start-ups from new venture hazards, such as resource scarcity, and the inability to break through the periphery of industry; in turn these alliances will sow the seeds of future opportunities.

In today's world innovation is now a global activity (Tidd, Bessant, & Pavitt, 2001). Tidd et al. state that it is now not the sole place of multinationals to operate in the global space: many firms – whether small or large – source components, handle administrative tasks, and manage distribution globally. They further state that with trade liberalisation and opening of new markets, there has been an upsurge in business activity and consequently the number of players in the game. The authors draw attention to the fact that competition has intensified which is being driven by innovation in products, services and processes. As a result they consider that innovation is now dependent on networking activity for three reasons. Firstly the complexity of many products and services means no one firm can do it all. Secondly businesses focus on their core competencies and purpose and configure networks to meet their needs beyond the immediate abilities and focus of the business. Thirdly firms will themselves become network structured and the benefit comes from the whole rather than the sum of the parts, where collaboration in the fullest sense includes not just activity but the sharing of opportunities, problems and risk.

Tidd et al. (2001) suggest firms collaborate for four reasons: to reduce the cost of technological development or market entry; to reduce the risk of development or market entry; to achieve scale economies in production; and to reduce the time required to develop

and commercialise new products. They indicate that the motives for collaboration can be strategic (to gain access to leadership and learning) or tactical (reducing cost, time and risk) which then dictates the nature of the alliance to be formed. They characterise alliances into horizontal relationships such as cross-licensing, consortia and collaboration with potential competitors that have complementary sources of technological and market know-how or vertical downstream relationships where collaboration occurs through sub-contracting and alliances with suppliers and customers. The authors state the primary reason for horizontal relationships tends to be access to complementary technological or market know-how whereas the primary motive for vertical alliances is cost reduction. Baum et al. (2000) highlight vertical upstream alliances that occur through collaboration in networks with groups such as universities, research institutes, government incubators and industry associations that provide external legitimacy and status. Therefore they state that strategic alliances may influence a business's capabilities as well as others' perceptions of its capabilities.

Baum et al. (2000) stress the importance of the judicious establishment of alliances that are carefully configured and suggest limiting the number of partners that are cultivated. They indicate that multiple alliances with similar partners may yield fewer benefits because of the less diverse pools of information and also that having multiple same-type alliances means allying with firms who compete with each other, which may result in conflict. They suggest therefore that start-ups carefully consider which potential rivals will be most beneficial. Tidd et al. (2001) also add that alliances have the risk of information leakage, loss of control and ownership and that divergent aims and objectives can ultimately result in conflict. Mobility can also be a problem where partners are locked into cooperation with each other and therefore locked out of cooperating with others. Whilst such mobility barriers may be a disadvantage for firms crossing strategic groups, they have the advantage of creating barriers for other firms wishing to enter the industry (Gulati, Nohria, & Zaheer, 2000).

Gulati et al. (2000) also indicate firms may only have limited time and resources to dedicate to creating ties and satisfying the expectations of the alliances and therefore will choose only to ally with some partners at the exclusion of others. The authors state that networks

are dynamic, with the evolution of network structures being governed by the choices of the actors collectively, and that no single actor has individual control. In most situations they suggest partners ally with each other in the hope of generating some common returns that they share in an agreed way, and if partners find themselves engaged in an alliance where the learning or exploitation of assets is exhausted, the partners are likely to choose to disband the alliance.

Yet where entrepreneurial ventures are able to establish well functioning unique networks, these networks and the resources they are able to tap into can ultimately become a source of sustainable competitive advantage, where it is difficult for competitors to imitate or even be able to substitute (Gulati et al., 2000).

3.4 Social Capital

The goodwill that is available to individuals or groups from the structure and content of social relations, which is effected by the flow from the information, influence and solidarity available, is termed “social capital” (Adler & Kwon, 2002). According to Nahapiet and Ghoshal (1998), social capital is the “sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by individuals or social unit. Social capital thus comprises both the network and the assets that may be mobilized through that network” (p. 243). They state that social capital is multidimensional and can occur at both the individual and organisational levels.

Social capital is embedded in relationships that facilitate collaboration and cooperation with resulting mutual benefits (De Carolis, Litzky, & Eddleston, 2009). De Carolis et al. indicate that being embedded in a network provides sources of information and opportunities and may be used to develop a participant’s social status and reputation. With the provision of information, knowledge and access to other networks, networks are themselves a valuable source of power and a powerful asset (Cohen & Prusak, 2001). Having greater access to valuable information provides a strategic advantage in allowing them to act quicker than their rivals (Gulati et al., 2000). Adler and Kwon (2002) state that the social capital brings the benefit of solidarity, where strong norms and beliefs encourage compliance and reduce the need for formal controls which results in reducing transaction costs (Gulati et al.). Social capital is both a product of an entrepreneurs network and is also the enabler of continued network development, that facilitates co-ordination and cooperation of network ties by bonding parties involved (Anderson & Jack, 2002).

Adler and Kwon (2002) categorise seven characteristics of social relations that quantify social capital as an asset:

1. It can substitute or complement other resources such as compensating for a lack of human capital (i.e. experience or education) or it could provide financial efficiencies through the reduction of transaction costs
2. It is an asset where resources can be invested with an expectation of a future flow of benefits

3. It can be used for different purposes such as for information or advice or an opportunity to generate other forms of capital e.g. accessing human, financial or marketing needs
4. It needs maintenance, where the bonds and relations need to be periodically renewed or they lose effect
5. It is not the private property of those who benefit, one person's use does not limit its availability to others
6. No one actor has exclusive rights, the capital is formed from the relationship not the people
7. Unlike other assets, investments in its development are difficult to quantify and therefore measure.

Whilst it is generally agreed social capital is derived from social relations, there is considerable debate as to the specific aspects of social relations that actually create social capital. Both stances focus on the connections of the parties in the network, termed network ties. One stance focuses on the formal structure of the network ties and the ability to build social capital through linking to groups not otherwise connected (Adler & Kwon, 2002). Through these ties resources such as information can be obtained by bridging the parties in the network, and providing an inclusive lubricant for the parties (Davidsson & Honig, 2003). In contrast other research emphasises the role or content of the tie in the network, where through the establishment of shared norms and beliefs will maintain the trustworthiness of the parties (Adler & Kwon). This trust forms a bonding or exclusive glue that holds closely knit organisations together (Davidsson & Honig).

Nahapiet and Ghoshal's (1998) model of "Social Capital in the Creation of Intellectual Capital" provides a wider perspective on this position. They posit that "social capital facilitates the development of intellectual capital by affecting the conditions necessary for exchange and combination [of resources] to occur" (p. 250). They consider that social capital has three dimensions: *structural*, *relational* and *cognitive*. Whilst a relationship can exist, they state social capital will not be developed unless an exchange and combination of

resources occurs. For an exchange and combination to happen, they believe any of the following four conditions must occur:

Access for the parties – that the opportunity exists to make the combination or exchange of resources;

Anticipation of the value to be gained – parties must expect the activity to create value;

Motivation of the parties to participate – parties involved in the exchange and combination of resources believe it will be worth their while;

Combination Capability – where the capability to share meaningful worthwhile information exists and the parties are able to assimilate and use it.

They state the intellectual capital developed through exchange and combination can be further used in the ongoing development of the social structure.

The authors also recognise that each dimension and facets of each dimension can be inter-related. They further suggest that not all dimensions of social capital are mutually reinforcing, for example a structurally efficient network may not be the best way to develop the relational and cognitive social capital that ensures the network operates effectively.

3.4.1 Structural Dimension of Networks

A fundamental proposition of social capital theory is that the network ties provide access to resources, i.e. “who you know” affects “what you know,” resulting in information benefits (Nahapiet & Ghoshal, 1998). Nahapiet and Ghoshal consider the structural dimension influences the development of intellectual capital, primarily through the ways in which various aspects affect access for parties to combine and exchange resources and participate in knowledge activities. They also suggest it can affect the anticipation of value for parties, but suggest this influence may also be a result of cognitive and relational dimensions of the network structure.

Networks can be distinguished into *personal networks* which focus on the individual and *extended networks* which focus on collectives (Dubini & Aldrich, 1991). A *personal network*

is where the actor has direct relations, for instance with partners, suppliers, customers, venture capitalists, bankers, distributors, trade associations or family members, which are termed direct ties. An *extended network* is the collective result of the interconnected personal networks and therefore all the relations that exist. For example, between firms the extended network consists of relations between all members of both firms and is termed indirect ties.

Thereby direct ties, especially ties to people who are well known, are significant not only for the people directly linked but also for the indirect access they provide to people and organisations beyond the direct contacts (Dubini & Aldrich, 1991; Gulati et al., 2000). Dubini and Aldrich suggest this broadens an entrepreneur's access to information and resources, increasing their span of action and also reducing uncertainty because of the implied relationship. Network ties are an important source of referral that enables participants to identify and learn about each other (Gulati et al.).

Networking activities save time as those in the network are likely to receive the information faster than those without such contacts (Burt, 1997; Dubini & Aldrich, 1991). Using networks can have cost advantages, where entrepreneurs gain access to resources otherwise unavailable at a more favourable cost (Brush et al., 2001; Dubini & Aldrich; Witt, 2004).

The *network size* can be measured by the number of direct links between focal actors and other actors, to ascertain the extent to which resources can be accessed (Hoang & Antoncic, 2003). Witt (2004) describes measuring networks using the concept of *centrality* or *connectedness*, which is the access to or control of indirect and direct links, and therefore the ability the actors have to "reach" others in the network quickly, by *closeness* where few or no intermediaries are used, or by *betweenness* which is being on the information paths between other actors of the network.

A network's *diversity* provides a measure of the scope of opportunity within the network (Dubini & Aldrich, 1991), or the heterogeneity of network participants (Witt, 2004). It

describes the extent to which actors can access new information and ideas through weak and strong ties that lie outside of their immediate cluster of contacts (Hoang & Antoncic, 2003).

Weak ties are superficial or casual relations (Dubini & Aldrich, 1991). They are without emotional basis and tend to be based on more rationally dominated relations (Granovetter, 1973). *Strong ties* on the other hand are relations that involve high levels of emotional underpinning (Granovetter) and can be relied on (Dubini & Aldrich). In networks with strong ties, Dubini and Aldrich state, information is diffused rapidly. Granovetter states that although strong ties are reliable, much of the information that is exchanged is often redundant, whereas weak ties are less reliable but offer better access to a wider set of information.

Dubini and Aldrich (1991) indicate that because information is diffused rapidly in networks with strong ties, actors would learn little from the interactions. Uzzi and Dunlap (2005) suggest that less diverse networks, built around contacts who are similar in terms of experience, training and world views or around people they spend most of their time with, will reduce opportunities and will restrict access to discrepant information which they suggest is critical for creativity and problem solving.

Dubini and Aldrich (1991) state that successful entrepreneurs need to have a balance of weak and strong ties so that they are connected to many diverse sources of information and resources. A casual acquaintance will have their own circle of friends that is unknown to the actor and provide access to a wider network and therefore access to strangers that have information of value. Yet they suggest diversity in strong ties, which could be strongly linked to people in a different part of the social system, can also provide access to different resource channels. Someone with a larger or denser set of divergent ties will be in a much stronger position than someone with a smaller set of overlapping ties (Uzzi, 1997).

The value or benefits a network brings can also be ascertained by a network's *density* (Dubini & Aldrich, 1991). A network's density is measured by the extent to which an actor's

contacts are interconnected and focuses on the extensiveness of the ties between people or organisations (Hoang & Antoncic, 2003). Hoang and Antoncic state that the denser an actor's network is, the less likely it is that new resources will enter the network and existing resources will be recirculated within the group. However the authors suggest that heterogeneity, i.e. a dense network composed of different kinds of actors, could alter this position especially where bridging ties link the groups together.

Coleman (1988) argues that the extent to which actor's contacts are themselves connected strengthens social capital as it facilitates the emergence of effective norms and maintains trustworthiness of others. Simply being a part of a network can be powerful in itself as Gulati et al. (2000) suggest, and actual establishment of network ties may even preclude access by others which can be favourable and profitable to a business, such as in favourable supplier industries. They further suggest that collusion may be facilitated to a greater degree by the strength of the ties. It is their view that strategic networks can influence industry structure and business performance and increase their market power.

In contrast Burt (1997) considers that sparse networks with few redundant ties provide greater social capital. He calls the gaps between contacts with nonredundant information *Structural Holes*. Defined as the absence of ties between actors, he states people either side of the hole circulate in different flows of information. He argues that networks rich in structural holes present opportunities for entrepreneurial behaviour, enabling entrepreneurs skilled in building the interpersonal bridges to span the structural holes. He considers that networks with few redundant ties provide the greatest social capital benefits in terms of being able to access and use a larger share of the resources that flow through them, and also having control advantages in being the broker in relations between parties otherwise disconnected.

In summary there are two mainstream arguments as to the structural benefit of social capital. The first is that coherent and dense networks enable actors to achieve their goals effectively because of the cooperative behaviour of members, the high trust embedded in the relationships and the informal social mechanisms that control opportunistic behaviours.

The second is that sparse and non-redundant networks rich in structural holes facilitate actors' access to new information, opportunities and resources (Batjargal, 2007).

Nahapiet and Ghoshal (1998) consider that the social capital developed in one setting can be transferred to another and become a source of value in the next setting. The authors give these examples: transferring of trust from family and religious affiliations into work situations (Fukuyama, 1995); developing personal relations into business exchanges (Coleman, 1990); and the aggregation of social capital of individuals into that of organisations (Burt, 1992).

3.4.2 Relational Dimension of Networks

The relational dimension of social capital concerns the nature of the relationships developed via interactions and connections. Nahapiet and Ghoshal (1998) consider this dimension influences three conditions for the exchange and combination of resources to occur: the access for parties, the anticipation of value for the parties involved and the motivation of parties to participate. Nahapiet and Ghoshal's model considers the relational dimension to involve trust, norms, obligations and expectations, and identification.

3.4.2.1 Trust

The task of attracting resources into a new venture is often considered the greatest challenge faced by entrepreneurs as their ventures lack of both reputation and a track record creates a heightened perception of risk by potential resource providers (Brush et al., 2001). Trust is the fundamental element that determines the strength of the link and the permanence of the tie which reduces the risks for the involved parties (Dubini & Aldrich, 1991). Gulati et al. (2000) state that transaction costs can be reduced, in particular with inter-firm alliances that involve extensive inter-dependence and task co-ordination, where high trust enables them to work closely without the need for costly formal controls.

Mishra (1996) believes that to trust in another party requires a willingness and readiness to be vulnerable because of a belief in the good intentions of that party. This willingness he attributes to four facets: competence; openness to a mutual relationship; concern that they

will act unselfishly for the collective interests; and that they can be relied upon to behave as expected. Where two parties trust each other they will be more willing to share resources and therefore cooperate to exchange or combine resources (Tsai & Ghoshal, 1998). In a network Tsai and Ghoshal indicate reputations of trustworthiness are widely known and therefore more trustworthy actors will be popular exchange partners, which they argue will lead to different levels of exchange and combination.

Trust has been classified in a number of ways by various authors: *contractual or deterrence-based trust* that honours the accepted and legal rules of exchange; *institutional trust* which is based around formal structures such as teamwork culture in organisations or legal systems at a societal level; *personal goodwill or relational trust* that is based on close bonds developed with someone which builds mutual expectations of commitment; *economic or calculus-based trust* which is characterised by economic exchange and based on business necessity when completing important but infrequent transactions; *competence trust* which is based on reputation of skills or know-how; and *social trust* based on personal, family or ethnic/religious ties (Lee & Jones, 2008; Rousseau, Sitkin, Burt, & Camerer, 1998; Tidd et al., 2001).

Trust builds trust (Cohen & Prusak, 2001). Trust evolves with a relationship, initially with minor transactions of little risk where there is little requirement for trust but as more transactions occur the parties prove their trustworthiness to each other (Dubini & Aldrich, 1991). Tsai and Ghoshal (1998) indicate that trust develops inside the network and an actor's reputation of trustworthiness will vary, which will have a bearing on the level of resource exchange and combination that will occur. Reinforcing trust, according to Lee and Jones (2008), is essential to anchor the future commitment to exchange, which is critical for entrepreneurs who wish to convert social ties to economic ties.

Uzzi (1996) has found that people "roll over" their trust on the basis of recommendations of others. This cascading trust can be enhanced by trust brokers who vouch for people and make introductions to help spread trust throughout the group (Cohen & Prusak, 2001). Cohen and Prusak identify the "span of trust" as to how far trust extends within a defined

structure, in terms of the number of people to which trust can be rolled over, where thin trust is widespread, and thick trust is stronger trust bonds within localised groups. They consider that trust diminishes as it cascades, with thick trust developing between close associates, but as the “friend of a friend of a friend” extends the trust lessens to a more generalised form of trust. Uzzi's (1997) study of inter-firm networks found that more proprietary and more tacit information, particularly competitively sensitive information, will be exchanged in “embedded” ties (those with close or special relationships) than with thin trust ties.

Cohen and Prusak (2001) suggest that reputation can bridge the gap between thick and generalised trust by enabling the assessment of trustworthiness in the absence of personal experience. They indicate that trust plays an especially powerful role in close-knit business communities that facilitate gossip and other ways that cultivate reputation, while Putnam (1995) considers reputation as an essential foundation for trust in a complex society. Yet reputation takes time to build and can be destroyed quickly, which according to Gulati et al. (2000) creates a strong disincentive for opportunistic behaviour.

3.4.2.2 Norms

Norms that constitute social capital are ones that forgo self-interest and act in the interests of collectivity (Coleman, 1988). Nahapiet and Ghoshal (1998) believe trust facilitates cooperation and in turn cooperation then facilitates trust, and over time leads to generalised norms of cooperation. They further cite norms such as willingness to value and respond to diversity, openness to criticism, and tolerance of failure, which are important for the development of social capital. Cohen and Prusak (2001) suggest that within networks norms teach the newcomers the “ground truth” or as often phrased “how we do things around here.”

Yet norms can be constraining and become rigid, reducing innovativeness with self-reinforcing beliefs, closing a group from the reality and the knowledge of outside events (Cohen & Prusak, 2001; Coleman, 1988).

3.4.2.3 Obligations and Expectations

Nahapiet and Ghoshal (1998) suggest obligations and expectations represent a commitment or duty to undertake some activity in the future and influences access for parties and motivation for parties to combine and exchange.

Casson and Della Giusta (2007) highlight four forms of obligations that can occur within a social group. *Contractual obligations*, where a contract is a reciprocal set of promises; in business these promises are considered of utmost importance. *Customary obligations* do not involve a contract, but people are expected and assumed to behave in a predictable fashion such as replying to correspondence and compromising in negotiations. *Considerate obligations* are those where the wider implications of an action need to be considered. A *philanthropic obligation* signifies corporate social responsibility being taken seriously, such as sponsorship or donation of products or services.

Whether they are formal, professional or personal obligations, Nahapiet and Ghoshal (1998) highlight the strength of commitment and obligation that develops when participating in a cooperative environment and the sense members have of identifying with the group.

3.4.2.4 Identification

Networks help people develop their identities (Cohen & Prusak, 2001). Identification is about connection, where individuals see themselves as one with another person or group, enhancing concern for the collective processes and outcomes (Nahapiet & Ghoshal, 1998). Cohen and Prusak assimilate identity with membership, where it implies a connection of trust, understanding and mutuality that supports cohesive and collaborative action.

