



CHAIR IN DIGITAL ECONOMY

HIGH GROWTH AND TECHNOLOGY

High Growth Firms in the Digital Economy

PART B: SUPPLEMENTARY REPORT

A REPORT FOR
THE DEPARTMENT OF SCIENCE, INFORMATION TECHNOLOGY AND
INNOVATION, QUEENSLAND GOVERNMENT, AUSTRALIA

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THE AUTHORS

Rowena Barrett is a Professor and Head of the School of Management at QUT. Rowena's research focusses on managing people at work, especially in smaller firms.

Marek Kowalkiewicz is a Professor and the PwC Chair in Digital Economy at QUT. Marek's research focuses on product and process innovation and management.

Shahid M Shahiduzzaman is a Research Fellow with the PwC Chair in Digital Economy team at QUT. His research focuses on the impacts of digital technology on business performance and productivity.

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CHAPTER 1: INTRODUCTION

This supplementary research report contains the background, methodology, data and analysis that support Part A Executive Summary: High Growth and Technology: High Growth Firms in the Digital Economy.

BACKGROUND

Not all firms that survive grow. In Australia there were 2,121,235 actively trading firms in June 2015; the majority (99%) were small- and medium-sized firms employing less than 200 people [1]. Overall, based on latest available information, total income of these firms increased by 3.3% from 2012–13 (A\$2967 billion) to 2013–14 (A\$3067 billion) (see Figure 1.1) and employment increased by 0.8% between June 2013 to June 2014 [2].

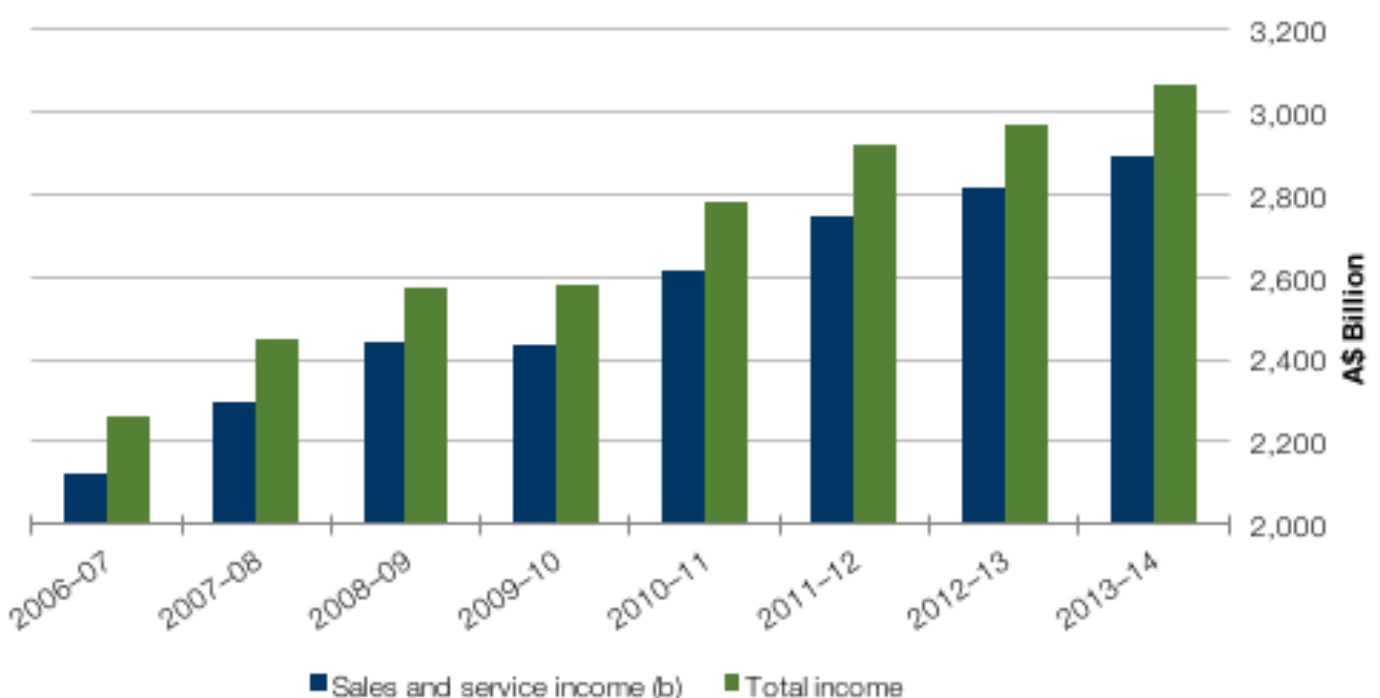
The Eurostat-OECD [3] recommends that turnover and employment be used to measure high growth (the latter to mitigate any small-firm growth) and defines high-growth firms as “all enterprises with average annualized growth greater than 20% per annum, over a three-year period, and with ten or more employees at the beginning of the observation period” (p. 61). High growth is not the usual pattern of firm growth. High-growth firms only make up a small proportion of firms in any economy.

What underpins that growth is not necessarily clear [4-7] as the characteristics of high-growth firms are not uniform [8-10]. Moreover, while a number of factors play a role in driving or contributing to growth, high growth is a ‘state’ [4] and not necessarily a state that can be sustained for long periods or repeated throughout the firm’s life [11-13]. So while high growth is difficult to achieve and maintain [4, 10, 14], the contribution of high-growth firms to new job creation is of key interest to governments [15-17].

RESEARCH FOCUS

This is a study of high-growth firms. While much has been written about high growth based on an array of studies, and using quantitative and qualitative methods to investigate different populations of firms in a variety of locations and contexts, there remains little that is agreed upon and still more to know. One aspect on which there is agreement is that high-growth firms are found across all sectors of the economy [6, 9, 18, 19]. High-growth firms are not more likely to be high-tech oriented [18], but instead human capital is important as high-growth firms are more likely to be knowledge-intensive firms[18].

Figure 1.1: Income, Total selected industries (a)



Source: *Australian Industry 2013-13*, Cat No. 8155

- (a) Excludes ANZSIC Division K Financial and Insurance Services
- (b) Earnings before interest tax depreciation and amortisation.

The heterogeneity of high-growth firms is important in the context of this study of high-growth firms in Queensland. While our interest is specifically in understanding the interaction between technology and high growth, we do not focus exclusively on high-tech, high-growth firms. Instead, our case study firms operate across industry sectors: seven high-growth firms operate in the service sector and four operate in the manufacturing sector. The preponderance of service sector firms among this group of high-growth firms is not unexpected given the evidence that human capital or knowledge intensity is critical to high-growth firms [18].

The 11 firms participating in the study all experienced a period of high growth being at or above the Eurostat-OECD standard over the period 2010–15. The details of how the firms were identified and selected are outlined in Chapter 3. The key questions framing this study are:

Research Question 1: What are the similarities across the business models of high-growth firms?

Research Question 2: What is the relationship between technology and high growth? In what ways do high-growth firms use technology as a resource?

Research Question 3: What can governments do to support high-growth firms?

In Chapter 2 we briefly overview the literature used to frame this study. Specifically, the study concerns the ways that information technology (IT) and digital technologies (hereafter ‘technology’) interact with high growth. In Chapter 3 we look at the drivers of high growth, before we review the resource-based view of the firm [20-23] in the context of technology as a resource to understand the ways in which technology can contribute to competitive advantage and firm growth. In Chapter 4 we investigate the ways in which technology has been employed and organised within high-growth firms. To see this more clearly we use the business model concepts [24, 25] and Osterwalder and Pigneur’s [24] Business Model Canvas as the basis for organising our analysis of the 11 participating firms’ characteristics. A business model “describes the rationale of how an organization creates, delivers, and captures value, in economic, social, cultural or other contexts. The process of business model construction is part of business strategy” [24] (p.14).

The emergence of the digital economy changes the nature of and relationships within firms [26]. By representing each high-growth firm’s business model we show where technology plays a role. Technology enables markets to open and firms to target and communicate with more distant and

different customer segments using internet-enabled and social media tools [23, 27, 28]. Technology can also change the way activities are undertaken within firms, either through enhancing manufacturing processes or service delivery or lowering the costs of undertaking those activities, or indeed by completely shifting those activities outside the firm [29, 30]. Technology can also be the output of the firm, as was the case with some of the firms studied.

REPORT STRUCTURE

In Chapter 2 we undertake a brief literature review touching on drivers of high growth, as well as the ways in which technology can act as a resource in accordance with the resource-based view of the firm.

In Chapter 3 we outline the research process, the data we collected and analysis technique used. We also explain the business model canvas in more detail.

In Chapter 4 we present the findings based on text analytics and the business model canvas analyses. Appendix 1 reports the details of the 11 case study high-growth firms, while Appendix 2 provides the business model canvases we created for each firm based on the qualitative data collected in semi-structured interviews with key personnel. We then draw on the resource-based view of the firm to frame the analysis of the ways key personnel in the 11 firms explained how they used or applied technology within their firm.

Chapter 5 presents the final remarks.

CHAPTER 2: LITERATURE REVIEW

The desire of governments to understand and support high-growth firms to foster economic growth and grow employment is not new. A small proportion of high-growth firms in an economy can create new jobs in a short period of time. Moreover, in a dynamic business eco-system, high-growth firms help stimulate competition, create new market opportunities and foster innovation within industries. Consequently, as cyclical and structural factors have seen economic growth slow in many advanced economies, the interest in high-growth firms has intensified.

While academics, practitioners and policy makers can mean different things when they refer to ‘high growth’, there is agreement that high growth is difficult to achieve, maintain and repeat [31]. In this chapter we look briefly at literature around understanding high growth, the contribution the resource-based view of the firm makes to understanding drivers of growth and the role technology plays in this context.

HIGH-GROWTH FIRMS

There is a desire to understand the characteristics of high-growth firms; as such there is extensive literature on the drivers of firm growth, especially small and entrepreneurial firms [32]. However, there is little we all agree upon on these driving factors[6]. It is now well understood that growth is a dynamic and heterogeneous phenomenon, due to growth being both a process and outcome. There are a variety of indicators used to measure firm growth, such as revenue, sales, profitability, employment, and assets amongst others [32]. Irrespective of the growth measure used there is still significant heterogeneity across firms, as only a small fraction of the total firms in the business population of any economy grow at a significantly high rate, and those that do make a disproportionate contribution to that economy.

An array of factors can impact on firm growth. These factors could be internal and particular to the firm itself—for example its ownership and management characteristics, age, number of employees, management practices, strategy, market orientation, commitment to product or process innovations, amongst others—or found externally in the economic, social, political, technological and business environment in which the firm operates.

Internal factors

A range of internal factors have been discussed in the literature as determinants of high growth and a number of them are addressed below.

Access to slack resource and value of network

Starting with Penrose [33], much research has explored the linkages between the availability of, or access to, existing resources and the high growth of firms [13, 34]. For example, using a sample of 6692 small and medium enterprises (SMEs) in Spain, Moreno and Casillas [13] found that the ability to get access to resources (e.g., human, technological and financial) and to new knowledge through internal development and/or external acquisition was an important factor for high growth. ‘Networked’ firms have better access to such resources and, therefore, possess greater potential for high growth.

Innovation

Innovation is considered a key aspect of firm growth [35]. Accordingly, studies explore the relationship between innovation and high growth [10, 11, 36]. Research summarised by NESTA in the UK identified that innovative firms grew twice as fast as less innovative firms [16]. However, innovation is a performance outcome and therefore it is necessary to understand what factors propel this performance and, amongst other items, the learning environment and creative climate have been considered as important factors for innovativeness that can drive high growth [37].

Organisational culture

Organisational culture refers to a set of shared values and norms held by an organisation’s employees [38]. Firms with entrepreneurial and team-based cultures, where people are willing to work together and are open to exploring new ideas are more innovative and grow faster [39-41]. Linked to this is research showing entrepreneurial behaviour is key to firm performance, and this may be because innovativeness, risk-taking and proactivity are chief determinants of entrepreneurial behaviour [42].