Identification enhances concern for collective processes and outcomes and thereby the recognition of the opportunity to exchange is enhanced (Nahapiet & Ghoshal, 1998).

Nahapiet and Ghoshal suggest this increases the perception of opportunities to exchange and potentially the frequency of exchange which in turn influences the anticipation of value and the motivation to combine and exchange.

3.4.3 Cognitive Dimension of Networks

The cognitive dimension refers to communication between actors based on their shared language, codes and narratives (Nahapiet & Ghoshal, 1998). Lee and Jones (2008) argue that the role of cognitive social capital is in maintaining structural relations in that it enables entrepreneurs to access additional resources. In Nahapiet and Ghoshal's view the cognitive dimension enables the combination of resources.

Language is an important part of social relations as it is the means by which people discuss and exchange information, and the fact they share a common language facilitates the ability to gain access to people and their information (Nahapiet & Ghoshal, 1998). Nahapiet and Ghoshal indicate that codes, which are intuitive and constitute rule-like behaviour (Lee & Jones, 2008), provide a sensory framework for observing and interpreting the environment and where a shared language exists there will be a belief in the benefit of exchange and combination. They indicate that if a shared language exists that includes a common grounding of knowledge then combining of information will occur. Narratives and metaphors provide the ability to cut across different contexts and enable both literal and imaginative understanding, with stories enabling the sharing of practical knowledge and tacit experiences facilitating discovery and development.

Tsai and Ghoshal (1998) argue that a shared vision embodies the collective goals and aspirations in a group. They state it can alleviate misunderstandings and promote opportunities to exchange ideas and resources freely because members of the group have the same understanding of how to interact with each other. As members of the group share goals or interests, through the shared vision, the authors believe they see value in the exchange and combination of resources.

Lee and Jones' (2008) study of entrepreneurs and cognitive social capital found that face-to-face communication helps to maintain close bonds and share common goals while clarifying complex tasks and meanings. They found the use of gestural (such as eye contact, facial expression, hand movements, tone of voice), assertive (such as self-disclosure, probing and prompting), and expressive (greetings, social niceties) language facilitates efficient understanding and meaning as to where communicative value lies. They found narratives,

stories and jokes facilitated the “ebb and flow” of face-to-face conversation. In online communication, their studies showed the development of positive codes reinforced a “can-do” philosophy. They suggest that sending succinct, assertive, clearly expressed messages in the online environment is central to building trust between geographically dispersed actors and bridging across vertical networks. They conclude that effective use of cognitive social capital enables trust to be built as well as mutual expectations and obligations and therefore the basis of relational capital.

3.5 The e-Venture

The internet has become an important tool in promoting the growth of business start-ups, especially software firms that have developed internet related applications and businesses that use the internet as their main facility to buy and sell goods and services (OECD, 2001). It has changed the way business is able to approach globalisation and its competition (Poon, 2000), providing a low-cost platform for SMEs to participate in business and commerce, opening a market once reserved for larger multi-nationals (OECD).

Along with reducing the physical distance between consumers and providers, Kathuria and Joshi (2007) state the internet has created new products and services that are information based through the separation of information about products and services from the actual products themselves. Through the internet, businesses can obtain and present information so that it provides added value for the customer, and when customers are willing to pay for this added value, an electronic product is created (Kollmann, 2006). The new businesses that are formed for the purpose of creating an electronic product are *e-ventures*.

The added value provided to the customer by electronic products can be a significant factor in creating a competitive advantage for e-ventures and can take a number of forms as listed by Kollmann (2006):

1. **Overview:** by providing a structured overview of a large quantity of researched information, which would normally have been a laborious activity to obtain and collate, which enhances both the speed and breadth of information accessible.
2. **Selection:** customers can use online queries to locate desired information / products / services quickly and successfully, providing assistance for evaluation.
3. **Mediation:** by facilitating a matching service, an online offer can create the possibility of bringing together requests of suppliers and demanders more efficiently and effectively giving value in problem solving.
4. **Transaction:** through well designed and structured business activities such as cost and payment options, completing a transaction can be simpler, quicker and cheaper.
5. **Cooperation:** by enabling various vendors and companies to interlink their services or products with each other, an online offer can provide complementary value.

6. **Exchange:** an online offer can allow different consumers to communicate easily with each other, creating value in communication.

To ensure the information is current and continues to provide value for the customer, Kollmann (2006) argues there must be an ongoing process of information gathering, processing and converting to an “information product”, which is regularly transferred or implemented to the electronic product.

3.5.1 Profile of an e-Venture and an e-Entrepreneur

Typically e-ventures are innovative, independent and original companies where the idea strongly focuses on information as the competitive factor (Kollmann, 2006). Often they are characterised by enormous growth potential that gives rise to a greater technical and market risk, which requires large amounts of capital investment (Tidd et al., 2001).

Based on two studies of 287 new technology businesses in the US and UK, Tidd et al. (2001) describe a broad profile of high technology entrepreneurs as high achievers, who take calculated moderately high risks and believe they have personal control over business outcomes, and who are motivated by independence more than just success. These studies found that the entrepreneurs had around 13 years of relevant work experience, were on average educated to masters level before establishing their new venture, and often came from professional families where one of the parents was likely to be self-employed.

An empirical study of 375 e-commerce entrepreneurs (e-entrepreneurs) in Thailand found a positive correlation between successful entrepreneurship and a founding entrepreneur having a high need for achievement from competitive success (Sebora, Lee, & Sukasame, 2009). The same study also found that successful e-entrepreneurs are associated with the internal locus of control of the founding e-entrepreneur. They describe the locus of control as the e-entrepreneur's ability to be self-directed in the pursuit of opportunities, as opposed to leaving the situation to chance, fate or luck. The study also found that e-commerce entrepreneurs did not believe the success of their venture had any relation to a propensity for risk.

3.5.2 The Experience of the Dotcom Shakeout

Tidd et al. (2001) believe that due to the high barriers of entry in terms of expertise and capital, the mortality rate of new technology businesses is lower than other types of businesses, yet Drucker (1985) states that for high technology ventures there are unique risks they must face. Drucker deems the business environments of these ventures to be turbulent and unpredictable, with the window of time to launch an idea often limited due to competing imitations and therefore the need for the product to be right first time. Once the window of opportunity closes, Drucker indicates a shakeout will occur, with many ventures failing. He believes this is more pronounced in the high-technology area because of the greater investment required and the slower profit returns, due to more research and development, and the initial development costs.

During 2000 and 2001 many e-commerce businesses (dotcoms) failed, providing evidence of Drucker's shake-out theory. Whilst not directly supporting the views of Tidd et al., it does give credence to their position on the financial and expertise needs of e-ventures.

During the 1990s many dotcoms were established by entrepreneurs who assumed commercial success would be guaranteed because of a perceived need for e-commerce businesses due to the fast adoption of internet usage at that time (Barnes, Hinton, & Miezowska, 2004). Many of these new ventures were small businesses led by inexperienced business people whose main focus was to be first to market, and often had no defined product income stream, many relying only on advertising revenue (Razi, Tarn, & Siddiqui, 2004). Those that had no product distinction over their competitors found initial trading difficult, and were unable to secure a sustainable customer base (Barnes et al., 2004).

A number of problems were cited, such as technically inadequate websites, little focus on customer service and back-end distribution channels, heavy investment on marketing and IT infrastructure, inappropriate spending, and unwise staff recruitment (Razi et al., 2004). Initial capital was secured through the buoyant stock markets at that time, but when

technology stock prices fell sharply and investors became wary about the viability of the business opportunity, they were left vulnerable (Barnes et al., 2004). Ultimately a number of dotcoms were left in a weak position and unable to effectively respond to unexpected market situations, nor capable of adopting a more responsive business model (Razi et al.).

3.5.3 Success Factors for an e-Venture

However, many dotcoms did survive the shakeout, overcoming the technical, operational and behavioural shortcomings of their failed counterparts (Razi et al., 2004). Kollmann's (2006) research on e-ventures identifies five focus areas: *management*, *product*, *market access*, *processes* and *finance*, that in conjunction with the studies by Razi et al. and Barnes et al. (2004) provide a structure to bring together the lessons learnt from the dotcom era and identify key points for an e-venture's success. Figure 4 shows Kollmann's focus areas and summarises the key points for success in each focus area. Each focus will be explored in more detail in the following sections.

Figure 4 Success Factors for Establishing an e-Venture

Source: Kollmann (2006)

3.5.3.1 Management

Whilst Kollman (2006) acknowledges the ability to manage stress, having a desire to succeed, possessing self confidence, having an awareness of risk, and the ability to influence and characterise the actions of the team, as discussed in section 3.5.1, are important for an

e-venture founder, he also highlights the importance of having strong informatics, information systems management and business administration skills.

Barnes et al. (2004) studied the dotcoms who survived the shakeout and showed the importance of having access to capable in-house expertise that can facilitate appropriate technology choices to best leverage the opportunities available, ultimately providing customer satisfaction.

E-venture founders need to be able to create electronic value for the customer, which Kollman (2006) states requires a solid understanding and knowledge of internet related standards, technologies and architectures, and database and software development, complemented with a knowledge of information management systems such as IT security, data warehousing and mining and e-business standards and payment systems. All of this then needed to be underpinned with a solid business grounding in the areas of marketing, business organisation, management, accounting and finance.

Because of this tall order of skills for an e-venture, Kollmann (2006) suggests establishing e-ventures with a team of founders, to bring together the required mix of abilities. Having skill diversity will provide a system of checks and balances in decision-making and complementary strengths that, taken together, provide more value than the sum of its parts (Stam & Schutjens, 2006).

3.5.3.2 Product

The importance of identifying a distinctive market niche of customers, with clearly definable needs that they can serve, is critical for the e-venture (Barnes et al., 2004; Tidd et al., 2001). Kollman (2006) states the electronic product / service offered needs to specify and communicate its electronic added value, all the time ensuring there is a customer need, and the customer is willing and prepared to pay for it, with the company's ultimate aim to achieve added value for the customer.

The product / service needs to have a unique characteristic that differentiates it from its competitors, especially in large markets where there may be many providers of the same product or service with similar pricing strategies (Kollmann, 2006; Razi et al., 2004). An e-venture must perform different activities than its rivals, or perform similar activities in different ways, ultimately ensuring a unique set of benefits for the customer is achieved (Porter, 2001).

Kollmann (2006) highlights that many e-ventures are dealing in new forms of business ideas and business models, and it can take customers time to become familiar with or even acknowledge the value from such ideas. Thus he indicates the importance of regular reconnection with customers and users to ensure the business idea will succeed. E-ventures need to be constantly learning through utilising the information obtained from online activities, and responding to the lessons learnt by changing business practice as appropriate (Barnes et al., 2004).

3.5.3.3 Processes

Whether work, financial or organisational processes, they must form a solid operative foundation in an e-venture, with the need for core processes to be clearly defined and harmonise with the evolving company structure (Kollmann, 2006). Combined with the quality of the information product and the process flows, Kollman states they become representatives of the company's quality image.

The design of the organisational infrastructure, back-end support and logistics plays a critical role in ensuring the right product / service is delivered to the right customer on time (Razi et al., 2004). Srinivasan (2004) state good customer service, which includes the ease of placing an order, order confirmation, order tracking and post-sale service, builds trust and loyalty that influences customer behaviour. They indicate trust is something that is earned over a period of time and is gained by observing the structure of the organisation and also from third party recommendations, which are critical for bringing in repeat business.

All of this needs to be executed within a logically designed workload management framework that ensures all activities are given the full attention they require, yet completed efficiently, in the least number of essential steps (Kollmann, 2006). Kollmann states this is particularly important where the business is based on taking advantage of economies of scale so that a large number of users can be serviced by the minimum number of processes.

3.5.3.4 Market Access

For an e-venture, market access entails ensuring successful market entrance, by establishing a product and brand and being able to effectively reach the customer via an electronic communication channel (Kollmann, 2006).

Having a strong and trusted brand is essential to success on the web, with visitors coming from various sources such as search engines, affiliate links and offline promotions, often without an established relationship. A known and trusted brand will provide reassurance that they will have a satisfactory purchase and user experience (Roberts, 2003). Chiagouris and Wansley (2000) identify that building a strong internet brand requires creating an *awareness* that generates recognition or a recollection of being exposed to the brand. Next, the authors indicate the brand must create *familiarity* – knowing the product, its features and services offered. The brand then needs to achieve a *positive image*, which links strong, favourable, and unique associations of the brand in a person's memory. Finally there is the *transaction* stage which is the beginning of a relationship, and as such, a fusing of the brand with internet activities.

To reach a customer electronically, the e-venture needs to ensure the domain name features in the top 30 results from a search engine, so the customer can find and access the site (Razi et al., 2004). Razi et al. state the website must be user friendly, easy to access, with simple navigation and appealing content that promotes the products and services and that provides a wealth of relevant information.

Whilst Kollmann (2006) states branding and market access is achieved through marketing and sales activity, many start-up companies have limited resources, are unknown, have no

reputation, and have not established a strong sales network. For this reason, he draws attention to the opportunity for an e-venture to establish cooperation arrangements, such as affiliate programmes, whereby they create a type of partnership with other online businesses who advertise and/or market them, and sell their product on their website for a commission or fee. He suggests this provides the new venture with access to a wider range of customer segments and assists in establishing a solid sales network.

3.5.3.5 Finance

The foundation for establishing a company, facilitating fast growth and being able to successfully continue developing the company requires finance (Amit, Brander, & Zott, 1998). Kollmann (2006) stresses the importance of realistic financial projections and the need to continually update the financial plan so that at any given point a realistic estimate of the financial position of the company can be made, along with being able to present the actual financing requirements. He further stresses the importance for the company to have good control especially with regard to the cost side of the business.

As new technology ventures often do not have a saleable product at formation, funding cannot be simply based on projected cash flows from early sales (Tidd et al., 2001). With low cash flow the return on investment is uncertain, collateral is often limited, and forecasting that relies on past performance is non-existent, which means financing by debt is often not an option (Kollmann & Kucketz, 2006). Kollmann and Kucketz indicate financing the company therefore comes from a mixture of own capital and various other forms, such as venture capitalists, where they take a stake in the company with the intention of later selling the shares for a profit. Based on surveys conducted in North America, Europe and Asia, funding criteria used by venture capitalists is based on wider considerations relating to the entrepreneur's personality and experience, characteristics of the product and market as well as financial factors (Tidd et al., 2001).

Throughout the venture's phases of development, financial restructuring is an ongoing need, firstly to complete the initial launch, secondly for initial development and growth, thirdly for consolidation and growth, and fourth for maturity or exit (Tidd et al., 2001).

For young companies Kollmann and Kucketz (2006) indicate investment in the early phase is normally within a small circle of investors. For subsequent financing rounds they state existing investors are then re-approached, along with developing relationships and building trust with a wider circle of potential investors. They suggest this requires having a good focus on investor relations, ensuring their methods of communicating and exchange of information enable trust and confidence to be built. From their studies, investors prefer up-to-date and interactive relationships, requiring additional informal, personal discussions with a mutual exchange of knowledge, enabling the investor to have a positive impact on steering business development and creating added value, along with building a commitment for future financing rounds.

3.5.4 Growth Strategies

E-ventures that successfully establish themselves need to employ strategies to enable them to grow. Volkmann and Tokarski (2006) identify three forms of growth for an e-venture:

1. *Internal growth* is within the company and based on its own strength through internal value creation, such as strengthening their technology focus or building core competencies.
2. *External growth* is outside the internal process of creating company values, such as forms of acquisitions and mergers. External growth is utilised for geographical business expansion and overcoming market entry barriers during internationalisation, along with diversification in acquiring complementary resources.
3. *Cooperative growth* is achieved by utilising formal and informal network structures, such as joint ventures and alliances. The primary aim is to gain complementary resources. Cooperative growth is defined as relating to the areas of product offer, communication and distribution, which support and strengthen the business rather than directly generating new sources of income. Examples are *viral marketing* which passes on information to third parties, using them as multipliers; the *market-programme*, where partners act as moderators by sharing information with their B2B community; and the *affiliate programme*, where partners provide links or

banners to company products for a fee; *web services* where external providers allow the user of their technology in another company's site, such as Google's search technology use within a private site, or integrating sections of Amazon's book catalogue within a site to provide added value for their customers; and *web services APIs* (application programme interface) such as Google APIs where anyone can build an application using the Google infrastructure and therefore product development is being carried out by people outside of the company's staffing structure, enabling collaborative growth.

3.5.5 Going Global

As usage of the internet grows, it provides a powerful medium for reaching and servicing customers around the world, and while there are many examples of start-up ventures who have embraced e-commerce, growing into successful multi-national businesses, cross-national differences do present complexities for the global e-business (Guillèn, 2002). Guillèn cites different national regulations, local consumer preferences and habits, multiple currencies, different languages, and varying user demographics and attitudes toward pricing and quality, hence the need to understand and address national differences to ensure success in any global approach. Appendix B – National Differences across World Internet Markets gives Guillèn's list of the main differences an e-venture faces when crossing national boundaries.

As Guillèn states, the challenge of doing business on a global scale is not unique to internet based businesses and the key to success is adapting for cross-national differences without sacrificing operational efficiencies of global integration and coherence in order to be competitive within each national market. The nature of the goods or services being sold will determine different levels of local responsiveness and building efficiencies from global integration to build a competitive advantage. Figure 5 shows Guillèn's framework of the balance that must be made between local responsiveness and global integration depending on the nature of the internet goods or services being sold.

Figure 5 Integration-Responsiveness Framework for a Global e-Venture

Source: Guillèn (2002)

Cell 1 indicates that the product or service only has a local market and therefore cannot be taken worldwide.

Cell 2 differentiates the goods and services that require a large level of local responsiveness in terms of website design, local language and currency, examination and return policies, and payment options as well as investment in customer service. Guillèn describes these products and services as “look ‘n’ feel” such as used cars or goods offered through online auctions, which require nationally differentiated strategies but not necessarily strong global integration. Guillèn considers entry into these markets requires careful choice to ensure there is enough growth potential to meet the market uniqueness without sacrificing operating efficiencies.

In direct contrast Cell 4 provides the challenge of being able to offer a wide selection of goods at the most competitive prices to be cost-effective. Guillèn suggests internet companies in this space need to exploit economies of scale and scope by integrating globally across national borders, thereby developing a distinct competitive advantage over

competitors and local business. He cites examples such as Dell and Amazon where there is limited adaption to local markets without sacrificing efficiency.

Finally Cell 3 fits products and services that must be tailored to the local market and also able to obtain global operational efficiencies to secure competitive cost advantages over competitors, such as financial products and services.

Guillèn's research concludes that any internet company wishing to develop global capacity must identify what is necessary for their product or service to meet the local needs of their intended market. The author highlights the importance of planning a global approach and sequence of foreign market entry, ensuring they research their intended markets and enlist competent assistance for advice and facilitation if necessary. The author indicates that the correct balance between local responsiveness and global integration can assist in achieving a competitive advantage in their business sector.

3.6 Conclusion

This literature review shows that networks are important for entrepreneurs and resulting innovative ventures. Networks enable entrepreneurs to access the resources, information, markets and technology that a new venture lacks. This is necessary because of the greater competitiveness in the today's business world, and the complexity of products and services being developed. It enables innovative ventures to focus on core competencies and provides a structure where opportunities, problems and risk can be shared.

Networks and alliances that are carefully constructed with the appropriate levels of energy exerted into the relationships can make new ventures viable and ultimately able to survive in a competitive environment. The uniqueness of each venture's networks can eventually become a source of competitive advantage which is difficult for competitors to imitate or substitute.

The goodwill that is generated from these networks can be defined as social capital which is an asset to any venture whether new or existing. Nahapiet and Ghoshal's (1998) model of Social Capital in the Creation of Intellectual Capital provided a useful framework to consider the aspects of social relations that make up social capital. The structural dimension highlights the importance of developing weak and strong ties and the benefits that can be obtained in having diverse ties and the ability for actors to access useful information. The relational dimension shows that trust is imperative in the motivation to combine and exchange information and resources. Norms provide the framework social relations work within and obligations and expectations govern the commitment to each other in individual relationships. Being able to identify with a group builds an implied trust and collectivity. The cognitive dimensions of social capital highlight the importance that language, codes and narratives have in the ability to share and exchange information, ultimately enabling trust and forming the basis of relational capital.

Well functioning networks that effectively access information, knowledge and resources can provide the venture with cost and time savings, they can reduce and offset risk and provide the new venture with opportunities of scale and scope, and a manageable way to structure

a network oriented business. The social capital within these networks forms a valuable asset for the business to further grow and develop the business.

Finally the review looked at e-ventures and the need for them to create added value for their customers through the separation of information about products and services from the actual products, resulting in an “electronic product”. E-ventures are able to achieve customer added value in a number of ways such as by providing large amounts of data succinctly, or they can assist with customer queries by locating options and choices quickly. The e-venture can provide a supply and demand matching service, or through good design it can make a transaction easy and efficient to complete. There is also the opportunity for an e-venture to bring vendors and companies together by interlinking service or product offers and they have the ability to create communication value for customers by allowing different customers to communicate easily and effectively.

The next section explored the building blocks of management, product, processes, market access and finance to determine success factors for an e-venture. Strategies for growing an e-venture can be deployed internally, by building on its existing strengths, or externally by acquisitions and mergers or by cooperative growth through joint ventures and alliances.

Whilst it is acknowledged that the internet has opened up opportunities for small businesses to enter the global marketplace, planning and research is required to ensure peculiarities of foreign markets are addressed. The nature of the good or service to be sold influences the balance in the business approach between local responsiveness and the cost saving opportunities provided by global integration to ensure they remain competitive with other businesses in the same market.

4 Industry Analysis

4.1 Introduction

This section will set the scene for a global internet company based in New Zealand. It will look at the development model relevant to this case, Software as a Service (SaaS), review world internet and broadband adoption, and the nature of small and medium businesses worldwide, before looking at the different choices available in accounting software for the small and medium business market.

4.2 Software as a Service

Software as a Service (SaaS) has recently received many promising future projections of its usage and adoption with Deisto and Pring (2008) who represent Gartner stating, “SaaS is moving beyond ‘the bleeding edge’ and is fast becoming a serious consideration for enterprises of all types and sizes” (p. 1). Gartner analysts predict SaaS usage will have a compound annual growth rate (CAGR) of 19.4% through to 2013. This is triple the predicted total market CAGR of 5.25% (Mertz et al., 2009). Similarly many other mainstream companies including IBM, Microsoft, and IDC propose a hopeful future for SaaS vendors:

- Saugatuck Technology representing IBM predicts by 2012, 70% of businesses with more than 100 employees will have deployed at least one SaaS application (IBM Corporation, 2008).
- Microsoft forecasts SaaS usage in 2009 to increase by 20% to 86% for small and medium business (Microsoft, 2009).
- IDC indicates 76% of US organisations will use at least one SaaS application for business use by the end of 2009 (Mahowald, 2009).
- IDC indicates 45% of IT budgets in 2010 will be spent on SaaS and whilst SaaS demand is strongest in North America, the customer base is growing in Europe, the Middle East, Africa and Asia/Pacific, and that by the end of 2009 nearly 35% of the world’s SaaS based revenue will be outside the US (Mahowald, 2009)
- Gartner are projecting the SaaS market value will achieve a 22% increase in 2009 from 2008 to be worth \$US 8 billion (CRM Landmark, 2009).

4.2.1 SaaS Definition and a New Zealand Context

SaaS (pronounced “sass”), is a model for software deployment, where a software application is delivered and managed as a service by a vendor to meet the needs of multiple customers simultaneously, deployed from a centralised data centre, across a network, typically the internet’s world wide web (THINKstrategies, 2008). Mertz, Eschinger, Pang and Dharmasthira (2008) define SaaS by three key elements:

- It is an application owned, delivered and managed remotely by one or more providers

- The provider delivers an application based on a single set of common code and data definitions, which are consumed in a one-to-many model by all contracted customers at any time
- Income is derived on a pay-for-use basis or as a subscription, based on use metrics

From a New Zealand perspective, a business whose product is delivered under the SaaS model which is deployed via the internet effectively is a global business opportunity and therefore the market is not restricted to any one country.

4.2.2 Background

The concept of SaaS is believed to have been first reported in 1999 by the Pennine Group, a consortium of software engineering researchers from Durham, Keele and Manchester Universities (Turner, Budgen, & Brereton, 2003). Based on their research they foresaw a demand-side model for delivery of software functionality to users, with highly flexible and agile software which would meet rapidly changing business needs (Bennett et al., 2000).

Also referred to as managed software or on-demand software, SaaS has evolved from the application service provider (ASP) model where specific client owned server applications were hosted by a third party (Kincora, 2006). Under the ASP model Kincora characterises, one provider hosted many different customer specific applications, often without any specific knowledge of the application, and therefore customers were usually still required to retain in-house expertise to support the application.

Under the SaaS model the provider owns the software and hosts the application and the associated data at the provider's location, taking responsibility for the technological infrastructure and support of the hardware and software (Chong & Carraro, 2006). SaaS essentially bundles software products with software delivery and maintenance services (Fan, Kuma, & Whinston, 2009).

4.2.3 The SaaS Vendor

For the SaaS vendor, the cost of providing software services is reduced through specialisation and economies of scale because of the simpler application scenario (Chong & Carraro, 2006; Kincora, 2006; Liao & Tao, 2008). Chong and Carraro state that a provider who serves many customers in a consolidated environment will achieve lower operating costs as more customers subscribe to the single, centrally-hosted software service. This, they indicate, enables vendors to reduce the minimum cost that software can be sold at.

The authors describe SaaS as an evolving state of *configurability*, *multi-tenant-efficiency* and *scalability* where the full financial efficiency benefits are not achieved until the fully evolved model is in place.

- *Configurable* applications use the same code for all customers, yet each customer's user experience and feature set is unique to them through the use of metadata: data about data, describing the who, what, where, when, why, and how of the data (USGS, n.d.).
- *Multi-tenant-efficiency* is a single instance that serves every customer, and through authorisation and security policies each customer's data is kept separate from others', with the end user unaware that the application instance is being shared among multiple tenants.
- *Scalability* is the ability for the vendor to host multiple customers on a "load-balanced farm" of identical instances, as opposed to holding separate databases for each customer. The SaaS system is scalable to an arbitrarily large number of customers, because the servers and instances can be increased or decreased to meet demand without the need to re-design the application and upgrades are rolled out to all tenants simultaneously.

The SaaS model provides a number of benefits for the provider:

- As the delivery of software is physically easier than for off-the-shelf products and is centrally controlled this provides operational cost savings for SaaS providers (Bantz, Mohindra, & Shea, 2002).

- Under the recurring-revenue model they also benefit from a regular revenue stream and with web based services the potential customer base is increased with access to the entire internet business market (SIIA, 2001).
- Users of subscription computing services become dependent on their providers and have a low user dropout rate, due to the business critical data the providers hold. Providers are able to accumulate knowledge about their users which they can use to increase the services' value to the customer (Bantz et al., 2002).

4.2.4 The SaaS Customer

The key attraction of SaaS for customers is considered to be the reduced total cost of ownership – comprising direct capital investment in hardware and software plus indirect costs of installation, training, repairs, downtime, technical support, and upgrading (BusinessDictionary, 2009) – and the ease and speed of implementing the solution compared to on-premise solutions (Mertz et al., 2008).

Whilst customers will require fast internet access for web services and correspondingly workstations capable of running up to date operating systems (Marks, 2008), they will not need to implement high-end IT infrastructure and can avoid up-front costs for the software and perpetual license agreements (Mertz et al., 2008; SIIA, 2001; THINKstrategies, 2008). Because SaaS solutions are deployed from a single code base they tend to offer limited customisation and configuration which in turn reduces time and effort to implement (Bantz et al., 2002; Manning & Bois, 2008)

With fixed subscription payments, Bantz et al. (2002) state that the consumer's cash flow is regulated, avoiding the cost spikes that occur with hardware and software upgrades, the impacts of growth and relocation, and recovery from breakdowns. They also highlight the value of backup services, antivirus and anti-hacking facilities, data protection and encryption, and continuous system monitoring being built into the subscription price.

The web based model of SaaS applications provides the user with ubiquitous computing and the ability to access the service from any remote location as opposed to being tied to a

license on a desktop machine (Bantz et al., 2002; Wikipedia, 2009, May 11). The SaaS model enables regular ongoing delivery of system upgrades, improvements and fixes which is considered beneficial for users as it allows them to access new services faster and avoids “version lock-in” (Manning & Bois, 2008).

The low entry cost makes the SaaS option attractive to small and medium sized businesses (Bantz et al., 2002; Chong & Carraro, 2006) and whether an existing business or a new venture, the SaaS option provides an organisation with the option to access and utilise the latest technology (SIIA, 2001). A Gartner survey draws attention to the ongoing and rising maintenance costs from “mega-vendors” which constrain budgets and encourage buyers to consider other options and vendors (Mertz et al., 2008). The same survey also found many organisations had previously invested heavily in application software licenses that were never used (“shelfware”) to take advantage of discounts with volume purchases, which resulted in reducing the available IT budget and therefore their ability to subsequently purchase new modules or software.

4.2.5 What the critics say about SaaS

Functionality

Fan et al. (2009) suggest that whilst SaaS applications are easy to use and have a low implementation cost, many lack performance and functionality compared to on-premise or off-the-shelf applications. They state that while customers are initially attracted to lower implementation costs, ultimately software quality and functionality will be an important factor in retaining and attracting customers.

Service Quality

Fan et al. (2009) also highlight that due to service outages of early SaaS applications, customers demand system availability and reliability, which means SaaS providers have to invest heavily in server and system capacity to ensure a guaranteed service quality, increasing their service and operation costs.

The authors conclude that because of these higher costs, a SaaS vendor needs to achieve service excellence with greater efficiency than that of off-the-shelf or on-premise

competitors. They believe that for SaaS vendors to be ultimately competitive in the long term, they will require higher design quality that involves achieving excellence in product innovation and quality improvement efficiently.

Integration

Results from the Gartner survey of 258 organisations using or planning to use SaaS within 12 months found that 37% are transitioning from on-premise solutions to SaaS solutions, while 14% of those surveyed were going back to on-premise solutions from SaaS solutions (Mertz et al., 2008). The survey found that at a high level the shift away from SaaS was due to significant integration requirements they faced and unmet performance expectations. Mertz et al. noted such decisions were found in countries where SaaS adoption is fragmented and therefore integration would be difficult. They also imply larger organisations that use SaaS may have more complex application environments that require prohibitively demanding integration efforts.

Long Term Cost

While the initial costs for a SaaS solution may be lower, Massie (2009) notes that the total cost over a three to five year period is not generally any different to the traditional license-based model. Mark (2008) concurs with this and considers in the long term a SaaS product would not be the cheaper option. Massie argues the ability to spread costs over several years under the SaaS option has little impact on company profitability, since most projects can be amortised over several years. Similarly Marks suggests that software leasing companies can provide the facility to finance a traditional software purchase and spread the repayments as monthly instalments. However Massie admits there is a psychological advantage for decision makers when presented with the choice of spending a smaller amount each month for a fixed contract period versus agreeing to a large single figure sum for expenditure, especially for businesses with limited cash reserves.

4.2.6 SaaS Enabled by SOA and Future Possibilities

While SaaS is a delivery model, Service Oriented Architecture (SOA) is an architectural approach (Seeley, 2007). SOA is a model for organising and utilising distributed capabilities that may be under the control of different owners (Maurizio, Sager, Jones, Corbitt, &

Girolami, 2008). In SOA, a system operates as a collection of services, with each service interacting with various other services to accomplish a certain task (Sim, Wang, Gilbert, & Wills, 2005).

Whilst SaaS solutions do not need to be SOA enabled, doing so gives SaaS providers the ability to serve many thousands of customers out of the same instance of the application, with SOA architectures and best practices enabling SaaS applications to scale, and flexibly change and version the software efficiently (Henschen, 2006). Henschen indicates under SOA, SaaS applications are able to be flexible in meeting customer needs and provide faster integration than on-premise solutions. They give the example of “mashups” where using web services, information from two or more services can be put together for an organisation’s specific purpose (examples of mashups are sites such as housingmaps.com which brings together Google maps and properties for sale/rent).

Seely (2007) suggests that in the future offerings that are delivered as software as a service may not be entire packages of applications, but components and services that could be mixed and matched, and as such representative of a portfolio of business services.

4.3 Internet and Broadband

The SaaS model deployed over the internet is dependent on good rates of internet adoption to ensure there is a market for the product. It is also dependent on the speed of the network to ensure the product functions in an acceptable manner to the user. As SaaS is a global model the next two sections will look at internet and broadband adoption and trends on a world scale to appreciate the opportunities SaaS vendors have to market their product in a global marketplace.

4.3.1 Internet Adoption

Since 1995 internet adoption has been rapid. Between 2001 and 2009, the number of internet users increased by 342.2%, from 360 million users to 1,596 million users worldwide. At the end of March 2009, 23.8% of the world's population were users of the internet (Internet World Stats, 2009).

By the end of March 2009, the greatest number of internet users was in Asia with over 650 million, followed by Europe with nearly 400 million and then North America at just over 250 million. Regionally North America has the greatest penetration of internet usage with 74.4% followed by Oceania / Australia at 60.4% then Europe at just under half at 48.9%. Iceland has the highest penetration rate by country at 90%, with New Zealand and Australia also having high penetrations rates of 80.5% and 80.6% respectively. Since 2001 the number of internet users in Africa and the Middle East has had the greatest growth of 1,100% and 1,296% respectively (Internet World Stats, 2009).

Paul Twomey, the CEO of ICANN (Internet Corporation for Assigned Names and Numbers), stated in a recent interview with the BBC that in the next two to three years there will be over 3 billion internet users worldwide (Twomey, 2009). He considers the next wave of internet growth will occur in the developing countries and will be driven by the internet's convergence with mobile communications. By the end of 2010, he states that 5 billion people will have a mobile phone, many of which will be internet enabled. He considers the expansion of mobile networks, combined with the latest internet enabled devices such as the "Smartphone", will allow developing countries to "leapfrog" traditional technologies thereby removing the barriers for their citizens and businesses to enter the global economy.

4.3.2 Broadband Adoption

Whilst the world has experienced a rapid uptake of the internet, there has been an even more rapid switch to broadband and a resulting increase in the range of activities that is carried out online due to the faster broadband speeds and greater bandwidth (OECD, 2008).

The OECD (2008) indicates that broadband has enabled the emergence of new business models, new processes, new inventions, and new and improved goods and services and has increased competitiveness and flexibility in the economy. The authors note the increase in the diffusion of information at a lower cost; improved access to increasingly larger markets; the enabling of people to work from multiple locations with flexible hours; and the general speeding up of procedures and processes through the uptake of broadband.

By the end of the first quarter of 2009 there were 429.2 million broadband subscribers in the world, a 7.4% penetration of the world's population (Vanier, 2009).

4.3.3 Broadband Technologies

Within the OECD community, DSL broadband is dominant with 59% of the 266 million OECD broadband subscribers, followed by cable at 29%, fibre and LAN 10% and 2% for other technologies as at December 2008 (OECD, 2009)³.

Figure 6 shows the breakdown of OECD broadband subscribers by technology per 100 inhabitants. The use of fibre and LAN technologies is markedly higher and the principal broadband technology in Japan (47.9%) and Korea (43.1%). Sweden and the Slovak Republic also show higher adoption of fibre at 20.30% and 18.6%, with DSL broadband remaining their main subscription technology. The United States, Canada and Belgium have highest levels of cable usage, although DSL is the dominant broadband technology in Belgium.

³ Point Topic indicate in their own broadband reports that wireless broadband technologies such as 3G and WiFi/WIMAX, are not included in their analysis because of their relative newness and the ability to collect data (Vanier, 2009); it is assumed this is also the case for the OECD not including or not separating details for wireless technologies.

Figure 6 Broadband Subscribers by Technology per 100 Inhabitants (December 2008)

Source: OECD (2009)

Figure 7 shows the speed of the broadband available in each country varies. This relates to the dominant broadband technology in use. DSL broadband (digital subscriber line) services typically provide download speeds of 256 kilobits per second (kbit/s) to 20 megabits per second (mbit/s) i.e. 20,000 kbit/s, dependent on the DSL technology, the line conditions and the service-level implementation (Wikipedia, 2009, June 24). In contrast, fibre communication has the potential to carry around 1000 mbit/s (FIPOt Communication Services, n.d.), which is reflected in the Japanese and Korean higher download speeds and their dominant broadband technology being fibre. Cable broadband technology download speeds can vary from 100 mbit/s to 400 mbit/s (Wikipedia, 2009, July 7).

4.3.4 New Zealand Broadband

As at December 2008, Figure 6 shows New Zealand's broadband uptake sits right on the OECD average. Predominantly broadband in New Zealand is provided through DSL, i.e. telephone technology. Whilst telephone services are deregulated in New Zealand, up until 2006 the physical infrastructure was controlled and managed by one company, Telecom New Zealand, the incumbent telecommunications provider from the days of state controlled telephone services. In June 2006, after considerable debate between the Government and internet service providers, the Government announced an amendment to the

telecommunications act to allow for “local loop unbundling”, of which the then Minister of Communications said, “This bill will help New Zealand catch up with leading OECD countries by promoting competition that will speed up the provision of fast, multi-faceted broadband internet service” (Cunliffe, 2006).

Under unbundling arrangements, competitors of the incumbent telecommunications provider can install their own equipment in the incumbent’s exchange facilities, under a lease arrangement with the incumbent provider, which enables new entrants to compete by providing differentiated services (Boyle, Howell, & Zhang, 2008). In theory, Boyle et al. indicate, unbundling should stimulate increased broadband uptake by increasing product variety and putting price pressure on the incumbent. At the time, as commentator Brian Dooley noted, ADSL equipment was already at rock bottom prices and therefore it would take time for new services that would be competitive to be developed, and the new possibilities would only gradually result in lower prices, higher bandwidth, higher bit caps for service and more symmetrical DSL services (Dooley, 2006).

Figure 7 OECD Average Advertised Broadband Download Speed, by Country, kbit/s (September 2008)

Note (**): New Zealand's download speeds are not typically advertised. Figure were imputed using technological maximum speeds for ADSL 2+ offers.

Source: OECD (2009)

4.4 Small and Medium Enterprises (SME)

Like many countries around the world most businesses in New Zealand (NZ) are classified as small and medium sized, with 19 or fewer employees (Ministry of Economic Development, 2008). As at February 2007 the Ministry of Economic Development indicated there were 433,405 SMEs, which represents 97.1% of all NZ enterprises. They indicate at the same period there were 413,136 (89.2%) enterprises that employed five or fewer people and 315,049 (68%) enterprises in NZ who employed nobody.