Value for customers

Creating unique value for customers is a key factor driving high growth [43]. Products or services of high-growth firms may be fundamentally different from those of their competitors [10]. But if the products or services are more common, then the firm must be able to clearly articulate the value for customers. In doing so, as Feindt et al [44] argue, the firm builds strong customer relationships which are also important for high growth.

External factors

A number of studies focus on external factors as important obstacles or challenges to high growth. External factors may be quite broad and could range from competition from existing firms or new entrants in the market to public policy settings that directly regulate, or indirectly affect, firm behaviour.

Disruption

Disruption refers to ‘unusual change’, which occurs in the firm’s external environment. Much disruption is caused by technology and technological advancements. Christensen [45] describes disruptive innovation as a process of transformation that enables existing, expensive and complicated products or services to become more affordable or simpler, such that they are accessible to a large population. As this takes place in the economy, leading firms confront challenges from the new/emerging firms that nurture disruptive technology [45].

Operating environment

Existing studies indicate the influence of environmental turbulence and environmental complexity on firms’ risk-taking and proactive behaviour [46]. A number of studies find that the operating environment imposes pressure on organisations to change their strategy. Miller and Friesen [47] find that environmental dynamism, hostility and heterogeneity tend to encourage a high level of innovation and analysis for successful firms.

Public policy

As the majority of firms in any economy only grow moderately, there has been intense debate in the literature about public policy for high-growth firms. Enterprise policy in developed countries often concentrates on promoting start-ups. However, there is critique in the literature about the way public policy seeks to encourage people into entrepreneurship. Shane [49] seriously criticises the phenomena and

argues that encouraging more people to become entrepreneurs is bad public policy. He draws on predominantly United States’ (US) evidence to argue that “getting economic growth and jobs creation from entrepreneurs is not a numbers game. It is about encouraging the formation of high quality, high growth companies” [49](p.141). Morris et al [50] counter Shane’s arguments and suggest a focus solely on high-growth ventures is misinformed and instead a vibrant business ecosystem requires an array of firms—survival, lifestyle, managed growth and high growth. Morris et al [50] suggest a range of examples of public policies to support high growth and these are listed in Table 2.1.

Table 2.1: Examples of Public Policies to Support High-Growth Firms

Financial investment	Small business innovation research grants State-backed seed funding for high-growth ventures
Non-financial support	Support for venture accelerators Programs to give entrepreneurs access to government-owned technologies Programs to build high growth management capacity
Tax policies	Research & Development (R&D) tax credits Low capital gains taxes R&D partnerships Tax credits for job creation Increasing tax write-off on start-up costs
Regulation and regulatory policies	Intellectual property protection Liberal bankruptcy laws

Source: Adapted from Morris et al [49, p. 724].

Policy to support high-growth firms needs to be context-specific [7] and recognise local economic, social and political conditions. In Australia we see a focus on high-growth firms through the federal government’s policy and support outlined in the National Innovation and Science Agenda (Dec 2015). An array of initiatives in this A\$1.1 billion policy are aimed at encouraging and supporting high-growth entrepreneurial and innovative ventures. Further support was provided in the 2016–17 Federal Budget. In Queensland we also see significant support through the A\$405 million Advance Queensland initiatives in the Queensland Budget 2016–17, building on the A\$180 million Advance Queensland

investment in the 2015–16 Budget. The Queensland Budget 2016–17 includes A\$22.7 million investment over three years in the Small Business sector to help build digital capability, harness innovation and derive business growth. Other investments in the Queensland Budget 2016–17 include A\$9 million to support industry accelerators, A\$6 million for Regional Innovation Hubs, A\$10 for Platform Technologies and A\$34 million over three years for TAFE Queensland to provide high-quality training to Queenslanders. A range of programs have been announced, such as the Building Digital Capability Grants, Entrepreneurs of Tomorrow, Queensland Small Business Champion, and the Certificate III Guarantee Boost program. Government is providing significant funding in infrastructure, innovation, arts and culture, tourism, environment and disaster management to boost jobs and growth in the local economy. A range of other policy initiatives have been announced since the Budget 2015–16, such as the Start Up Hub, HotDesQ, Queensland Commercialisation Program and Business Development Fund, specifically focusing on entrepreneurial ventures. Moreover, the Brisbane City Council also supports entrepreneurial activities as attested by their Feb 2016 launch of The Capital – a co-working space in the central business district. Activities such as the Digital Brisbane, Visiting Entrepreneurs Program, PowerUps and other digital events run in Brisbane also seek to enhance skills and encourage entrepreneurship. The Queensland Government is providing industry investment opportunities aimed at moving businesses to Queensland, as well as giving existing Queensland businesses more incentives to grow.

RESOURCE-BASED VIEW OF THE FIRM

Since the early 1990s the resource-based view of the firm has emerged as a way to answer the question of ‘why do some firms outperform others?’ Eliciting a flurry of interest from researchers in a range of disciplines, including strategy, entrepreneurship, human resource management, marketing, international business, management information systems, amongst others, the resource-based view explains how firm-level resources can be organised and uniquely used to achieve competitive advantage. For resources to be a potential source of sustainable competitive advantage the following conditions [20] need to be satisfied:

- Valuable: resources must add positive value to the firm.
- Rare: resources must be unique amongst current and potential competitors.

- Imperfectly imitable: resources cannot be easily copied.
- Non substitutable: resources cannot be exchanged with another.

The resource-based view suggests that firms obtain competitive advantage by implementing strategies that exploit their internal strengths through responding to environmental opportunities, while neutralising external threats and avoiding internal weaknesses [20].

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TECHNOLOGY AND HIGH GROWTH

Technology can be used across all parts of a firm’s business model, whether this is identifying the customers’ needs, procuring inputs, manufacturing products, delivering goods and services, interacting with value chains or managing resources. By adopting and using technology firms can effectively reduce costs and increase profitability.

Whether technology in and of itself can be a source of competitive advantage has been widely investigated in the literature [22, 51, 52]. The productivity paradox suggests that the investment in technologies is not returned [53], potentially because commodity-like technology investments can be easily duplicated across firms. Instead, as Teece et al [54] and others have argued, resources must be organised to be effective, so the role of internal factors (or organisational capabilities) in assembling, integrating and deploying resources is key to competitive advantage.