In the United Kingdom (UK) at the start of 2007 there was an estimated 4.7 million private sector enterprises, of which 99.3% or 4.6 million were small enterprises with 0-49 employees; 0.6% or 28,000 medium-sized enterprises with 50-249 employees and 0.1% or 4,700 enterprises were large with over 250 employees (BERR, 2008). In the UK 99.9% of all private sector businesses are SMEs, employing less than 250 staff.

In 2007, all enterprises in the UK had an estimated combined annual turnover of £2,800 billion, with the small and medium enterprises (<250 employees) accounting for 51.5% or £1,442 billion of the turnover (BERR, 2008). Small enterprises (<50), alone, accounted for 47.5% of UK employment and £1,050 billion or 37.5% of the total turnover.

In Australia, as at June 2007, there were 2.01 million SMEs, with 95% (1.9 million) classified as small, i.e. employing less than 20 staff (Australian Communications and Media Authority, 2009)

An Australian study of SMEs found that the internet was a critical business tool for dealing with customers, managing supply chains and undertaking activities such as banking and selling products or services (Australian Communications and Media Authority, 2009). Their study highlighted the growing reliance on the internet as a channel for e-commerce with 95% of Australian SMEs connected to some form of broadband. They further highlight that 78% of SMEs surveyed see broadband as having a positive impact on their business operations, in particular an increased efficiency in the speed at which activities can be undertaken.

Similarly in Western Europe there is an increased use of broadband for business purposes by SMEs: a study of 184 European SMEs in France, Germany and the United Kingdom found that SME spending on broadband managed services is forecasted to increase by more than €4 billion to €9.7 billion by the end of 2011 (Ryan, 2007).

4.5 Accounting Software

Accounting in today's world is a data management function dependent upon information technology (Kee, 1993). Whilst bookkeeping can be completed manually, most organisations have now computerised their accounting to some extent, whether accessing an independent software solution from their personal computer, or using an integrated feature of an enterprise resource planning system (Considine, Razeed, Lee, Speer, & Collier, 2008).

Until the 1970s, Considine et al. (2008) indicate, information systems were support tools in aiding record keeping for accounting. Today the authors state that information systems provide an important information service to businesses, with accounting being just one of the many business functions incorporated into information systems.

As technology continues to advance there is an increasing need for businesses to have timely access to critical information for decision making. For example Considine et al. (2008) indicate the traditional accounting function of providing financial reports on an annual basis is being changed to being able to produce these at any point in time. Considine et al. suggest that incorporating this type of change in the accounting process puts pressure on businesses to have functionally able accounting information systems that can meet these real-time information needs.

Table 1 provides a summary of companies that provide accounting software for the New Zealand (NZ) small and medium business market. Whilst this list may not be exhaustive, it indicates there is a wide range of choice of different levels of functionality to meet the needs of different sized enterprises, and enterprises in multiple locations, with a variance in price options accordingly.

Many companies providing accounting software operate on a global scale, although their product offerings vary from country to country. Due to unique legal and taxation regulations in each country, accounting software that provides tax and legal compliant reporting needs to be customised to meet each country's regulatory requirements. As noted in Table 1, 1placeonline, ACCLAIM, Accredo, Bookkeeper, Desktop Financial,

Easybooks, and Infusion only have products for the New Zealand market. Accomplish, Attachè and Banklink operate in both the Australian and New Zealand markets.

Table 1 Accounting Software Available in NZ for Small and Medium Enterprises

COMPANY	ACCOUNTING BASED PRODUCTS	PRICE RANGE (NZ)	GLOBAL PRESENCE	ESTAB	CUSTOMERS	WEB BASED
1place online	My Customers, My Money	\$15-35 pm	NZ only	2007		Yes
ACCLAIM	CashBook Lite / Complete	\$120 - \$240	Accounting only in NZ, imaging software sold in 20 countries (NZ owned)	1995		
Accomplish	CashManager Lite / standard / plus / manager/ with/out invoicing	\$524.25 - \$1,244.25	NZ, Australia, UK (NZ owned)	1992		
Accredo	Saturn / Mercury		NZ only	1994	800 companies	
Aplicor inc	Online CRM/Accounting	\$119 p/user pm	US company, offices in UK, Costa Rica. Operates worldwide			Yes
Attachè	PRO /prophet	\$200.00 pm per user/ dependent on modules	Australian company, operates in NZ and Australia		5,000 customers	
Banklink	Accounts Online	\$45+ pm	NZ and Australia		2,000 accountants	Yes
Business Bookkeeper	Business Bookkeeper v1	\$299.00	NZ only			
Cognito Software	MoneyWorks Cashbook / Express / Gold / Datacentre	\$253.12 - \$3,369.38. ASP version \$995.00pa	NZ, Australia, Canada, UK, USA, Singapore. (NZ owned)	1992		ASP
Desktop Financials	Quantum 5 /Plus / Plus 6user)	\$995 - \$3995	NZ only	1991		
Easybooks	Full Pro	\$299 - \$799	NZ only	1999		
Greentree	CBA		Australia and NZ, (Partners Asia- Pacific, USA, Canada, UK)	1983	10,000 organisations	
Infusion	Fundamentals / Professional / Elite	\$570 -\$2,244	NZ only		1,300 companies	
Intuit (marketed as Reckon in NZ)	QuickBooks 2009- 10 EasyStart / Accounting / Small Business / Plus /Account Edge / Pro / Premier/ Enterprise	\$159 - \$16,490	US company sold worldwide(major offices US, Canada, India, UK)	1983	50 million people	

COMPANY	ACCOUNTING BASED PRODUCTS	PRICE RANGE (NZ)	GLOBAL PRESENCE	ESTAB	CUSTOMERS	WEB BASED
MYOB	Business Basics Cashbook (online) /Accounting / Premier / AccountEdge / Enterprise	\$199 - \$2,999 \$22.50 pm online	Australia, China, Hong Kong, NZ, Malaysia, Singapore, United States	1991	700,000 customers	Yes
NetSuite	NetSuite		Worldwide	1998	6,600	Yes
Sage Software	Line 50 Accountant / Plus / Financial Controller		Worldwide	1981	5.8 million customers	
SAP	Business One	Monthly financing over 7 years, loans from \$15,000	Located in 120 countries	1972	82,000 worldwide. Business One 22,600 (end 2008)	
Xero	Xero / Xero Accountants Edition (Xero Cashbook)	\$55.13pm	NZ based, Australia, Belgium, Canada, Chile, Dom Rep, Estonia, Germany, Ireland, Japan, Mexico, NZ, Nigeria, Philippines, Singapore, Slovenia, SA, Switzerland, United Arab Emirates, UK, US	2006	6,154 customers. 17,646 users (Mar 2009)	Yes

Sources: (1placeonline, n.d.; About Right Limited, n.d.; Acclaim Software Ltd, n.d.; Accomplish Ltd, n.d.; Accredo Business Solutions Ltd, n.d.; Aplicor Inc, n.d.; Attachè, n.d.; BankLink, n.d.; Cognito Software, n.d.; Desktop Financials, n.d.; EasyBooks Limited, n.d.; Greentree, n.d.; Infusion Software, n.d.; MYOB, n.d.; NZCIA, 2009; Reckon NZ Pty Ltd, n.d.; Sage, 2008; SAP, n.d.; Xero, 2009)

4.5.1 More than an Accounting Solution

SAP

German company SAP is the longest established company in the list, with 37 years in the software industry. They are well known for their ERP (Enterprise Resource Planning), industry vertical solutions implemented in many large companies. In 2008 they had 82,000 active customers in 120 countries worldwide, earning €11.5 billion in revenue for 2007 (SAP, 2008). Their Business One product offers more than just an accounting solution, it is an ERP facility suited to small and medium size businesses. Whilst no exact pricing can be obtained from online enquiries, SAP offer financial packages to cover the cost of implementation that include software, infrastructure and services, with the minimum loan available for their

Business One finance package being €15,000 (SAP Financial Services, 2006). To date, Business One has 22,600 customers which is a 27% year-over-year increase since the product's SAP version launch in 2002. SAP's SaaS product Business ByDesign is not yet available in New Zealand but is marketed to medium sized businesses in China, Germany, United Kingdom, France, India and the United States (SAP, n.d.), although Sommer (2009) indicates that the product is in a controlled roll out with the multi-tenancy feature still under development.

NetSuite

NetSuite, who claim to be the number one web based business software suite, offer full financials, Customer Relationship Management (CRM) services, inventory and e-commerce software that operates in the wholesale, distribution, retail, services, manufacturing, media and publishing, agriculture, non-profit, e-commerce, and IT sectors (Netsuite Inc., n.d.). Available in New Zealand, they advertise that they have customers in the United States, United Kingdom, Northern Ireland, Belgium, Sweden, France, Canada, Hong Kong, Australia, Singapore, and Japan. In 2008 their revenue was \$US152.5 million and as at 31 December 2008 they had 6,600 active customers and a staff of 971 employees (NetSuite Inc., 2009).

A Gartner survey rated NetSuite the fastest growing financial management system vendor in North America with 41.1% growth for 2008 which was significantly better than the overall 3.4% growth of the ERP market for the same period (Webwire, 2009). In 2009 NetSuite was the first SaaS vendor to gain German Auditing Standard 880, which gives certification compliance for their software with German tax law and accounting principles (Kanaracus, 2009). This places NetSuite in a very strong position to compete directly with SAP in its home market and its ability to offer financial accounting services and other business applications designed for German companies and multinationals based in Germany (Veverka, 2009).

Greentree

Similarly New Zealand owned company Greentree offers a modularised ERP solution that is sold in Asia-Pacific, USA, Canada and the UK, with over 10,000 organisations using their product in New Zealand and Australia (Greentree, n.d.).

Other Companies

Other companies such as Applicor, Accredo and Infusion offer inventory management, job costing, and management of sales and purchasing functionality as part of their accounting solution. Applicor, an American web based provider, offers a full CRM service as part of their product.

Most companies also offer payroll facilities, either as an add-on package or through an additional online service to their accounting offerings.

4.5.2 MYOB

MYOB, an Australian company established in 1991, stated at its 2008 Annual General Meeting they were the number one leader of business systems for small and medium sized businesses in Australia and New Zealand, with more than 700,000 businesses and accounting firms using their accounting and payroll products in the Asia-Pacific region (MYOB, 2008). For 2007 they reported revenue earnings of \$A205.6 million, with the New Zealand market representing 16% of its revenue, and an 81% recurring revenue with growth in the New Zealand market of 13% (MYOB, 2008). Originally MYOB had focused on accounting solutions to small businesses with less than 20 employees, but have broadened their focus to larger businesses of up to 200 staff (Xero Live Limited, 2007).

In 2008 it was reported that their first half financial figures showed a 23% drop in New Zealand small business customer revenues, and an overall revenue drop of 2%, which was offset by an increase in support and maintenance and accountants revenue streams, with MYOB CEO Tim Reed citing “deteriorating market conditions and increased competition” as a factor for the result (Computer World, 2008).

In March 2008 MYOB launched its online product BusinessBasicsOnline to the New Zealand market. It is designed for small businesses to use in conjunction with their accountants, with the subscription rate for the product is \$22.50 per month (MYOB, 2008).

In May 2008 MYOB withdrew operations in the United Kingdom and Ireland. In January 2009 Manhattan Software Bidco Ltd completed a takeover of MYOB, which was followed on January 20 2009 with MYOB delisting from the Australian Stock exchange. In May 2009 Craig Winkler, the founder and previously Chief Executive Officer of MYOB, took a 22.23% shareholding in Xero, becoming Xero's second largest shareholder.

4.5.3 Sage

British company Sage Software has 5.8 million customers in 26 countries, declaring earnings of £1,295 million in revenue for 2007, with accounting software representing 55% of their business revenue (Sage, 2008). Sage's primary market is small and medium enterprises that employ less than 100 staff (Xero Live Limited, 2007). Sage's product portfolio was initially focused on accounting software, but they have broadened their product range to include payroll, human resources, customer relationship management, property and construction management software, merchant services and medical practice management software, although not all of these products are available in New Zealand (Sage, n.d.).

In the UK they have two online accounting products: Online 50 which has been available since 2003, and more recently Sage 50 Accounts Professional Online (Meall, 2008). Sage's 2008 Annual Report indicates that along with contracts and maintenance agreements, transaction and hosting revenue had increased 9% while their software market share dropped 2% (Sage, 2008).

4.5.4 Intuit

Intuit is a United States based company with major offices in Canada, India and the United Kingdom, with 50 million people worldwide using their products and services, which include QuickBooks, Payroll, Payments, TurboTax, Digital Insight and Quicken (Intuit Inc., 2008). Its revenue for 2007 was \$US3.1 billion, with the Quickbooks accounting products representing 20% of their revenue (Intuit Inc., 2008). Predominately their revenue is generated from their United States market, with international revenue representing less than 5% of the total.

As part of their QuickBooks portfolio, they have a SaaS platform called QuickBase, in which users select ready-made online workgroup applications or create custom solutions for their businesses (Intuit Inc., 2008).

Intuit's 2008 Annual Report noted the change in the competitive landscape, with new companies entering their market space, particularly companies with free or low-priced online offerings for entry-level products and services, where they consider the barriers to entry are lower than for desktop equivalents. However they still believe there are market growth opportunities: "Many of our new customers previously used pencil and paper or software such as word processors and spreadsheets, rather than competitors' software and services, to perform financial tasks. We believe that there is a long-term trend away from manual methods toward the use of both desktop and online software to accomplish these tasks that will provide future growth opportunities" (Intuit Inc., 2008, p.11). See Appendix C for a summary of products available in the US.

4.5.5 Web Based Accounting Services

In New Zealand, 1placeonline, Banklink, NetSuite and Xero offer web based accounting services, with MYOB and Cognito Software web based versions complementing their stand alone products.

Attachè, with 5,000 customers in Australia and New Zealand, do not have an online product offering as such but have adopted a subscription payment method model, that includes free support and upgrades with transaction based charging.

Meall (2008) states that in the United Kingdom there is a choice of 12 online accounting services, that includes Sage's two products (Online 50 and Sage 50 Accounts Professional Online) plus Xero, e-economic, Bean Accounting, iCash (from Iris), Imbercal, Inrax (from Meier), Kashflow, Liberty Accounts, net-accounting.co.nz and NetSuite. To complement this she states accounting firms such as Tenon and Vantis, Cameron Baum, Critchleys and CS Corporate Solutions are offering clients bureau-style online bookkeeping and accounting solutions.

In the United States, Wikipedia indicate there are 14 web based software accounting products available (Wikipedia, 2009, July 16). See Appendix C for the list. As discussed in section 4.5.1 American SaaS company NetSuite experienced a 41.1% growth in 2008, making it the top performing financial management system vendor in the North American market, considerably ahead of its on-premise rivals such as Microsoft, Exact, Lawson, Deltek, Sage, Epicor and Infor (Webwire, 2009). The authors consider the growth as providing validation that businesses are turning to SaaS for business software and go further to suggest that the SaaS option is even more attractive to companies during tough economic times.

4.6 Conclusion

The global adoption of the internet since 1995 has been rapid, with the growth expected to continue. Presently 23.8% of the world's population has access to the internet. With the convergence with mobile technologies it is thought a new wave of internet growth will occur in developing countries through internet enabled devices such as the "Smartphone", removing old technology entry barriers for citizens of these countries to enter the global economy.

Along with growing internet usage there has also been a growing demand for faster access to the internet which has seen an even more rapid adoption of broadband technologies. Today 7.4% of the world is using some form of broadband technology. Small and medium enterprises have also embraced broadband with an Australian study finding 78% of SMEs indicated broadband has a positive impact on business operations.

The OECD(2008) consider broadband to have brought the emergence of new business models, new processes, new inventions, new and improved goods and services that have increased competitiveness and flexibility in the economy. Software as a Service (SaaS) is one such industry where software is deployed over a network, typically the internet, as a service to customers for a regular subscription fee. Gartner expects SaaS to have a compound annual growth rate of 19.4% to 2013 (Mertz et al., 2009) with customers attracted to the model because of the low entry cost, ease of installation and reduced total cost of ownership related to less infrastructure and support personnel needed compared with on-premise solutions.

NetSuite, an American company that offers ERP and financial software under the SaaS model, experienced a 41.1% growth in the North American market in 2008, outperforming all of its on-premise rivals, which by some is seen as confirmation that businesses are considering and taking this option. This in turn has seen some off-the-shelf providers such as MYOB and Sage launching their own web based product offerings. One company who does not have a web based version is now selling their product under the subscription payment method opposed to the software and license fee structure.

But even in SaaS's relatively young 10 year existence, there is a growing number of competing companies in the financial marketplace. In the United Kingdom alone there are 12 choices of online accounting services as well as a number of firms that are offering bureau-style online accounting and bookkeeping solutions. In the United States there are already 14 web based software products available, which will make it crucial to develop a good reputation through reliable and excellent service and quality product improvement and innovation to retain customers and be competitive. The SaaS vendor needs to ensure their SaaS implementation is capable of achieving economies of scale that achieve operational cost efficiencies through a fully evolved model of configurability, multi-tenant-efficiency and scalability.

5 Case Analysis

5.1 Introduction

The case of Xero, showed that for the founders, Hamish Edwards and Rod Drury, networking is an integral tool in their ongoing entrepreneurial endeavours and was extensively used to establish and develop the company. Rod Drury openly states that networking is a part of his “...personal value – that transcends his business” and that networks, “...are everything – it is how you get things done...every little contact is useful for the next thing.”

Hamish and Rod’s personal resource portfolios were strong. Both had previous entrepreneurial experience: Hamish in developing and growing the family business, and Rod in successfully starting up technology businesses in New Zealand (NZ) and America.

Together they also brought a complement of skills to the venture, with Rod an experienced technologist and Hamish a practising chartered accountant. Their skills and entrepreneurial experience brought a diverse network that they have utilised in successfully establishing Xero. This supports the views of Brush et al. (2001), Gilbert et al. (2006) and Kollmann (2006) that a wider diversity of resources initially available to the new venture will assist in the venture’s success. Hamish and Rod managed to secure \$NZ 15 million seed funding through an IPO, early in the venture’s start-up, of which 70% was obtained through friends, family and business colleagues. They have established a global market for their developed product, with a focus on NZ, Australia and the United Kingdom (UK) as planned at the outset. Investors have shown their support of the company with 70% electing to re-invest through a share purchase top-up offer.

As well as personal networks, Xero as an organisation has modelled itself on a networked approach with the establishment of strategic partnerships and alliances with other business communities and organisations. The networks have assisted Xero to overcome the liability of newness and smallness that Baum et al. (2000) see as a problem for new ventures. Thus through alliances such as with partnering accountants they have been able to break through the periphery of industry and access the wider small business community. The networks they have established with telecommunications companies have alleviated the resource scarcity that Baum et al. discuss. Piggy backing on these large organisations’ reputation and

infrastructure has provided market entry to the customer base of these organisations, and provided Xero with a greater public profile by the association with these known major business partners. Tidd et al. (2001) highlight four reasons to collaborate: cost, risk, scale and time. Through partnership networks, Xero has been able to reach a much wider audience, providing cost savings, reducing risk and taking less time to achieve results, all important factors in the high technology sector so to get a product to market quicker to beat competitors and obtain revenue to sustain and grow the venture.

To explore this further and understand how social relationships and networks have been an asset to Hamish and Rod in starting up and establishing Xero, this analysis will look at the social capital that is developed and utilised through these relationships. Social capital is defined by Nahapiet and Ghoshal (1998) as the “sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by individuals or social unit. Social capital thus comprises both the network and the assets that may be mobilized through that network” (p. 243).

Using Nahapiet and Ghoshal’s (1998) model, which describes the structural, relational and cognitive dimensions of social capital, the following sections will analyse the social capital bound within the relationships of Hamish, Rod and Xero and consider the factors of access, anticipation of value, motivation and combination capability that were satisfied for the parties in the relationship, that enabled an exchange and combination of resources to occur. Whilst Nahapiet and Ghoshal’s model describes social capital in three dimensions, they recognise that each dimension and facets of each dimension are inter-related. In the following sections of analysis this overlap will also be evident.

5.2 Structural Dimension

The structural dimension focuses on the nature of the connections in the network and the way the connections are formed between the actors that facilitate the exchange and combination of resources. Nahapiet and Ghoshal (1998) consider the structural dimension to involve ties in the network, the configuration of the network, and the ability to transfer social capital from one setting to another, each of which will be addressed in the following sections.

5.2.1 Strong Ties Important in Early Phase of Start-up

A fundamental proposition of social capital theory is that the network ties provide access to resources, i.e. “who you know affects what you know” resulting in information benefits.

Strong ties involve high levels of emotional underpinning (Granovetter, 1973), and are found in relationships that can be relied on (Dubini & Aldrich, 1991). For example, Larson and Starr (1993) indicate that during the early stage of establishing a venture, entrepreneurs source critical resources to start it from family friends and existing business contacts and spend a significant amount of time maintaining existing networks (Greve & Salaff, 2003). This is evident in Hamish and Rod’s initial approach to securing funding, staff people and use of their strong ties.

Once the seed of Xero was sown, Hamish and Rod sought the aid of trusted friends who had small businesses and who they knew would be interested and capable of adding value in formalising their business plan and provide legitimacy for the idea (Hoang & Antoncic, 2003). As the business progressed, they sought the services of Hamish’s clients and good friends of his and Rod’s, who they knew had the appropriate small business knowledge to provide crucial assistance with product research development, design and beta testing.

Seeking funding for Xero was centred on their circle of friends and professional colleagues who they knew were in a position to financially support the venture. These contacts were personally approached by Hamish and Rod to invest in Xero, which resulted in 70% of the IPO being secured in this manner.

The Board of Directors were hand-picked through Hamish and Rod's network of business colleagues. Each was individually chosen because of their specific skills, contacts and their ability to invest in Xero. Through their network they were able to source a Board of Directors which together gave the desired broad range of skills along with financial input to support the venture.

Many of Xero's first employees that took instrumental positions at the beginning were recruited because they had previously worked together. They were colleagues Rod and Hamish could rely on, to deliver the task-in-hand, to build a product and surrounding processes fit for market. Hamish, and in particular Rod's strong ties in the technology sector provided people with the knowledge, necessary skills and right mindset that could make up a cooperative working team, that would bring Xero the company and the product alive. This was a critical consideration for the success of the Xero vision, as Rod indicated he needed people that could easily work alongside him and not hold him back. Craig Walker, who took a lead in designing the Xero product, was recruited as Chief Technical Officer, is a good example. Craig and Rod knew each other well, as they had previously been involved in a number of technology developments together. Craig had even worked as Rod's "personal programmer." They had a proven successful working relationship and knew and had faith in each other's capabilities.

From a network structural perspective, the key to the success of the early phase as Burt (1997) states, was the knowledge of access to strong ties that could provide the resources they needed quickly and efficiently. This was achieved by the social capital they brought to the venture from past relationships that Rod and Hamish had. The ability to successfully exchange and combine resources was facilitated because of the other parties' willingness and motivation due to the strong relationship they had and the trust within the relationship.

5.2.2 Weak Ties Bring New Sources of Information

In contrast to strong ties Granovetter (1973) states that while weak ties are less reliable they offer better access to a wider set of resources and new information. Weak ties are

superficial or casual relations (Dubin & Aldrich, 1991) and are without emotional basis and tend to be based on more rationally dominated relations (Granovetter).

Very early on in Hamish's entrepreneurial endeavours he actively used networking to establish contacts with new people to build the client base for his family business through the Treasurer's position at the Royal Port Nicholson Yacht Club. This process proved extremely productive at building a wider network of weak ties, and was where Hamish met Mike Upshon, who in turn introduced Hamish to Rod, where the seed of Xero was sown.

When Hamish went to England he sought contacts that would assist in establishing Xero in the UK market. He spent a large amount of time developing relationships with "everyone." He indicated he went to every function he could, just to meet new people and personally promote Xero. He developed relationships with New Zealanders living in the UK, through Kiwi Expats Abroad (KEA).

It was through KEA he established contact with Sarah McCourtie who worked for the Hong Kong and Shanghai Banking Corporation (HSBC), and was loosely acquainted with Rod as Rod's previous company Aftermail banked with HSBC. Sarah provided an important connection and referral for Hamish and Xero with the HSBC's Chief Operating Officer (COO). Once the HSBC COO was supportive of Xero's bank feed proposal, he then sponsored Hamish and Xero with subsequent COOs. Burt (1992) indicates that through network ties, three information benefits occur: access, timing and referral. In this case the relationship with Sarah was able to provide quick access to the HSBC COO, whom Sarah knew and she was happy to provide a referral to for Hamish and Xero. The COO also gave referral for Xero to subsequent COOs. The process of establishing the bank feeds with HSBC also provided Hamish with new knowledge about the type of information banks want to know, in order to consider a bank feed proposal. This has been useful in subsequent negotiations with other banks.

The social capital developed from this transaction also provides Xero with many future opportunities for growth. As Hamish outlined, HSBC is capable of providing bank feeds to

any of their customers in the world, so whilst it was thought the deal related to just customers in the UK, the diverse customer base that Xero could promote and market to through HSBC has the potential to be global and considerably larger. Hamish anticipates this organisational relationship has potential value for Xero to build customer numbers and open doors to global market opportunities.

Similarly Stu McIntyre was a weak tie that Rod met while holidaying at his NZ bach. Stu was able to arrange two introductions into British Telecom (BT) for Rod, Hamish and Xero, which provided an access benefit through his knowledge of potentially influential people they should talk to within BT about their proposal, and his knowing how to establish meetings with these people. Stu's initial referral saved Xero time and effort and provided them with a path to the key decision maker at BT in just three meetings. This ultimately saw a deal with BT completed in eight months, although such deals normally take an average of 24 months.

5.2.3 Network Configuration

Nahapiet and Ghoshal (1998) indicate that ties provide the channels for information transmission, but the overall configuration of the ties provides an important facet of social capital because it affects the flow of information transfer. Hoang and Antoncic (2003) indicate that where an actor is positioned in the network is an important source of resource access and therefore entrepreneurial outcomes. They suggest that who the actors are is secondary to their position in the network structure. The following sections will explore the concept of network configuration in terms of diversity, centrality, density, structural holes and size.

5.2.3.1 Network Diversity and Weak Ties

Dubini and Aldrich (1991) indicate that the diversity of an entrepreneur's networks is crucial to the scope of opportunities open to them. Granovetter (1973) argues that while weak ties are less reliable, they offer better access to a wider set of new information compared to strong ties, where the information shared is often redundant.

Upon arrival in the UK, as mentioned previously, Hamish became part of the KEA group. This opened up his UK network of contacts to many new people and assisted Hamish to make business contacts throughout the UK. One such important lead was Sarah McCourtie, who helped in successfully securing a UK bank feed with HSBC.

Similarly Hamish diversified his network of accountant contacts through roles he held in NZ with the Inland Revenue (IRD) on their Tax Agent Enhancement Board, the Institute of Chartered Accountants (NZICA) Tax Professional Group, and in the UK, with software accreditation from the Institute of Chartered Accountants in England and Wales (ICAEW). These relationships assisted in providing contacts to many previously unknown accountants. These diverse networks of weak ties were useful for promoting Xero and their certified accounting programme to a wide audience of accounting professionals. It also proved useful as a way to learn who the key decision makers were in many of the accounting firms they wished to target.

Hamish's network with other Software as a Service (SaaS) vendors also diversified his network and provided weak ties offering direct and indirect connections to new business networks in the UK and potentially around the world, as many of the SaaS vendors originate outside of the UK. Also as the SaaS business cluster has been formalised under the Intellect group, this has further provided access to a wider set of technology experts, industry leaders, the media, government and other members of Intellect.

5.2.3.2 Network Diversity through Strong Ties

Whilst diversity in weak ties provides access to new information that lies outside of their immediate cluster of contacts (Granovetter, 1973), strong ties are also significant because they too can provide access to other parts of the social system (Dubini & Aldrich, 1991; Gulati et al., 2000). Dubini and Aldrich indicate that successful entrepreneurs need to be in positions that are connected to many diverse sources of information. They state, "direct ties, especially strong ones are significant not only for the persons directly linked but also but also for the indirect access they provide to persons and organizations beyond the direct contacts" (p.309). One example of this is the recruitment of Mark Hallett in the UK.

Alastair Grigg, employed as Xero's Chief Operating Officer (COO), was one of Rod's close colleagues from the Glazier Systems days, a strong tie and early confidant with the Xero idea. Alastair Grigg facilitated Mark Hallett's introduction to Hamish in the UK. Mark and Alastair had worked together previously and over the years became friends. Alastair provided an important source of referral for Mark, who as Gulati et al. (2000) suggest enabled Hamish and Mark to identify and learn about each other and Xero.

Mark was motivated to work for Xero because it was something he wanted to do and be a part of, which conceptually lies within the identity facet of the relational dimension of social capital. Hamish anticipated value in the relationship because of Mark's past experience and knowledge from working in sales in the UK accounting software market. His contacts would potentially bring a greater network diversity that could assist in speeding up Xero's UK market entry. Mark's appointment fitted with Dubini and Aldrich's (1991) idea that he broadened Hamish's access to resources and information, increasing Xero's span of action, reducing uncertainty in contacts Hamish would need to make in the UK business world, which could provide faster receipt of information: "He had the business networks, from an accountant's standpoint and small business as well."

Not long after Mark's appointment, Mark's personal network provided Xero with its first UK sale, a relative who had a small business. This was an important breakthrough, as this customer could provide important validation of Xero as a product suitable for small businesses in the UK and therefore a useful reference to potential customers.

5.2.3.3 Network Diversity for Business Growth

Network diversity is also useful in growing a business. Once a business is established, Lescher and Dowling (2002) indicate entrepreneurs endeavour to increase sales through the development of marketing networks and cooperation networks, which gives access to a wider range of customer segments and assists in establishing a sales network (Kollmann, 2006).

Xero has established relationships with telecommunication carriers, banks, accountancy firms and professional bodies which has diversified Xero's business network and also gives referred access into wider customer markets. The BT deal also shows potential to build their API partnering programme through building relationships with other SaaS providers on the BT Portal. Hamish's indication that his business relationship with Salesforce has resulted in further discussions relating to co-marketing and sales opportunities for Xero is an example.

Volkman and Tokarski (2006) describe one type of growth for e-ventures as cooperative growth, where by utilising formal and information network structures they gain access to complementary resources. The API partnering programme, which they have termed the "Xero Network", facilitates growing the company through cooperative growth. In these cases, for both Xero and the API partner, the benefit of these networks are greatest for the anticipation of value that can be achieved for both parties with the "added electronic value" they can offer to their customers. Whilst increased access to potential customers can also be possible, this is only secondary, as many API partners tend also to be young ventures and similarly endeavouring to establish their own customer base.

5.2.3.4 Network Centrality

The social capital derived by access to indirect and direct links within a network can be measured by the concept of centrality, which determines the "reach" an actor has to other sources of information through intermediaries or being on the path of information between parties (Witt, 2004). Through the membership of the Beachheads Programme in the UK, it provided Hamish, Rod and Xero with reach to a diversified network of contacts in the UK through the members of the Beachheads Board.

The Beachheads Programme is a formalised network structure which is designed to provide members with access to important networks of resources and in particular knowledge and referral to assist members with international growth. Members of the Beachheads Board are individuals who are experienced business people, selected for their well developed personal networks and evident strong personal social capital and who are willing to share

this with the members of the Beachheads Programme. Through this programme Hamish, Rod and Xero were given the ability to access many influential people in the UK business world who would otherwise have been unknown to them. It provided a way to get Xero known to businesses in the UK and also to discover resources to assist in building Xero's UK markets that Hamish indicated: "It was one of the best things we did."

Within the network structure they achieved a central network position in a diverse network of opportunities (Witt, 2004). This enabled an efficient and short route of access via members of the UK Advisory Board who acted as intermediaries providing referral and access to other formal UK development agencies, technology sector networks, and their own personal networks. The programme facilitated through NZ Government Trade and Enterprise leverages the reputation of past successes and government relationships which assists with an important source of referral that provides an anticipation of value and builds motivation to exchange and combine resources for all parties.

Similarly Sarah McCourtie and Stu McIntyre with their introductions to staff at the HSBC and BT respectively provided network centrality to key people in those organisations who could make the decision and act upon Xero's proposal to them.

5.2.3.5 Network Density

The density of a network refers to the extensiveness of ties between people or organisations and provides a measure of the extent to which an actor's contacts are interconnected (Dubini & Aldrich, 1991; Hoang & Antoncic, 2003). Dense networks enable actors to achieve their goals effectively because of the cooperative behaviour of members and the high trust embedded in the relationships which control opportunistic behaviours (Batjargal, 2007). For Xero network density has proven useful for spreading information about the company, and making its products known to accountants. With software accreditation from the ICAEW, Xero was able to diffuse knowledge and an awareness of the company, the product and the certified partner programme with its member body of accountants, through newsletters, stands at conferences and speaking appointments.

The ICAEW is a semi-closed network whose membership is bound within the accountancy sector. Embodied by the ICAEW's formalised structure, it provides a professional facility for members to become acquainted with other people and organisations within the accountancy sector and facilitates the sharing of pertinent information relevant to their professional needs. The ICAEW is representative of a dense network, where actors become interconnected through their professional capacity, even outside the confines of ICAEW.

Whilst Hoang and Antoncic (2003) state that the denser the network the less likely new information will enter, with existing resources re-circulated within the group, the ICAEW may be representative of a balance point, where not all actors are completely connected, and with the ICAEW performing an information broker service by bringing in information that is relevant to the body from outside the network. When relevant information enters the network, the organisation provides a suitable conduit for it to be circulated. The ICAEW as a professional body with rules of engagement and set protocols establishes shared norms and facilitates trustworthiness of those in the group (Coleman, 1988). Any information that is shared would be considered of value, especially where it is endorsed by the governing body.

Similarly their acceptance as the sole partner in the NZICA Catalyst Programme also provided the benefit of diffusing information about Xero and their Certified Partner Programme to its membership of NZ professional accountants.

5.2.3.6 Structural Holes

In contrast to network density, Burt (1997) considers that sparse networks with structural holes provide greater information benefits. He defines structural holes as the gaps between contacts with non-redundant information. He states that in the absence of ties between actors, people either side of the hole circulate in different information. By bridging the holes, actors have access to new information, opportunities and resources (Batjargal, 2007).

Stu McIntyre, also with very strong farming links to NZ, provided Xero with access to BT's business network through his knowledge of BT's corporate structure as he worked for them in London. Whilst Stu was unknown to Rod, as an entrepreneur Rod saw an opportunity to

potentially leverage Stu's connections after meeting him on holiday. Rod's good use of interpersonal skills built a relationship with Stu which essentially was an opportunity to bridge a gap between Xero and BT. This Burt (1997) defines as "spanning structural holes." Stu operated in a circle of information about BT that Rod and Xero had no connection with. By building this relationship Rod created an opportunity and saw potential value for Xero and himself to learn more about BT and access relationships that Stu had within BT. The information that Stu held ultimately provided strategic value for Xero that assisted in achieving one of their UK goals: to form a relationship with a telecommunication carrier. This has provided a method to promote the Xero product, utilising the telecommunication carrier's marketing infrastructure and customer base.

Similarly Rod realised Craig Winkler was in an opportunistic position after selling the business he founded to a private consortium and de-listing it from the stock exchange, leaving no position in the new structure for Craig. Rod used his contacts to pursue an opportunity: "I made it known to a few people I was trying to find his email address or phone numbers." Again Rod was bridging structural holes between Xero and Craig and Craig's depth of experience and networks of contact in the Australasian accounting market.

Through Rod establishing a relationship with Craig, Xero has benefited by securing a substantial financial investor, and created access to Craig's own social capital of many crucial business contacts and knowledge related to the accounting software sector because of his extensive business experience with MYOB. With Craig's investment and appointment to the Xero Board of Directors there is a strong motivation for Craig to share his entrepreneurial experience, and knowledge about Xero's largest competitor, MYOB, and his general knowledge of the Australasian accounting market, because he can anticipate value in building the wealth of Xero, as he is now a major shareholder and has influence on the future success of the company.

The level of contacts and local knowledge he can exchange will have tremendous value in growing the Xero market in Australia, providing knowledge on the best access routes in that

market and also knowledge of other competitors. The relationship also (as Rod indicated) built Xero's "credibility" in the eyes of Australians.

5.2.3.7 Network Size

The network size can be measured by the number of direct links between focal actors and other actors, to ascertain the extent to which resources can be accessed (Hoang & Antoncic, 2003). The phase a start-up is in determines the size and nature of the network that is required (Greve & Salaff, 2003; Larson & Starr, 1993). Once Xero was established, the size of Hamish and Rod's and Xero's network varied depending on what they needed to achieve in the phase of business development they were in. Initially it was mainly strong ties with close friends that provided the essential resources to start the venture as discussed in section 5.2.1.

Once the start-up was launched, Hamish stated he spent a significant amount of time developing and broadening his and Xero's network, as Greve & Salaff (2003) describe. This involves enriching the network relationships of the venture, and establishing a social dimension to these relationships (Larson & Starr, 2003). When Hamish went to the UK, he spent a large amount of time developing relationships with "everyone," building a large network of weak ties trying to sell Xero to everyone he met. After a while he determined which networks and events were worthwhile and concentrated his efforts on these, containing his networking to a manageable size. Many of Hamish's UK contacts became good friends as a result of the increasing amount of useful information exchanges, including NZ Trade and Enterprise UK Commissioner Michelle Templar, and Eric Tracey and Bernard Cazenove, both members of the Beachheads Advisory Board.

Greve and Salaff (2003) indicate that once the venture is established and growing, existing relationships are explored more and less time is spent growing the network. Larson and Starr (1993) state that relationships tend to operate more at an inter-organisational as opposed to a social level. This position is reflected in Hamish's revised approach to networking and building opportunities since his return to NZ. He sees the next stage as building on the relationships they already have, with Salesforce, Microsoft, HSBC and BT. He

knows he now has time constraints and he can only maintain so many network relationships: “As your network becomes bigger and your business requirements become bigger, and there is so much demand on your time, it is really hard to just put all your energy into developing your network.” From a structural perspective he is building strong ties to access reliable markets and wants to be certain there is an anticipation of value from these business relationships, which is specifically about Xero and not him personally.