A clear representation of the business model is important in order to see the architecture that underpins the ways in which technology enables the cost-effective and timely delivery of products and services that meet customers’ needs and deliver value to customers. In other words, it is how firms leverage the specific technologies they invest in that is likely to give them a source of competitive

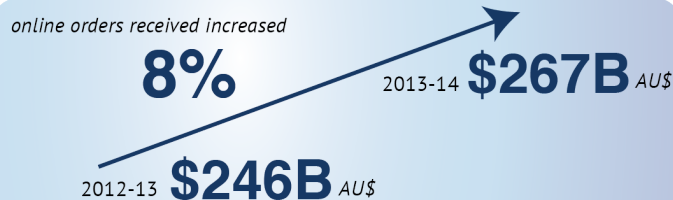
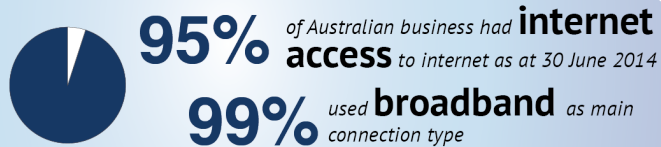
Figure 2.1: The Conversation Prism (source: <https://conversationprism.com/>)

advantage. This is apparent when the World Bank [27] notes, “more productive firms are more likely to adopt the internet and use it more intensively” (p.52).

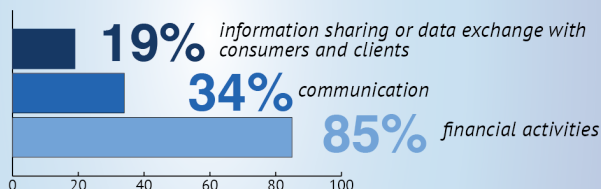
Leveraging technology requires the skills of managers and workers, as well as firm ‘know how’ [55] or culture [20]. General agreement therefore exists around the fact that technology is an enabler [56-58] of firm performance by lowering costs and adding value to products and services. Moreover, increasing usage, power and sophistication of technology (particularly

mobile and digital technologies) combined with decreasing costs escalates a firm’s ability to support activities, open channels of communication and find competitive advantages from their investment in technology resources [58].

While the channels firms can use to communicate with customers and partners, share information or co-create content have rapidly expanded over recent years (see the Conversation Prism in Figure 2.1 for a

Box 2.1:**Business Use of Information Technology: 2013-14**

Businesses used the internet for (excluding email):



visual map of the social media landscape), evidence suggests the capability to use and manage social media effectively may be lacking [59].

In terms of growth, however, the Australian Bureau of Statistics (ABS) estimates that there were approximately 12.9 million internet subscribers in Australia at the end of December 2015 [60], while at the same time there were some 21.3 million mobile handset subscribers [60]. The volume of data downloaded in Australia is growing, with the average data downloaded per month by the mobile handset subscriber being 1.4GB [60]. The latest information from the ABS about Australian firms' use of information technology is contained in Box 2.1.

SUMMARY

Clearly there is more to know about the ways in which technology interacts with high growth. In undertaking this study, the firm is considered to be a complex system operated by founders, owners or managers who make decisions which are shaped by the firm's environment. Queensland firms, like firms globally, are being impacted by technological change and development. Technology is a critical factor in any firm's operating environment. Its effect on the firm is of interest to us and the resource-based view helps to explain the ways exogenous or endogenous technological forces of change—opened up through digital enablement for trade, changes to work practices, supplier relationships, market practices amongst many possible others—have interacted with high growth. While technology is the focus, we know that high growth is a function of multiple qualitative factors. In Chapter 3 we explain our research processes and how the business model concept can be applied to examine drivers of high growth.

Source: ABS (2015). Australian System of National Accounts, Various Tables. Cat no. 5204, Canberra: Australian Bureau of Statistics.

Note: The above numbers are based on data collected from a random sample of 6,640 businesses via online and hard copy questionnaires. The sample was drawn from an estimated number of 757,000 businesses in Australia in 2013-14.

CHAPTER 3: ABOUT THE RESEARCH

RESEARCH QUESTIONS

The questions framing this study are:

Research Question 1: What are the similarities across the business models of high-growth firms?

Research Question 2: What is the relationship between technology and high growth? In what ways do high-growth firms use technology?

Research Question 3: What can governments do to support high-growth firms?

SAMPLE

In the literature the terms ‘high growth’, ‘fast growth’ and ‘rapid growth’ are often used interchangeably [41]. Firms selected to participate in this study have been categorised at some point during 2010 to 2015 as ‘high growth’ using the Eurostat-OECD [3] measure outlined in Chapter 1.

It is not known how many Queensland firms are high-growth firms. The OECD [62] estimates that when the employment growth criteria is used, firms representing high growth could be only between 3.5% and 6% of the total business population, although when the turnover criteria is used then the share could grow to 20% or more of the total business population. However, the OECD qualifies this to say that the proportion of high-growth firms varies considerably across countries. Moreover, while high-growth firms are often thought to be high-tech firms there is variation across sectors and they may exist in declining industries [63].

The participating firms were chosen from those that have self-identified as high-growth firms, either in a self-selecting manner (i.e. participate in a publication such as BRW Fast 100, Telstra Business Awards or Smart Company Fast50 awards) or through another mechanism, such as a business database, media or discussions with industry partners and other industry personnel. Self-selection is important in this kind of research as revenue data is difficult to obtain when firms are not publicly listed.

Because there is no known database that identifies such firms in Queensland (or nation-wide), a list of 50 high-growth firms was generated through extensive searches of different databases and public sources. Databases included: the Orbis dataset, BRW Fast 100 list from 2013 to 2015, and the free online company research portals (<http://www.fta-companies-au.com/>).

Those firms with the closest match to the OECD measure were targeted for inclusion in the study. While there is likely only a small proportion of firms in Australia, let alone Queensland, that satisfy this criteria, our aim was not to target the ‘usual suspect’ high-growth firms such as the ones identified in the Brisbane City Digital Audit [64].