5.2.4 Transferable Social Capital

Social capital in one setting can be transferred to another setting, such as developing personal relations into business exchanges and the aggregation of social capital of individuals into that of organisations (Nahapiet and Ghoshal, 1998).

Many relationships established on behalf of Xero were built on Hamish and Rod’s founder skill set, their previous business reputation and the personal control they have within the company. Hamish believed this was powerful in building new relationships with representatives of organisations: “At important meetings they may not be as giving if you aren’t the founder. If they know you are one of the guys who can make decisions, they immediately know they are talking to the best people. ”

Hamish felt this was important when initially establishing relationships in the UK, but once Xero had a foothold he believed it was more appropriate that Xero appoint someone with UK business knowledge and in particular contacts to develop sales channels and partnerships for Xero. Gary Turner, who was appointed Xero’s UK Managing Director, is expected to fulfil this need, in the belief that Gary’s own social capital developed in his previous business positions within the UK software sector will assist in developing new and enhancing existing relationships for Xero.

Hamish utilised the social capital he had with the family business Openside Accounting to build business relationships for Xero. The strong relationship with Openside was leveraged within Xero to start the Certified Partner Programme, which was then used to promote and continue building the certified partner network with other accounting firms.

Hamish also turned a personal exchange with Sarah McCourtie into a business exchange with HSBC. Similarly Xero's partnership arrangement with Telecom NZ was secured through Rod's own personal contacts from his time working on telecommunication billing systems. Rod's friendship with Stu McIntyre also initiated the BT deal; both this and the Telecom partnership have assisted in developing Xero's organisational network.

As Xero moved from start-up to establishment to growth phases, their individual social capital has transferred and developed into Xero's organisational social capital with personal relationships developed with companies such as HSBC and BT expected to further develop into inter-organisational relationships with their respective global counterparts.

5.3 Relational Dimension

As previously discussed the main benefit of the structural dimension of social capital is in providing access and a level of anticipated value for the parties. Many of these same relationships are also affected by the relational dimension of social capital with each dimension being intertwined and often reinforcing each other (Liao & Welsch, 2005).

The relational dimension is concerned with the nature of the relationship that Nahapiet and Ghoshal (1998) consider involves trust, norms, obligations and expectations and identification, which will be discussed in the following sections. They consider this dimension influences access of the parties, anticipation of value to exchange and combine resources and the motivation of the parties to engage in a relationship.

5.3.1 Trust

Trust is thought to be the fundamental element that determines the strength of the link and the permanence of the tie, which reduces the risk for the parties involved (Dubini & Aldrich, 1991). Trust helps to eliminate uncertainty, and where two parties trust each other they will be more willing to exchange and combine resources (Tsai & Ghoshal, 1998).

When Hamish and Rod were initially formalising the idea for Xero and mobilising resources, trust was paramount in the success of relationship transactions. They discussed the idea with “trusted” friends; people they knew and could trust would give good advice in return. This trust was built up over many transactions which gave Hamish and Rod a “knowing” because of a past experience that had been satisfactory.

Similarly recruiting staff to work for Xero and approaching colleagues for Directors appointments was limited to people trusted by Rod and Hamish who they knew had suitable skills, and in return they trusted that Rod and Hamish were competent and able to deliver on their promises, which they endorsed by investing in the Xero start-up venture. There was an anticipation of value and a motivation for both parties to exchange and combine resources.

Raising the necessary capital demonstrated significant levels of trust by investors. Reputation provides a foundation for trust which Putnam (1995) describes as essential in close knit business communities. As Hamish indicated, they leveraged Rod's "good reputation" to get family, friends and employees to invest. Competence, reliability, concern and openness are attributes of trust (Mishra, 1996), which is demonstrated in the pre-securing of investments for the IPO by Hamish and Rod. They had a reputation of competence based on their past business experience, they were seen as reliable, both with successful business achievements. They were open and honest that the venture was risky and had the potential to lose money. They approached people whom they knew had the financial resources to invest and could afford to lose their money in such an investment. As Hamish indicated, they warned investors and showed concern for the implications if the investment was lost: "If this thing tips over, and it could, we don't want you coming back to us and saying 'I've lost my house and my marriage has crashed'."

At this very early stage they did not have a product and therefore could not project cash flows based on early sales. Even four years after the dotcom shakeout, internet start-ups were and still are today considered a high risk venture. Their business model around software as a service (SaaS) was relatively unknown, and certainly there were no success stories for businesses modelled on SaaS in New Zealand, where the majority of investors hailed from.

Even FirstNZ Capital placed their faith in the reputations of Hamish and Rod in the belief they were competent and could do what was suggested. Such trust could have only been established because Rod and Hamish could demonstrate a track record, existing support and solid reputations. Whilst First NZ Capital would earn a fee for running the share issue, they were promoting the investment to their clients, which meant their own good reputation was also at stake, and they would not have wanted to be known to promote offers doomed to fail.

This, as Mishra (1996) states, is because FirstNZ Capital and all early investors had a belief in the good intent of that party. Hamish and Rod were able to eliminate a level of perceived

risk, which assisted in generating a willingness and readiness to exchange. For both parties there was an anticipation of value: Xero could secure necessary investment and investors had the potential to make money from the investment. It also facilitated motivation, especially from the investors' perspective, because they had faith based on past activities and a belief it would return benefits.

In addition the Board of Directors established through close friends of Hamish and Rod's represented a balance of skills and knowledge to run a business, and provided reassurance and a good reputation to their investors. This was especially important for the unknown "Mum and Dad" investors that were secured through the IPO, because that demonstrated the company was in "good hands" and would be well run, and therefore a company that could be trusted to deliver on its promises.

5.3.1.1 Building Trust in Xero's Customer Network

Rod viewed the delivery of accounting services to small businesses as a long term business venture because he considered it involved building "personal relationships with lots of small businesses," effectively Xero's customer network. For Xero it has been important to build trust within its customer network that provides the motivation for customers to be part of it and also to remain part of it.

The success of the IPO was very important for Xero in being able to demonstrate a strong capital base. To customers it indicated security and provided a perception of longevity that enabled Xero to build long term relationships with customers, a necessity under the SaaS revenue model. Rod and Hamish wanted clients to trust that Xero was going to be around for a significant amount of time, so that they would be prepared to store their trusted financial information with Xero, in a remote location away from their personal computer and customers would continue to pay regular monthly subscriptions.

The Back Office Support System (BOSS) was built in-house to ensure that customers receive what is needed and builds trust with the customer that Xero delivers a good service with the appropriate functionality. Under the SaaS model they have released software upgrades at

least once every month, which they believe has accelerated a trust relationship with their customers and certified partner network. This was particularly important in the very early days of the product launch, as it demonstrated to the customers that Xero was listening and acting upon customer feedback, all managed through the system application BOSS.

They have also developed trust with customers through leveraging the trust and reputation of large institutions they have partnered with and therefore are associated with. Cohen and Prusak (2001) suggest trust by association enables the assessment of trustworthiness in the absence of personal experience. Whilst many potential customers may not know much about Xero, especially in overseas markets away from the New Zealand media, being associated with a major telecommunication company or a bank or one of the top accounting practices, immediately eliminates the uncertainty of the unknown. By association, Xero's reputation and trust is associated with the partner. The benefit of this is giving a strong signal to the customer: "this company has trusted them, so why shouldn't we." So the trust that manifests in one relationship can be used to build trust in others.

5.3.1.2 Trust Brokers and Roll-Over Trust

Uzzi (1996) defines the transfers of trust based on the recommendation of others as "roll over" trust. Cohen and Prusak (2001) state that "trust brokers" are people who vouch for others and facilitate introductions, providing a valuable source of trust in the absence of personal knowledge. Sarah McCourtie who provided the introduction to HSBC acted as a trust broker for Hamish. Similarly Stu McIntyre provided Hamish and Rod with introductions at BT. In both of these cases the introduction and roll over trust provided motivation for an exchange to occur. It enabled a relationship to be built with people completely unknown to Hamish and Rod, which ultimately established relationships between Xero and BT, and Xero and HSBC. It provided the benefit of saving time and knowledge in eliminating the level of effort necessary to find and persuade the key people to meet and talk. In today's business world key business people and decision makers are constantly being approached with propositions, and will be hesitant to agree to meet if they are not provided with some form of assurance that the time will be well spent. A referral by a business colleague can provide the necessary level of trust to commit to such meetings.

Members of the Advisory Board of the Beachheads Programme also acted as trust brokers for Hamish and Xero. Hamish indicated they introduced him to many business contacts throughout the UK, and on the basis of their recommendation assisted Hamish and Xero to build relationships with the referred people and organisations.

It was also through one of the Beachheads advisors, Charles Ward, that Hamish learnt about the Intellect group. Intellect provided an excellent way to formalise the SaaS Business Cluster within a neutral setting, where the trust of the Intellect Group rolled over to the SaaS Cluster, which ultimately assisted in removing any mistrust of hidden agendas and enabled the group to meet and share experiences and information about running a SaaS business with the aim of benefiting all in the cluster.

5.3.1.3 Trust Facilitates Gossip

In close knit business communities Cohen and Prusak (2001) indicate trust plays a powerful role in facilitating gossip. For Hamish and Xero this was a major benefit of being associated with committees and organisations that were specific to accountancy such as the NZ IRD Tax Enhancements for Tax Agents committee, the NZICA Tax Advisory Group, the NZICA Catalyst Programme and the ICAEW through the software accreditation. As Hamish indicated, because they knew him as a Chartered Accountant and knew about the product, “they were intrigued to find out more.” These networks provided the benefit of sharing news about Hamish, his company and its product. They could criticise or promote the product, either as “good advice” or a “warning” to colleagues as members of the same trusted professional group.

5.3.2 Norms, Obligations and Expectations

Norms represent a degree of consensus in the social system, while obligations are a commitment or duty to undertake some activity in the future (Nahapiet & Ghoshal, 1998). Norms are expectations that bind (Kramer & Goldman, 1995), and that govern group behaviours (Yoong, Abbott, Toland, Molina, & Joe, 2005/2006). Coleman (1990) distinguishes obligations from generalised norms, stating obligations are expectations that

are developed within personal relationships, whereas norms forgo self-interest and are in the interests of the collective (Coleman, 1988).

The SaaS business group was established with an expectation that all members would put aside any competitive element, so that they could collectively address problems each may be experiencing individually. Cooperation rather than competition is an important aspect of the group's ability to function effectively. This ensures all members believe they can benefit from being part of the group and results in trusting one another and ultimately a better exchange and combination of information. Naphiet and Ghoshal (1998) indicate that cooperation facilitates trust and in turn by trusting each other, facilitates cooperation between the parties.

5.3.2.1 Openness as a Norm

Naphiet and Ghoshal (1998) note the importance of cooperation rather than competition in knowledge intensive firms, where openness and teamwork as norms build loyalty through an open disclosure of information. Openness has been embedded into the Xero culture, which Hamish describes as “transparency... can't lie to customers, and you definitely can't lie to staff.” Right from the outset Rod was honest with Hamish and the major shareholders that he wished to maintain a major shareholding, which set the rules of exchange for any major Xero business decisions. Rod was also open about his style of working, where he clearly states he needs both staff and Board to work alongside his vision, not to hold him back, and the need to avoid unnecessary time spent justifying decisions or explaining direction. This has defined Xero's working environment and the teamwork culture for both staff and Board.

The openness transfers to existing and potential customers, as in the example of the tri-meter faces that determine how customers feel about using Xero. Customers are able to provide feedback in the form of happy, sad or indifferent faces and all the results are openly published on the Xero website. Rod considers this creates “a positive buzz,” because customers believe Xero know how customers feel about the product.

Kollmann and Kucketz (2006) indicate good communication and exchange of information with investors builds trust and confidence which potentially adds up to loyalty. The Xero blog is available to any visitor to its website. Xero uses this method to share information about the company such as events, news, what staff are up to, awards, opinions and business commentary, and at times to amuse and entertain, and readers are invited to participate in topic threads. As part of Xero's "open brand," Rod blogged the company's customer numbers which became known as the Hockey Stick. This resulted in many positive comments including one investor and also a customer thanking Rod for his "transparency."

With business partners and alliances, Rod indicates they had a philosophy of openness and see it as integral in the success of these Xero relationships. He considers it a two-way relationship, where if Xero is good to them, then there is an expectation that they will reciprocate and be good to Xero.

5.3.2.2 Reciprocal Expectations

Adler and Kwon (2002) define generalised reciprocity as something you do for someone else today, leading to an understanding that they will do something for you at some point in the future. When both Rod and Hamish are building networks they initiate actions which will result in an expectation that the other party will one day reciprocate. Rod described this as "jelly beans in the jar," where he will find a way to do something for people he is deliberately working to build a relationship with to establish a contact that he can use at a later date: "...what can I do to help them' – you might surprise them with an introduction or a lead some time later. Keep clocking up points – never know when they will be useful."

Similarly when Hamish went to England he actively worked at building his networks, doing things to try and help other people which he believed "...was part of becoming known as a 'good guy'... Immediately I was able to give, not just receive. This way I was able to build relationships and win some favours that people owe you."

5.3.2.3 Contractual Obligation

Casson and Della Giusta (2007) view obligations as the basis on which social groups are formed; when an obligation to another party is recognised then the other party will recognise an obligation to them. When Xero partnered with BT the obligations of both parties were formalised with a legal contract. Casson and Della Giusta state contractual obligations are a reciprocal set of promises that in business are regarded as of the utmost importance. As discussed in the case, a lot of importance was placed on the contract with BT, which confirmed both parties' acceptance of the terms and conditions of the deal. As Hamish indicated, even once they had passed the first hurdle and BT had given a verbal indication they wanted to do business together, they did not know they had a deal until the contract had been successfully negotiated.

5.3.3 Identity

Cohen and Prusak (2001) assimilate identity with membership, implying a connection of trust, understanding and mutuality that supports cohesive and collaborative action. Nahapiet and Ghoshal (1998) state this increases the frequency of exchanging and combining information and resources and the opportunities to do so.

When developing the product, Xero utilised the services of colleagues who had small businesses and were happy to assist with advising on and testing the product. As Hamish indicated, "they were just excited to be part of it and influence it." These people provided their time and know-how free of charge and did so because they wanted to be identified with the project. Combined with the trust and faith they held in Hamish and Rod, they showed an understanding of the importance of helping to get the product right and were happy to collaborate.

Similarly Mark Hallett was keen to be associated with Xero, and was motivated to be part of the company, as Hamish said: "He liked the product and he liked our story," which was conducive to exchanging and combining resources.

Nahapiet and Ghoshal (1998) state identification with a group or collective enhances concern for the collective's processes and outcomes, which increases the opportunities to

exchange and combine resources. In formalising the SaaS Business Cluster under the Intellect umbrella, Intellect provided a code of conduct that promoted the primary aim of the group to foster collaboration for the collective good of the UK technology sector. This assisted in neutralising any potential competitive conflicts between members through grounding the group within a much greater common good.

The KEA group also facilitated the building of relationships centred on Kiwi identity and loyalty in the form of supporting NZ businesses. Xero used the commercial arm of KEA to promote its UK launch to New Zealanders living in the UK and working for British companies. The relationship that Hamish formed with Sarah McCourtie from HSBC was founded on their identifying with NZ and supporting the collective good of contributing to the future prosperity of New Zealand which could be achieved through sharing of knowledge, contacts and opportunities as defined within the KEA mission and objective. This provided the motivation and anticipation of value by exchanging and combining resources related to obtaining bank feeds with HSBC. Similarly this position may equate with Stu MacIntyre's motivation to assist Xero with introductions to staff of BT.

Hamish's identity as a Chartered Accountant provided an important reference point for building relationships related to Xero and its product with accountants and accounting practices in NZ and the UK. Initially the company and product did not have its own reputation, and Hamish's professional accountancy background assisted in building this reputation. His professional standing within the framework of accountancy was useful in making contacts and provided a useful referral for Xero with Hamish as one of its founders.

5.4 Cognitive Dimension

Nahapiet and Ghoshal (1998) state the cognitive dimension of social capital refers to “those resources providing shared representation, interpretations and systems of meaning among parties” (p. 244). They indicate it involves the sharing of knowledge resources through a shared language and vocabulary and also with collective narratives.

Tsai and Ghoshal (1998) indicate a shared vision embodies the collective goals and aspirations in a group that alleviate misunderstandings and promote opportunities to exchange ideas and resources freely, because they see the value it brings to the collective group. Xero has a shared vision which has been important for the staff and Board to work towards. With a short development schedule it was critical they efficiently work together. Tsai and Ghoshal state that a shared vision acts as a bonding mechanism which helps different parts of an organisation to integrate and combine resources.

As the project grew, Xero believed it was important that all members of staff were involved and knew what was happening within the company and could contribute to group discussions easily, no matter what location they were working in. To facilitate this sharing of information they implemented an electronic product to provide a sense of the “water cooler chat,” that enabled online chat, discussion boards and a knowledge base. In a rapidly changing development environment, staff could keep abreast with what was going on and thus maintain the shared vision. This provided a sense of inclusion that motivated and provided the capability to exchange and combine resources.

Xero’s back office system BOSS also facilitates an important repository for knowledge sharing. Through managing and analysing customer feedback, Xero can prioritise customer requested enhancements and problems, which has proven to be an important source of information to build trust within their customer network and provide the capability for customers to share information.

The SaaS business cluster was initially established to informally share and learn from the experiences of SaaS accounting vendors in the UK. It beginnings centred with the English social ritual of a meeting over a “cup of tea”, evolving into a regular relaxed social meeting

over “a few beers” at the aptly named “Counting House” pub. Pub, an abbreviation of public house, is representative of a place that is central in the English community, known for centuries as a meeting place for friends, colleagues and business people to chat (Pubs.com, n.d.). It provided a congenial environment for cluster members to share experiences related to the common subject of SaaS. Both the constructs of having a cup of tea and then meeting at the pub provided the framework to build informal relationships and trust within the group before it was formalised under the Intellect umbrella.

The group’s collaboration can assist in determining best practice, and to promote knowledge and awareness of the SaaS concept in the wider business community. The upcoming release of a SaaS user’s guide is the first step to bring together and document the knowledge from the collective group about SaaS and its business adoption. Anderson, Park and Jack (2007) indicate that effective knowledge exchange is a key component in the development of successful economic clusters. They state the ability to be in close proximity benefits firms engaged in new activities that rely on recent knowledge, which is best shared in a face-to-face manner. In evolving technology fields much of the knowledge is yet to reach the public and can be difficult to articulate and transfer unless those that possess it are willing to demonstrate it to others, which the planned events with invited guest speakers should assist in facilitating.

As shown, a meeting in congenial circumstances can assist in facilitating knowledge sharing; Lee and Jones (2008) also indicate that other facets of language sharing are important. Their studies indicate face-to-face meetings assist in building shared common goals. The regular meeting of the SaaS group at the Counting House enabled members to get to know each other and reassured them of the purpose of meeting. Similarly Rod flying to the UK for the BT meeting as opposed to joining them via conference call was also important to demonstrate the importance he placed on meeting with BT. Hamish further indicated they broke the ice at important meetings with a “Kiwi” joke which Lee and Jones indicates facilitates the ebb and flow of face-to-face communication. Activities like these, Lee and Jones state, build trust and therefore facilitate a motivation to exchange and combine information resources.

5.5 Conclusion

Nahapiet and Ghoshal's (1998) model of social capital with its structural, relational and cognitive dimensions has provided a useful method to show the importance of social capital in providing resource benefits for Hamish and Rob in the establishment of Xero.