RESEARCH TECHNIQUES

All research at QUT which requires data to be collected from humans must be undertaken in accordance with the National Statement on Ethical Conduct in Human Research. Approval for such research must be granted by the University Human Research Ethics Committee (UHREC) before any data is collected. Approval number 1500000790 relates to this project.

Each firm was contacted by telephone and email with a request to the CEO, founder and/or owner to participate in an interview at a time and location convenient to them. Every effort was made to select newer, smaller and medium-sized private companies that met the definition of high growth.

A total of 11 firms participated, with semi-structured interviews undertaken jointly or separately with 17 key informants in these 11 firms (see Appendix Table 1). Each interviewee provided informed consent and the interviews were audio recorded and transcribed verbatim.

Semi-structured interview questions (see Figure 3.1) focussed on: the firm’s growth, what that growth meant for key firm personnel, what they thought the relationship was between technology and high growth in the context of understanding their business models, and what they thought governments could do to support high-growth firms.

The aim of a semi-structured question is “to explore the subjective meanings motivating people’s actions in order to be able to understand these” [65] (p.84). This is particularly the case in smaller firms where the boundary between ‘the firm’ and ‘the owner’ is not always clear: what goes on within the small firm is often reflective of, and attendant on, the owner’s skills and capacity as well as their attitudes and values.

Figure 3.1: Semi-Structured Interview Prompts



DATA ANALYSIS AND THE BUSINESS MODEL CANVAS

The qualitative data analysis is a ‘fluid’ process of making sense. The analytic approach is partly intuitive, with the transcriptions reviewed for common themes and relationships between them categorised [66]. The data were analysed according to the meanings managers attached to issues with reference to broader contexts.

Content analysis is performed by means of conceptual and rational analyses. In a *conceptual analysis* text is examined for the presence, frequency and centrality of concepts. Such concepts can represent words, phrases or more complex definitions. *Relational analysis*, on the other hand, tabulates the frequency of concepts and co-occurrence of concepts, thereby examining how concepts (predefined or emergent) are related to each other within the text. We are interested in *both* conceptual and relational analysis that identifies the central concepts and explores the co-occurrence. The text analytics software Leximancer was used to extract and group the key concepts. These concepts are identified using a Bayesian co-occurrence metric [67] and bootstrapping algorithm to identify families of weighted terms that tend to appear together in the text [68].

While the content analysis presents the general and dominant concepts, it does so without having any theoretical and analytical framework. In order to overcome this limitation, the framework of the business model canvas is applied as it captures all aspects of the business that work separately and in concert to create business value [24, 69]. The business model canvas is used to ask the questions:

1. Who are the firm’s target customer/s?
2. What does the firm offer to the customer?
3. How does the firm create the value proposition?
4. How does the firm generate revenue?

Semi-structured interview questions focussed on the nine building blocks that make up the business model canvas (Figure 4.1). Customer segments describe the people and/or groups for which the firm is creating value. For each customer segment the firm offers a bundle of products and services (specific value propositions) that generate value (hence

value proposition). The channels then describe the interactions with customers to deliver on that value proposition. Customer relationships outline the type of relationship the firm establishes with its various customer segments, while the revenue stream clearly articulates how and through what pricing mechanisms the firm captures value. Key resources describe the inputs used to capture that value, be they human, physical and or other resources, and therefore which assets are indispensable in the business model. Key activities outline the things the firm must perform to deliver value. Partnerships show who (individuals or groups) and/or what (institutions) can help leverage the business model and include those in the firm’s value chain. Once these eight building blocks are understood so too should the ninth, which is the firm’s cost structure.

Teece [70] argues that “designing good business models is in part an ‘art’” (p. 190) and the accuracy of the business models we construct and report in Appendix 2 depends on the interpretation of data from the key informants we interviewed. Each firm’s business model canvas was independently completed by two researchers. Our representations of each firm’s business model canvas may be incomplete, because all the component parts were not clear to the interviewee or shared with the interviewer/s. Results were compared, discussed and collated into one representation for each firm.

While there is increasing awareness of business models and application of the business model canvas in the practitioner community [71], there is a paucity of both theoretical and practical literature on the topic [70]. Morris et al [71] argue that much of the empirical work to date on business models is case study-based and, as Veit et al [72] argue, “addressing the business model concept as an anchor for the identification of the impact of IT is a fairly novel endeavour” (p. 45).

By using the business model canvas approach we were able to draw a static representation of the building blocks that make up a firm’s business model and identify where technology plays a role. We are concerned with the role played by technology within the business model, not the business model itself. The business model is usually not a form of competitive advantage as it is easily imitable [70, 71]. By completing the business model canvas for all 11 high-growth firms based on the data gathered through interviews with key firm personnel, we can see (potentially) common and different elements which relate to, are underpinned by, or are reliant on technology for these high-growth firms. These are the elements we draw on to examine the relationship between technology and high growth.

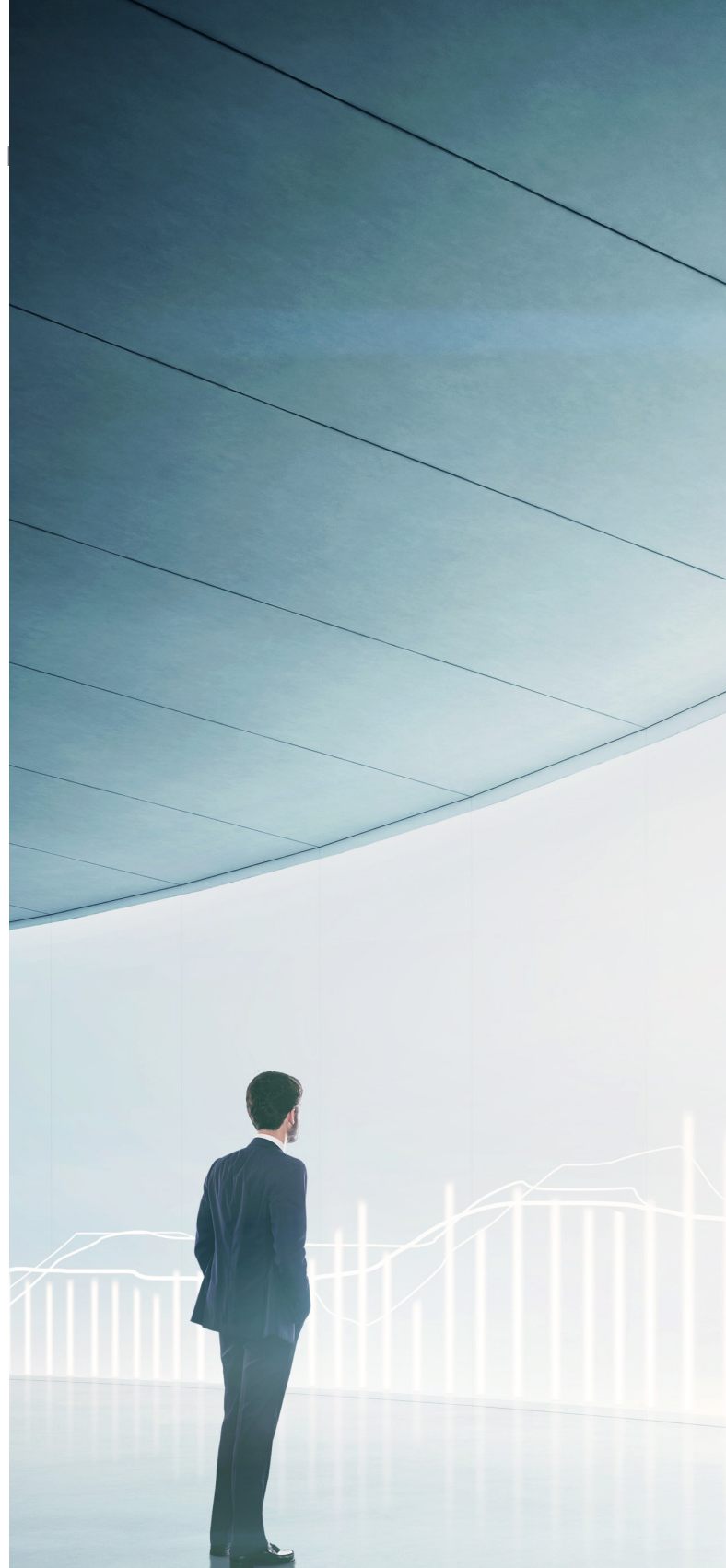
RESEARCH LIMITATIONS

There are a number of limitations to this study. The first limitation is that the sample size is small. However, there is no way of knowing the total Queensland population of firms, let alone high-growth firms. Eleven firms from across industry sectors is sufficient to illustrate key themes, but we recommend a more detailed and larger study to provide more conclusive findings.

The second limitation is that we cannot conclude any causality; that is, whether technology resources and capabilities cause high growth or vice versa. A longitudinal study would be required in order to test causality.

The third limitation of this study rests on the data collected. Semi-structured interviews were used to gather perceptions and understandings of key personnel in the 11 firms. The relationship between the interviewer and interviewee, the time, place and whether the interview was face-to-face or conducted by telephone can affect the quality of this subjective data. In nine cases there were two interviewers, although one predominantly led the interview. Interviewees were asked to nominate a time and place suitable to them, which the interviewers respected. Two interviews were conducted by telephone but they took the same length of time as the face-to-face interviews.

A limitation of a study of this kind can relate to subjectivity in the data analysis techniques. Thematic analysis of the interview data and then the construction of the business model canvas for each firm were undertaken separately by two academics, before the results were discussed, collated and compared for similarities and differences across firms. The use of Leximancer overcame some of these issues and showed correspondence between the thematic and statistical analyses.



By using the business model canvas we were able to draw a static representation of the building blocks that make up a firm's business model and identify where technology plays a role. We are concerned with the role played by technology within the business model not the business model itself.

CHAPTER 4: ANALYSIS AND FINDINGS

GENERAL CHARACTERISTICS OF PARTICIPATING FIRMS

The general characteristics of each of the participating firms are presented prior to the businesses model canvas representation in Appendix 2 of the report. The 11 participating firms operated in a diversity of Queensland's economic sectors, both traditional and non-traditional. Firms were established in different time periods—the oldest was established in 1975 (Services 5) but had undergone changes in organisational form from being a partnership to incorporating in 2008. The youngest firm (Services 7) was established in 2012.

The firms were different in size and ranged from having 5 to 250 employees. Four of the firms had staff in multiple locations: Services 3 had two locations in Brisbane; Services 4 had staff in Brisbane and two capital city locations; Services 5 had staff in Brisbane and seven other capital city or regional locations; Services 6 had

staff in an office in regional Queensland, a capital city and overseas; and Services 7 had two locations in the same Queensland regional city, as well as 10 franchised locations across Australia. In addition to Services 6 having staff in an overseas location, Services 1, Services 3 and Services 4 also had contractors located in overseas locations.

Firm founders/owners brought a range of different experiences to their firms. Six had some form of prior experience in owning and/or managing a firm. Of the other owners and/or founders without prior business experience, three (Services 3, Services 7 and Manufacturing 1) had worked in different industries to the one their firm now operated in—one in the same industry (Manufacturing 2) and one (Services 5) in the same firm.