The structural dimension has shown that network ties predominantly provided access to resources, and for Hamish and Rod as entrepreneurs, it has highlighted the importance of having a balance of weak and strong ties depending on the nature of resources they needed. Strong ties proved useful in the early phase of the start-up, where highly reliable sources were necessary for areas such as finance and human resources. As the business developed, weak ties provided access to new information and resources to develop and grow the business, with network diversity useful to broaden their span of action, as particularly evident when endeavouring to tap into the large and unknown UK market. Network configuration identified that building relationships through KEA, ICAEW, the Beachheads Programme and recruiting UK staff enabled diversification of their networks which gave access to many new contacts, knowledge and resources. The networks also provided centrality in the ability to reach useful contacts through intermediaries. Rod also demonstrated that by spanning structural holes he was able to establish new sources of resources for Xero, particularly through Stu McIntyre's BT contacts, and Craig Winkler's Xero investment and Board appointment. The high level of social capital that Rod and Hamish have has assisted in gaining financial access, skilled staff, key competitive information and potential customers. It is apparent that the social capital that Hamish and Rod individually brought to the business has been able to build social capital for Xero. Hamish and Rod have extensively used their personal contacts to create Xero's organisational relationships.

The relational dimension has highlighted the importance of existing trust and reputation in providing the motivation to exchange and combine resources for Hamish and Rod, especially in the early start to secure critical resources such as money and people. Xero has worked hard to build trust in their customer network as they have seen this as critical to securing and retaining customers. This has been achieved through their back office system, having a strong capital base and through strategic alliances with large and trusted organisations such as BT, HSBC and major accounting firms. They have also benefited from

referral trust to form new relationships, in particular due to their reputations from past business experiences and through formalised networks such as the Beachheads Programme and the professional accounting networks, ICAEW and NZICA. Xero works within an open philosophy that they incorporate into all aspects of the business which assists in building a cooperative workplace and facilitates trust through transparency. There is strong evidence that they value relationships and believe that generalised reciprocity is important in building relationships where they need to give and not just take. Identifying as a New Zealander was useful in developing business networks while overseas. It was also evident that people and businesses wanted to identify with Xero and happily provided resources and became part of establishing Xero. Hamish's background as a chartered accountant proved extremely useful in providing a professional credential to Xero and its product, all of which assisted in building trust and facilitating motivation and the anticipation of value and exchange.

The importance of the cognitive dimension in facilitating the capability to exchange is apparent. The shared vision has been at the core of the Xero team. It has provided the backbone for them to build the product quickly without misunderstandings. It is important that Xero is able to share information with its staff so that all staff are aware of what is happening in the company, to keep abreast of the vision, and to feel included. Similarly the back office system is the knowledge sharing repository that ensures customers are able to provide customer feedback easily. The SaaS business cluster has also been established to facilitate knowledge sharing within the group and the wider business audience. Through congenial meetings and latterly through the Intellect group they have been able to build the group without competition becoming an issue. Meeting face-to-face has assisted the group in getting to know each other, facilitating knowledge sharing and working towards a collective goal which has been identified as beneficial to high technology ventures.

What is apparent from using the model is the difficulty of singling out one dimension in isolation due to the multifaceted way social relationships occur, evolve and develop. Most relationships entail more than one dimension of social capital and each dimension has a bearing on the other. For example strong ties were critical to obtain start-up resources to launch the Xero venture, but many of these resources were not available just because a

person was known well, but facilitated by the level of trust they have in each other. Similarly weak tie relationships that established partnership arrangements with BT and HSBC were not facilitated because they happened to meet, but because there was an underlying desire to support a NZ company in the UK business market and having a shared identification with NZ played a major factor in motivating the exchange to occur. Likewise the BOSS system provides cognitive value in that it facilitates information sharing but also facilitates customers' trust because sharing information will result in a better system for them. Similarly a shared vision and common goals affect levels of trust and the level of knowledge sharing that can occur in a team environment. So whilst one dimension may have a strong influence on anticipated value, access to parties, motivation or capability, other dimensions also have a major and complementing bearing on these same factors which enables a successful exchange and combination of resources to occur.

To close, Nahapiet and Ghoshal's (1998) model has provided a useful tool to assess the benefits of social capital. Through each dimension it has been apparent that Hamish, Rod and Xero have benefited by having access to valuable resources for the venture. In many instances their social capital has assisted in making this happen quickly and efficiently. Saving time is critical in the high technology sector, with the need to get a product to market quickly to beat potential competitors and also to provide the necessary revenue to sustain the venture. Referral has also played an important part in securing resources that provided trust and assisted in finding opportunities. Many of the relationships focused on closeness that has created a bond between each of the parties, enabling Xero to go forward and develop strongly as a single unit. They have also benefited from new sources of information by creating a bridge between unrelated parties. The various forms of social capital evident in this case have made Xero distinct from its competitors, who would find it difficult to emulate this source of competitive advantage.

References

- 1placeonline. (n.d.). *1placeonline*. Retrieved July 20, 2009, from 1placeonline:
<https://www.1placeonline.com/>
- About Right Limited. (n.d.). *Bookkeeper*. Retrieved July 20, 2009, from Bookkeeper:
http://shop.seeker.co.nz/bbc/bbc_home.aspx
- Acclaim Software Ltd. (n.d.). *Cashbook Complete*. Retrieved July 20, 2009, from Acclaim:
<http://www.acclaim.co.nz/index.htm>
- Accomplish Ltd. (n.d.). *Accomplish CashManager*. Retrieved July 20, 2009, from Accomplish:
<http://nz.accomplishglobal.com/>
- Accredo Business Solutions Ltd. (n.d.). *Accredo Products*. Retrieved July 20, 2009, from Accredo:
http://www.accredo.co.nz/pr_module_suite.php
- Adler, P. S., & Kwon, S.-W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, 27 (1), 17-40.
- Amit, R., Brander, J., & Zott, C. (1998). Why do venture capital firms exist? Theory and Canadian evidence. *Journal of Business Venturing*, 13 (6), 441-466.
- Anderson, A. R., & Jack, S. L. (2002). The articulation of social capital in entrepreneurial networks: A glue or a lubricant? *Entrepreneurship & Regional Development*, 14, 193-210.
- Anderson, A., Park, J., & Jack, S. (2007). Entrepreneurial social capital. Conceptualizing social capital in new high-tech firms. *International Small Business Journal*, 25 (3), 245-272.
- Aplicor Inc. (n.d.). *Aplicor Online Accounting*. Retrieved July 20, 2009, from Aplicor:
http://www.aplicor.co.nz/online_accounting.htm
- Attachè. (n.d.). *Attachè Accounting Software*. Retrieved from Attacheè:
<http://www.attachesoftware.com/products/package/bpartner/index.asp>
- Australian Communications and Media Authority. (2009, March). *Convergence and Communications. Report 2: Take-up and use of communications by small and medium enterprises*. Retrieved July 21, 2009, from Australian Government:
http://www.acma.gov.au/webwr/_assets/main/lib100068/convergence_comms_rep-2_small_medium_enterprises.pdf
- BankLink. (n.d.). *BankLink Products*. Retrieved July 20, 2009, from BankLink:
<http://www.banklink.co.nz/products.html>
- Bantz, D. F., Mohindra, A., & Shea, D. G. (2002, July / August). The emerging model of subscription computing. *IT Pro*, 27-32.
- Barnes, D., Hinton, M., & Miezowska, S. (2004). Avoiding the fate of the dotbombs: Lessons from three surviving dotcom start-ups. *Journal of Small Business and Enterprise Development*, 11 (3), 329-337.

- Batjargal, B. (2007). Internet entrepreneurship: Social capital, human capital and performance of internet ventures in China. *Research Policy*, 36, 605-618.
- Baum, J. C., Calabrese, T., & Silverman, B. S. (2000). Don't go it alone: Alliance network composition and startups' performance in Canadian biotechnology. *Strategic Management Journal*, 21, 267-294.
- Bennett, K., Layzell, P., Budgen, D., Brereton, P., Macaulay, L., & Munro, M. (2000). Service-based software: The future for flexible software. *Seventh Asia-Pacific Software Engineering Conference* (pp. 214-221). Singapore: IEEE Computer Society.
- BERR. (2008, July 30). *Enterprise directorate: Small and medium enterprise statistics for the UK and regions*. Retrieved July 21, 2009, from Department for Business Innovation and Skills: <http://stats.berr.gov.uk/ed/sme/>
- Boyle, G., Howell, B., & Zhang, W. (2008, July). *Catching up in Broadband Regressions: Does Local Loop Unbundling Really Lead to Material Increases in OECD Broadband Uptake?* Retrieved September 1, 2009, from University of Canterbury: http://ir.canterbury.ac.nz/bitstream/10092/2410/1/12614125_LLUBroadband01c.pdf
- Brush, C. G., Greene, P. G., & Hart, M. M. (2001). From initial idea to unique advantage: The entrepreneurial challenge of constructing a resource base. *The Academy of Management Executive*, 15 (1), 64-78.
- Burt, R. S. (1992). *Structural Holes: The Social Structure of Competition*. Cambridge, MA: Harvard University Press.
- Burt, R. S. (1997). The Contingent Value of Social Capital. *Administrative Science Quarterly*, 42 (2), 339-365.
- BusinessDictionary. (2009). *Total Cost of Ownership (TCO)*. Retrieved June 11, 2009, from Business Dictionary.com: <http://www.businessdictionary.com/definition/total-cost-of-ownership-TCO.html>
- Casson, M., & Della Giusta, M. (2007). Entrepreneurship and social capital. *International Small Business Journal*, 25 (3), 220-244.
- Chiagouris, L., & Wansley, B. (2000, Summer). Branding on the internet. *Marketing Management*, pp. 35-38.
- Chong, F., & Carraro, G. (2006, April). *Architecture Strategies for Catching the Long Tail*. Retrieved May 21, 2009, from MSDN Architecture Centre: <http://msdn.microsoft.com/en-us/library/aa479069.aspx>
- Cognito Software. (n.d.). *MoneyWorks*. Retrieved July 20, 2009, from Cognito Software: <http://www.cognito.co.nz/>
- Cohen, D., & Prusak, L. (2001). *In Good Company: How Social Capital Makes Organizations Work*. Boston: Harvard Business School Press.

Coleman, J. S. (1990). *Foundations of Social Theory*. Cambridge, MA: Belknap Press of Harvard University Press.

Coleman, J. S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, 94, Supplement: *Organizations and Institutions: Sociological and Economic Approaches to the Analysis of Social Structure*, S95-S120.

Computer World. (2008, August 21). *Kiwi market tough for MYOB*. Retrieved July 15, 2009, from Computerworld:
<http://computerworld.co.nz/news.nsf/news/93F91B50C3C6E145CC2574AB001BEE14?Opendocument&Highlight=2,myob>

Considine, B., Razeed, A., Lee, M., Speer, D., & Collier, P. (2008). *Accounting Information Systems*. Milton, Qld, Australia: John Wiley & Sons Ltd.

CRM Landmark. (2009). *SaaS markets*. Retrieved June 05, 2009, from CRM Landmark:
www.crmlandmark.com/saasmarket.htm

Cunliffe, H. D. (2006, June 26). *Faster, Better Broadband Bill Introduced*. Retrieved August 13, 2009, from Scoop Parliament: <http://www.scoop.co.nz/stories/PA0606/S00501.htm>

Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18, 301-331.

De Carolis, D. M., Litzky, B. E., & Eddleston, K. A. (2009, March). Why networks enhance the progress of new venture creation: The influence of social capital and cognition. *Entrepreneurship Theory and Practice*, 33 (2), 527-545.

Desisto, R. P., & Pring, B. (2008, May 30). *Essential SaaS Overview and Guide to SaaS Research*. Retrieved 05 12, 2009, from Michigan University: <http://www-personal.umich.edu/~brianhe/saasoverview.pdf>

Desktop Financials. (n.d.). *Quantum Accounting Software*. Retrieved July 20, 2009, from <http://www.qssl.co.nz/products.htm>

Dooley, B. (2006, July 28). *What Telecom's Unbundling Means*. Retrieved September 1, 2009, from Resellernews: <http://reseller.co.nz/reseller.nsf/feat/B3503B610132982ECC2571E3000861A4>

Drucker, P. F. (1985). *Innovation and Entrepreneurship*. London: William Heinemann Ltd.

Drury, R. (2009, March 11). *Telecom Campaign*. Retrieved September 15, 2009, from Xero Blog: <http://blog.xero.com/2009/03/telecom-campaign/>

Drury, R. (2009, March 31). *The hockey stick*. Retrieved September 01, 2009, from Xero Blog: <http://blog.xero.com/?s=hockey+stick>

Dubini, P., & Aldrich, H. (1991). Personal and extended networks are central to the entrepreneurial process. *Journal of Business Venturing*, 6, 305-313.

- EasyBooks Limited. (n.d.). *EasyBooks Products*. Retrieved July 20, 2009, from EasyBooks: <http://www.easybooks.co.nz/products.php>
- Fan, M., Kuma, S., & Whinston, A. B. (2009). Short-term and long-term competition between providers of shrink-wrap software and software as a service. *European Journal of Operational Research*, 196, 661-671.
- Fierlinger, P. (2008, September 30). *Xero now availble in Australia*. Retrieved September 1, 2009, from Xero Blog: <http://blog.xero.com/2008/09/xero-now-available-in-australia/>
- FIPT Communication Services. (n.d.). *FTTx Primer*. Retrieved July 9, 2009, from FIOPT Communication Services: <http://www.fiopt.com/primer.php>
- Fukuyama, F. (1995). *Trust: Social Virtues and the Creation of Prosperty*. London: Hamish Hamilton.
- Gilbert, B. A., McDougall, P. P., & Audretsch, D. B. (2006). New venture growth: A review and extension. *Journal of Management*, 32 (6), 926-950.
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360-1380.
- Greentree. (n.d.). *Company overview*. Retrieved July 10, 2009, from Greentree: http://www.greentree.com/company/company_overview.cfm
- Greentree. (n.d.). *Greentree Business Management Software*. Retrieved July 20, 2009, from Greentree: <http://www.greentree.com/>
- Greve, A., & Salaff, J. W. (2003). Social networks and entrepreneurship. *Entrepreneurship Theory and Practice*, Fall, 1-22.
- Guillèn, M. F. (2002, May-June). What is the best global strategy for the internet? *Business Horizons*, 45 (3), 39-46.
- Gulati, R., Nohria, N., & Zaheer, A. (2000). Strategic networks. *Strategic Management Journal*, 21, 203-215.
- Henschen, D. (2006, December). *SaaS and SOA: Together forever*. Retrieved May 21, 2009, from Intelligent Enterprise: <http://www.intelligententerprise.com/showArticle.jhtml?articleID=194500397>
- Hoang, H., & Antoncic, B. (2003). Network-based research in entrepreneurship. A critical review. *Journal of Business Venturing*, 18, 165-187.
- Huggins, R. (2000). The success and failure of policy-implemented interfirm network initiatives: Motivations, process and structure. *Entrepreneurial and Regional Development*, 12, 211-236.
- IBM Corporation. (2008, June 9). *Fast Track to Software as as Service*. Retrieved 06 16, 2009, from Siia: https://www.siia.net/ondemandeurope/2008/ppt/SaaS_Event%20_Final.ppt
- Infusion Software. (n.d.). *Infusion Business Software*. Retrieved July 20, 2009, from Infusion: <http://www.infusionsoftware.co.nz/>

- Internet World Stats. (2009, March 31). *World Internet Users and Population Stats*. Retrieved June 10, 2009, from Internet Usage Statistics: <http://www.internetworldstats.com/stats.htm>
- Intuit Inc. (2008, September 12). *Form 10-K Annual Report*. Retrieved July 20, 2009, from Intuit Investor Relations: <http://investors.intuit.com/secfiling.cfm?filingID=950134-08-16540>
- Jack, S., Dodd, S. D., & Anderson, A. R. (2008, March 20). Change and the development of entrepreneurial networks over time: A processual perspective. *Entrepreneurship & Regional Development*, 20 (2), 125-159.
- Kanaracus, C. (2009, June 29). *Germany's Auditing Board Gives Nod to NetSuite*. Retrieved July 20, 2009, from Computerworld: http://www.computerworld.com/s/article/9134988/Germany_s_auditing_board_gives_nod_to_NetSuite
- Kanter, R. M. (2002). Creating the culture for innovation. In F. Hesselbein, M. Goldsmith, & I. Somerville, *Leading for Innovation and Organizing for Results* (pp. 73-85). San Francisco: Jossey-Bass.
- Kanter, R. M. (1985). *The Change Masters*. Boston: Unwin.
- Kathuria, R., & Joshi, M. P. (2007). Environmental influences on corporate entrepreneurship: Executive perspectives on the internet. *International Entrepreneurship and Management Journal*, 3, 127-144.
- KEA (2007). *Mission and Objectives*. Retrieved September 10, 2009, from KEA: <http://www.keanewzealand.com/about/mission-objectives.html>
- Kee, R. (1993). Data processing technology and accounting: A historical perspective. *The Accounting Historians Journal*, 20 (2), 187-210.
- Kincora, M. (2006, September 20). *ASP vs. SaaS: What's the difference?* Retrieved May 13, 2009, from SearchCIO.com: http://searchcio.techtarget.com/tip/0,289483,sid182_gci1216679_mem1,00.html?ShortReg=1&mb oxConv=searchCIO_RegActivate_Submit&
- Kollmann, T. (2006). What is e-entrepreneurship? Fundamentals of company founding in the net economy. *International Journal of Technology Management*, 33 (4), 322-340.
- Kollmann, T., & Kucketz, A. (2006). Investor relations for start-ups: An analysis of venture capital investors' communicative needs. *International Journal of Technology Management*, 34 (1/2), 47-62.
- Kramer, R. M., & Goldman, L. (1995). Helping the group or helping yourself? Social motives and group identity in resource dilemmas. In D. A. Schroeder (Ed.), *Social Dilemmas* (pp. 49-68). New York: Praeger.
- Kuratko, D. F., & Audretsch, D. B. (2009, January). Strategic entrepreneurship: Exploring different perspectives of an emerging concept. *Entrepreneurship Theory and Practice*, 33, 1-17.

Larson, A., & Starr, J. A. (1993). A network model of organization formation. *Entrepreneurship Theory Practice, Winter*, 53-69.

Lee, R., & Jones, O. (2008). Network, communication and learning during business start-up: The creation of cognitive social capital. *International Small Business Journal*, 26 (5), 559-594.

Lescher, C., & Dowling, M. (2003). Firm networks: External relationships as sources for the growth and competitiveness of entrepreneurial firms. *Entrepreneurship & Regional Development*, 15, 1-26.

Liao, H., & Tao, C. (2008). An anatomy to SaaS business mode based on internet. *International Conference on Management of e-Commerce and e-Government* (pp. 215-220). Nanchang, Jiangxi: IEEE Computer Society.

Liao, J., & Welsch, H. (2005). Roles of social capital in venture creation: Key dimensions and research implications. *Journal of Small Business Management*, 43 (4), 345-362.