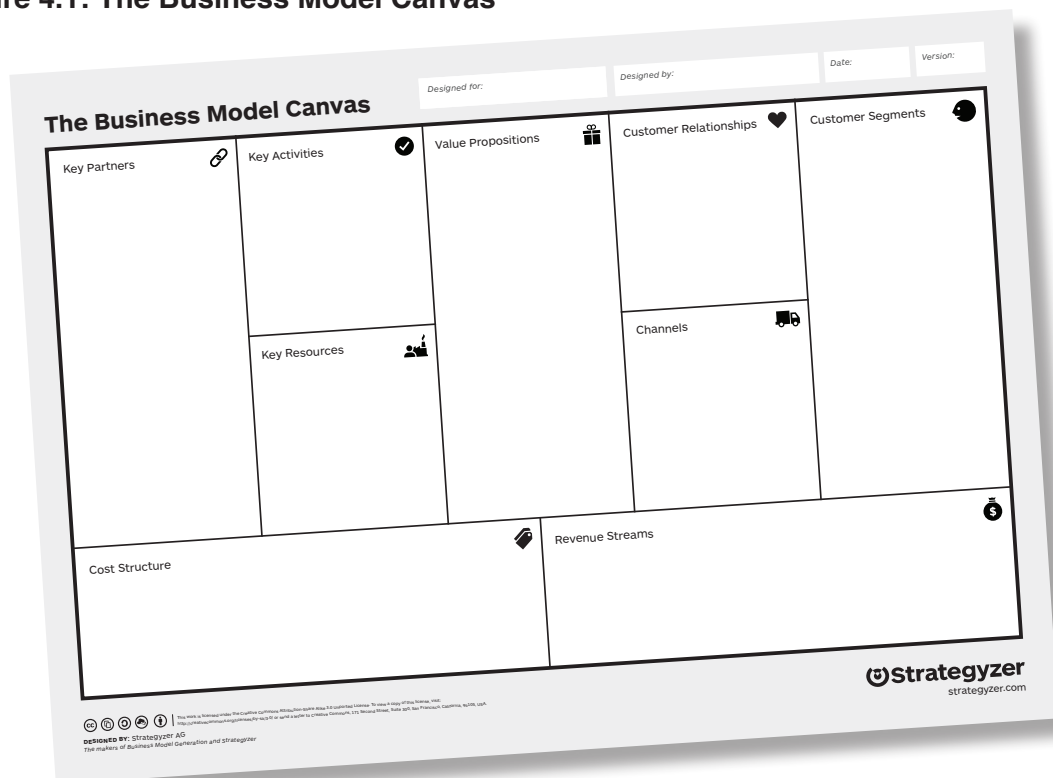


BUSINESS MODEL ANALYSIS

Each business model canvas (Figure 4.1) representation has nine building blocks, constituting 'Key Partners', 'Key Activities' and 'Key Resources' in the left blocks and 'Customer Relationship' and 'Customer Segment' and 'Channels' in the right blocks. The 'Value Proposition' block sits in the middle, while the 'Cost Structure' and 'Revenue Streams' blocks are placed at the bottom. A business model canvas therefore represents all possible aspects of

However, one major attribute across firms is that they are able to articulate their unique value to customers. As the Engineer of Services 2 described, *"We really are holistic here and it means that when we approach a customer, it's not about trying to sell a system, it's about really trying to identify what will work best for them, and our services that we provide actually"*. Similarly, Founder 1 of Manufacturing 1 articulated, *"we have a very good reputation in the industry for quality product"*. Founder 1 of Services 1 mentioned, *"we're solving the fundamental problem that there isn't a safe, palatable way to borrow a small amount of money"*. Similarly, the Founder/CEO of Services

Figure 4.1: The Business Model Canvas



a firm where technology can potentially play a role. Given below are some dominant attributes of the representations.

An abbreviated business model canvas for each firm has been included in Appendix 2. They show that each firm in the sample is different in terms of the products and services they offer to their customers. The customers across the businesses are diverse, covering individuals (i.e., Manufacturing 1, Services 5), retailers (i.e., Manufacturing 2, Manufacturing 4), local governments (Services 2) and international markets (Manufacturing 2). Many firms also had national to international customers. Their relationships ranged from traditional modes of communication, such as face-to-face (Services 2) to 100% online (Services 1).

6 said, *"you've got to be able to solve the problem and provide value for someone"*. High-growth firms, therefore, emphasise understanding customer 'pain' and creating innovative solutions to relieve that pain.

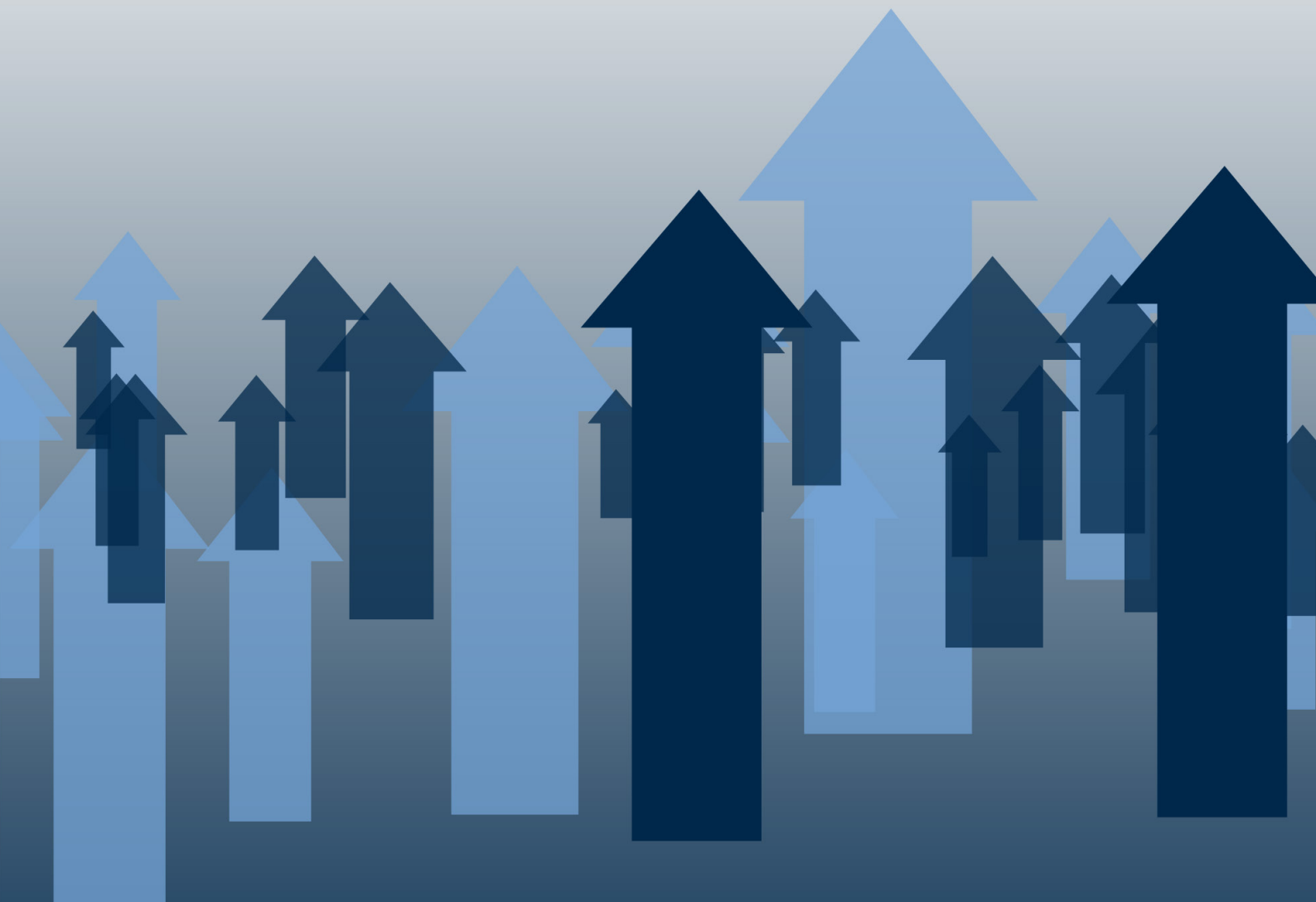
The second common feature of the high-growth firms studied is they emphasised workplace culture and agile management processes as being integral to success. The firms are more likely to be knowledge-intensive and it is the interrelationship between the nature of the environment, the firm and the people/persons operating the firm that underpin the growth. As the Founder/CEO of Services 1 mentioned, *"all decisions are based on complex data analysis."* Similarly, Founder 1 of Services 3 said, *"We've been big on making sure we have people who we can rely on"*