Mahowald, R. (2009, January 26). *IDC - Press Release*. Retrieved June 16, 2009, from IDC: <http://www.idc.com/getdoc.jsp?containerId=prUS21641409>

Manning, C. D., & Bois, R. (2008, April 19). *Voice of the Customer: What users really value about SaaS*. Retrieved June 05, 2009, from AMR Research: http://www.amrresearch.com/Content/Search_Results.aspx?stw=&dr=simple&Nf=P_PubDate%7CGTEQ+19000101&sub=&hi=&ey=undefined&ste=&N=4294965642+10000828&resultOption=10&sta=&est=&sk=All&Ntk=All&sm=undefined&sortBy=1&type=a&sd=undefined&pd=19000101&Ntt=&ed=unde

Marks, G. (2008, July 24). *Beware the Hype for Software as a Service*. Retrieved May 07, 2009, from Business Week: http://www.businessweek.com/technology/content/jul2008/tc20080723_506811.htm

Massie, P. (2009, January 15). *Is SaaS Recession-proof?* Retrieved August 31, 2009, from Gerson Lehrman Group: <http://www.glgroup.com/News/Is-SaaS-Recession-Proof--31558.html>

Maurizio, A., Sager, J., Jones, P., Corbitt, G., & Girolami, L. (2008). Service oriented architecture: Challenges for business and academia. *41st Hawaii International Conference on System Sciences* (pp. 315). Waikoloa, Big Island: IEEE Computer Society.

Meall, L. (2008, April 7). *Online Bookkeeping: Evolution or Revolution?* Retrieved June 13, 2009, from ACCA Global: www.accaglobal.com/members/publications/accounting_business/archive/2008/april/3085272

Mertz, S. A., Eschinger, C., Eid, T., Huang, H. H., Pang, C., & Pring, B. (2009, May 5). *Market Trends: Software as a Service, Worldwide, 2008-2013*. Retrieved August 31, 2009, from Gartner: http://www.gartner.com/DisplayDocument?ref=g_search&id=965313

Mertz, S., Eschinger, C., Pang, C., & Dharmasthira, Y. (2008, October). *User Survey Analysis: Software as a Service, Enterprise Application markets, Worldwide*. Retrieved May 11, 2008, from Salesforce.com, Gartner survey: http://www.salesforce.com/assets/pdf/analysts/AR_Gartner_Saas_Ent.pdf

Microsoft. (2009, March 25). *Microsoft SMB Insight Report*. Retrieved May 22, 2009, from Microsoft: <http://www.microsoft.com/presspass/presskits/smb/docs/Microsoft2009SMBInsightsReport.doc>

Ministry of Economic Development. (2008, August). *SMEs in New Zealand: Structure and Dynamics* . Retrieved July 21, 2009, from Online Services: http://www.med.govt.nz/templates/MultipageDocumentTOC____38373.aspx

Mishra, A. K. (1996). Organizational responses to crises, the centrality of trust. In R. M. Kramner, & T. M. Tyler (Eds.), *Trust in Organizations: Frontiers of Theory and Research* (pp. 261-287). Thousand Oaks, CA: Sage Publications.

MYOB. (2008, April 24). *Annual General Meeting 2008*. Retrieved July 15, 2009, from MYOB: http://myob.com/servlet/Satellite?cid=1154415685781&pagename=MYOB%2FPage%2FContentPageWithNav&site=en_NZ

MYOB. (n.d.). *MYOB Small Business*. Retrieved July 20, 2009, from MYOB: http://myob.com/servlet/Satellite?cid=1147651223977&pagename=MYOB%2FPParent%2FCategoryFull&site=en_NZ&parentId=1147651224139&c=PParent

Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management*, 23 (2), 242-266.

NetSuite Inc. (2009, March 13). *Form 10-K*. Retrieved July 21, 2009, from United Securities and Exchange Commission: <http://www.sec.gov/Archives/edgar/data/1117106/000119312509053860/0001193125-09-053860-index.idea.htm>

NetSuite. (n.d.). *NetSuite Product Overview*. Retrieved July 20, 2009, from NetSuite: <http://www.netsuite.com/portal/products/main.shtml>

NZCIA. (2009, July 20). *Home & Office Accounting*. Retrieved July 20, 2009, from NZCIA IT: <http://www.nzicait.com/acquire/default.asp?PageID=Department&dept%5Fid=2200070>

OECD. (2009, May 20). *OECD Broadband Portal*. Retrieved July 4, 2009, from OECD, Directorate for Science, Technology and Industry: http://www.oecd.org/document/54/0,3343,en_2649_34225_38690102_1_1_1_1,00.html

OECD. (2008, December 23). *OECD Information Technology Outlook 2008*. Retrieved September 1, 2009, from OECD. Directorate for Science, Technology and Industry: http://www.oecd.org/document/20/0,3343,en_2649_33757_41892820_1_1_1_1,00.html

OECD. (2001). The Internet and Business Performance. *OECD Digital Economy Papers* (57). OECD publishing .

Poon, S. (2000). Business environment and internet commerce benefit - a small business perspective. *European Journal of Information Systems*, 9, 72-81.

Porter, M. E. (2001, March). Strategy and the internet. *Harvard Business Review*, pp. 63-78.

Pubs.com. (n.d.). *History of the English Pub*. Retrieved from Traditional and Historic London Pubs Online: http://www.pubs.com/pub_history.cfm#english

Putnam, R. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6 (1), 65-78.

Razi, M. A., Tarn, J. M., & Siddiqui, F. A. (2004). Exploring the failure and success of dotcoms. *Information Management & Computer Security*, 12 (3), 228-244.

Reckon NZ Pty Ltd. (n.d.). *Quicken Business Software*. Retrieved July 20, 2009, from Quicken: http://www.quicken.co.nz/products/business_software.asp

Riddell, J. (2009, March 31). *The hockey stick*. Retrieved August 10, 2009, from Xero Blog: <http://blog.xero.com/2009/03/the-hockey-stick/>

Roberts, M. L. (2003). *Internet Marketing: Integrating Online and Offline Strategies*. New York: McGraw-Hill/Irwin.

Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23 (3), 393-404.

Ryan, E. (2007, March 5). *SME Broadband Demand May Slow: Analysis*. Retrieved July 4, 2009, from The Register: http://www.theregister.co.uk/2007/03/05/sme_broadband_demand/

Sage. (n.d.). *Our Products and Services*. Retrieved August 21, 2009, from Sage: <http://www.sage.com/ourbusiness/aboutus/ourproductsservices>

Sage. (2008). *Sage Annual Report and Accounts*. Retrieved July 13, 2009, from http://www.investors.sage.com/reports_presentations/results_presentations/?year=2008

SAP Financial Services. (2006, June). *SAP Business One Services*. Retrieved July 14, 2009, from SAP Business One: <http://www.sap.com/asia/smallbusiness/services/index.epx>

SAP. (n.d.). *Get started with SAP Business ByDesign*. Retrieved July 20, 2009, from SAP Small Businesses and Midsize Companies: <http://www.sap.com/sme/howtobuy/businessbydesign/index.epx>

SAP. (2008). *SAP Annual Report*. Retrieved July 13, 2009, from SAP: <http://www.sap.com/about/investor/reports/index.epx>

SAP. (n.d.). *SAP Small Business Solutions*. Retrieved July 20, 2009, from SAP: <http://www.sap.com/asia/smallbusiness/index.epx>

Sebora, T. C., Lee, S. M., & Sukasame, N. (2009). Critical success factors for e-commerce entrepreneurship: An empirical study of Thailand. *Small Business Economics*, 32 (3), 303-316.

Seeley, R. (2007, April 23). *SOA and SaaS: Where do the Twain Meet?* Retrieved July 8, 2009, from Search SOA.com: http://searchsoa.techtarget.com/news/article/0,289142,sid26_gci1252502,00.html#

IIA. (2001, February). *Software as a Service: Strategic Backgrounder*. Retrieved May 12, 2009, from Software & Information Industry Association: <http://www.sii.net/estore/ssb-01.pdf>

Sim, Y. W., Wang, C., Gilbert, L., & Wills, G. (2005, July 1). *An Overview of Service-oriented Architecture*. Retrieved July 8, 2009, from University of Southampton: <http://eprints.ecs.soton.ac.uk/11209/>

Smith, D. A., & Lohrke, F. T. (2008). Entrepreneurial network development: Trusting in the process. *Journal of Business Research*, 61, 315-322.

Sommer, B. (2009, June 12). *SAP & SaaS - Some Clarifications*. Retrieved July 21, 2009, from ZDNet - Software & Services Safari: <http://blogs.zdnet.com/sommer/?p=502>

Srinivasan, S. (2004). Role of trust in e-business success. *Information Management & Computer Security*, 12 (1), 66-72.

Stam, E., & Schutjens, V. (2006). The fragile success of team start-ups. In W. During, R. Oakey, & S. Kauser (Eds.), *New Technology Based Firms in the New Millennium* (pp. 219-233). Elsevier, Amsterdam: Oxford.

THINKstrategies. (2008). *White Paper, CIO's Guide to Software-as-a-Service: A Primer for Understanding and Maximizing the Value of SaaS Solutions*. Retrieved May 12, 2009, from SaaS Showplace: <http://www.saas-showplace.com/>

Tidd, J., Bessant, J., & Pavitt, K. (2001). *Managing Innovation: Integrating Technological, Market and Organizational Change* (2nd ed.). Chichester, England: John Wiley & Sons Ltd.

Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal*, 41 (4), 464-476.

Turner, M., Budgen, D., & Brereton, P. (2003, October). Turning software into a service. *Computer*, 36 (10), 38-44.

Twomey, P. (2009, May 26). *The Tech Lab*. Retrieved July 5, 2009, from ICANN: http://www.icann.org/presentations/BBC_NEWS___Technology___The...pdf

USGS. (n.d.). *Metadata*. Retrieved May 22, 2009, from USGS: <http://walrus.wr.usgs.gov/infobank/programs/html/definition/fmeta.html#sections>

Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42 (1), 35-67.

Uzzi, B. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review*, 61 (4), 674-699.

Uzzi, B., & Dunlap, S. (2005, December). How to build your network. *Harvard Business Review*, 53-60.

Vanier, F. (2009, June). *World Broadband Statistics Q1 2009*. Retrieved July 4, 2009, from PointTopic: <http://point->

topic.com/contentDownload/operatorsource/dslreports/world%20broadband%20statistics%20q1%202009.pdf

Veverka, M. (2009, June 29). *NetSuite Takes it to SAP*. Retrieved September 1, 2009, from Barrons: http://online.barrons.com/article/SB124605584884663329.html?mod=googlenews_barrons

Volkman, C., & Tokarski, K. O. (2006). Growth strategies for young e-ventures through structured collaboration. *International Journal of Services Technology and Management*, 7 (1), 68-84.

Webwire. (2009, July 10). *Gartner ranks NetSuite as North America's faster growing financial management system vendor among top 10*. Retrieved July 20, 2009, from Webwire: <http://www.webwire.com/ViewPressRel.asp?ald=98955>

West III, G. P., & Noel, T. W. (2009). The impact of knowledge resources on new venture performance. *Journal of Small Business Management*, 47 (1), 1-22.

Wikipedia. (2009, July 7). *Cable Internet*. Retrieved July 8, 2009, from Wikipedia: http://en.wikipedia.org/wiki/Cable_internet

Wikipedia. (2009, July 16). *Comparison of Accounting Software*. Retrieved July 16, 2009, from Wikipedia: http://en.wikipedia.org/wiki/Comparison_of_accounting_software

Wikipedia. (2009, June 24). *Digital subscriber line*. Retrieved July 9, 2009, from Wikipedia: http://en.wikipedia.org/wiki/Digital_subscriber_line

Wikipedia. (2009, May 11). *Software as a Service*. Retrieved 05 12, 2009, from Wikipedia: http://en.wikipedia.org/wiki/Software_as_a_service

Witt, P. (2004). Entrepreneurs' networks and the success of start-ups. *Entrepreneurship & Regional Development*, 16.

Xero Live Limited. (2007, May 11). *Share Offer Investment Statement Prospectus*. Retrieved August 10, 2009, from Xero: <http://www.xero.com/downloads/pdf/xero-offer-document.pdf>

Xero. (2009, June). *Xero Limited Annual Report 2009*. Retrieved July 20, 2009, from Xero: <http://www.xero.com/downloads/pdf/reports/XeroLimitedAnnualReport2009.pdf>

Yoong, P., Abbott, J., Toland, J., Molina, M., & Joe, C. (2005/2006). The development of a community of academic 'researchers'. A social capital perspective. *International Journal of Knowledge, Culture and Change Management*, 5, 1447-9575.

Appendix A – Telecom and Xero Media Advertisement

Example of Telecom New Zealand Media Campaign that included Xero

Source: Xero Blog (Drury, 2009 March 11)

Appendix B – National Differences across World Internet Markets

Dimension	Types of Difference
Infrastructure	International bandwidth
	Dominant visual interface, i.e. PC, TV, mobile phone
	Cost of internet use
Geographical distance	Distribution and restocking logistics
Language	Search engines and directories are local and language specific
	Marketing always takes place in the buyer's language
	Contractual details
Buyer Behaviour	Tastes, preferences vary
	Culture of catalogue sales
	Different holiday dates
	Price elasticity of demand
User Demographics	Proportion of female users
	Proportion of urban users
Payment Systems	Credit cards, COD, bank transfers
	Legal and cultural norms regarding credit
	Security
Currency	Quoting prices
	Exchange rate variance
Reputation	Location of website
	Origin of products or service being sold

Source: Guillèn (2002)

Appendix C – Accounting Software in the United States

Package	License	Market focus	Type	Structure
24SevenOffice	Software as a Service	Low to Mid-Market	?	Web based
Access Accounting	Proprietary	Mid-Market	Financials, Customer Relationship Management, Manufacturing, Job Costing, POS, Stock, ERP, Business Intelligence, CIS, Payroll	Stand alone
ACCPAC	Proprietary	Mid-Market	ERP	Stand alone and web based
AME Accounting Software	Proprietary	Low to Mid-Market	Payroll, General Ledger, Accounts Receivable, Accounts Payable, Double-entry Accounting, Small Business Accounting	Stand alone
Baan	Proprietary	Mid to Low-Market	ERP	Stand alone and web based
Banana Accounting	Proprietary	Low to Mid-Market	GL; Double-Entry Accounting; Small-Business Accounting; etc.	Stand alone
COA Solutions	Proprietary	Mid-Market to High End	ERP	Stand alone
CODA	Proprietary	Mid-Market	GL; AP; AR; Analytics; Integration ¹ disambiguation needed ¹ ; etc.	Stand alone/web access
Compeat	Proprietary	Restaurant management	Accounting, Inventory Control, Commissary, Payroll, Scheduling	Stand alone
Cubit Accounting	Proprietary	Mid-Market	ERP, CRM, POS	Web based

Package	License	Market focus	Type	Structure
Cougar Mountain Software	Proprietary	Low to Mid Market	Business Accounting, POS Retail, Nonprofit, Inventory Control	Stand alone and web based
CYMA Systems	Proprietary	Low to Mid Market	?	Stand alone
EasyAs Accounting Software	Proprietary	Low to Mid Market	Single Entry, Small Business Accounting	Stand alone
FirstOffice	Proprietary	Low Market	?	Stand alone
FinanceToGo	Proprietary	Low to Mid Market	Double-entry Accounting, Mortgage/Loan/Profit & Loss Accounts, Share Portfolio Management, Small Business Accounting	Stand alone
FlexAccount	Proprietary	Mid to High End Market	ERP, Manufacturing, Intercompany, Multicurrency, Budgeting, Reporting, Analysis	Stand alone and web based
Fortora Fresh Finance	Proprietary	Personal	?	Stand alone
HansaWorld	Proprietary	Mid Market	ERP, CRM, Sales Management, Manufacturing, Job Costing, Stock, POS, Rental, Calendaring, Service Orders, Webshop, Loans, Alerts, Hospitality Management, Document Management, Graphical Resource Planning	Stand alone & WAN ready
Integrated Office Accounting	Proprietary	Low to Mid-Market	Payroll, General Ledger, Accounts Receivable, Accounts Payable, Small Business Accounting, Inventory Control, Manufacturing, POS, Order Entry, Job Costing	Stand alone - Multi-User - Terminal Server - WAN

Package	License	Market focus	Type	Structure
Lawson Software	Proprietary	Mid to Large size Enterprises	ERP, CRM, SCM, PM, e-Commerce, BI	Web based
Mamut Software Limited	Proprietary	Low to Mid Market	ERP, CRM, e-commerce	Stand alone
Microsoft Dynamics AX	Proprietary	Mid Market	ERP, SCM, CRM, WMS, Project mgmt, Manufacturing, Intercompany, Multicurrency, Cost Accounting, Reporting & Analysis services	Stand alone and web based
Microsoft Dynamics GP	Proprietary	Mid Market	?	Stand alone
Microsoft Dynamics NAV	Proprietary	Mid Market	?	Stand alone
Microsoft Dynamics SL	Proprietary	Mid Market	?	Stand alone and web based
Microsoft Money	Proprietary	Personal	?	Stand alone
Microsoft Office Accounting	Proprietary	Low Market	?	Stand alone
Moneydance	Proprietary	Personal	Double-Entry Accounting, multi-currency	Stand alone
MYOB	Proprietary	Low to High End Market	Small business and commercial accounting. Payroll and POS	Stand alone
NetSuite	Software as a Service	Mid Market	CRM, ERP, ecommerce	Web based

Package	License	Market focus	Type	Structure
NolaPro	Software as a Service or Freeware	Low to High End Market	Double-Entry Accounting, Small Business Accounting, Inventory Control, Order Entry/Tracking, Payroll, ERP, ecommerce, POS	Stand alone and web based
Openda QX	Proprietary	Low to Mid Market	CRM, ERP	Stand alone
Oracle E-Business Suite	Proprietary	High Market	ERP	Web based
Peachtree by Sage	Proprietary	Low-end to High end	Business management.	Stand alone
Pegasus Software Opera II	Proprietary	Mid-market	?	Stand alone
POS Solutions	Proprietary	Newsagency pharmacy	POS	Stand alone
Quasar Accounting	Proprietary	?	?	Stand alone
QuickBooks Enterprise Solutions	Proprietary	Mid Market	Business management, Payroll	Stand alone
Quicken	Proprietary	Personal	?	Stand alone
Sage	Proprietary	Accounting Firms	CRM, Payroll	Stand alone
Sage Line 50	Proprietary	Low-market (for SME)	?	Stand alone

Package	License	Market focus	Type	Structure
Sage Pastel Evolution	Proprietary	Small, Medium to Mid-size Enterprises (SMME)	Financials, Inventory, Manufacturing, Job Costing, POS, Procurement, CRM, Business Intelligence, Payroll & HR	Stand alone
Sage PFW ERP	Proprietary	Mid-market	ERP, Process Manufacturing	Stand alone
SAP Business One	Proprietary	Small & Midsize Enterprises (SME)	ERP, e-Commerce	Stand alone
SAP ERP	Proprietary	Midsize to High-end	ERP, CRM, SCM, SRM, PLM, GTS, e-commerce, Business Intelligence, Mobile Business	Stand alone and web based
Simply Accounting	Proprietary	Low-end	Business Accounting, Retail, Inventory Control	Stand alone
Tally	Proprietary	Mid-market	payroll	Stand alone
Ubikwiti	Software as a Service	Low to High End markets	Easily customizable online accounting and business management software, personal finance.	Web based
You Need a Budget (YNAB)	Proprietary	Personal	Personal spending management, with an emphasis on budgeting	Stand alone

Source: Wikipedia (2009, July 16)

Appendix D – Research Consents