to give us good information, for us training is number one". The CEO of Manufacturing 2 mentioned, "So we're turning ourselves now into a company with [a] massive amount of data." Accordingly, Manufacturing 2 is recruiting people with an analytical background to help understand the data and make informed decisions.

These high-growth firms build a culture of co-creation, idea sharing and team work. As the Founder/CEO of Manufacturing 1 mentioned, *"I don't try and own all the problems, if we have an issue, the team will solve it."* Also, *"we have team meetings and we come up with ideas about what we want to do"*. Similarly, the Founder/CEO of Services 1 said, *"You have to have a strong culture that is reinforced at every point and led by everyone, not one that is just some sign on the wall."* Founder 1 of Services 3 mentioned, *"It's really key to make sure your team is on board and able to build that growth throughout*

the business". The Founder/CEO of Services 4 said, *"It's individuals in the business who come up with ideas"*. The Founder/CEO of Manufacturing 1 wanted to create the right culture because, *"it keeps people passionate and intrinsically motivated"*. The Founder 1 of Manufacturing 4 mentioned, *"We have all worked together for a long time"*. Similarly, Founder 1 of Manufacturing 3 said, *"We love working together"*.

To summarise, high-growth firms place overwhelming importance on organisational culture, knowledge-based decisions, employing and supporting the right people and team work as key drivers of high growth.



Technology enabling marketing and sales

The relationship between technology and high growth can be seen clearly around the ways firms communicate with customers and in their sales and marketing efforts. As the CEO of Services 4 articulates, *“technology is key to sales and marketing and customer acquisition”*. Similarly, for Services 7, *“So, for us social media is a fantastic platform, which is obviously technology, both for communicating with our customers and then also communicating and recruiting our partners”*. Services 3 makes sure they have all necessary digital platforms covered to attract different customers as the Owner 1 said, *“we must cover all those digital marketing platforms”*. Similarly, Services 1 employs digital communications experts: *“It’s just lucky that I happened to know one of the best guys in Australia for digital marketing.”* Founder 1 of Manufacturing 3 said, *“one of the first things we did was create a website; like, not with online sales, just a website, and that completely brought in new customers constantly; like, people would ring—and say, ‘Oh, I’ve just seen you on the website,’ da, da, da, y’know, ‘and can I just chat?’”*.

Technology use was evident in sales and marketing efforts, but it works as a strong complement to analogue communications. As an example, Owner 1 of Services 3 said, *“buyers still come from the paper where they first see [the property] but then they will go digital for clarification.”* Similarly, the CEO of Services 5 mentioned, *“nothing beats a telephone call or a personal contact.”* Founder 1 of Manufacturing 4 said, *“It’s a small industry, people talk”*.

Technology enabling process innovations

Firms such as Manufacturing 1, Manufacturing 2, Manufacturing 4, Services 3, Services 5 and Services 7 use technology to facilitate process innovations. The relationship between technology and high growth is not only around the ways in which to build rapport and speed up communication with customers, but also communication with suppliers.

For example, Services 3 uses multiple social and traditional media channels to reach customers. Technology enables the speed of communication to increase. The richness of that communication increases as data can be collected, stored and researched, and analysed to benefit sales. Founder 1 of Services 3 explained how technology facilitates a key activity in their business:

“A perfect example is if somebody called me and I’m not sure I recognise that number or

they leave a message like ‘Hi it’s Fred call me back’, I can put that number straight into our database and pull out all the information we have on Fred. And so I can call him back and go ‘Hi Fred, you came through 9 Jones Street. You didn’t mind it, but you’re looking for...’. So all of a sudden I’ve built rapport with Fred, which I wouldn’t have if I said ‘Hi Fred I missed your call’. That’s the thing about technology. If you can build these sort of systems, then it makes you more professional and people want to call you.”

Similarly, the Founder/CEO of Manufacturing 1 articulated *“We use it [digital] to communicate with customers, we use it to organise our entire office and streamline things; we’re all digital.”*

Technology enables organisational processes to be streamlined so costs can be managed and reduced. Process innovation facilitated by the application of technological solutions is evident at Services 5 and Manufacturing 4. Point of sales software (Manufacturing 4) and the file sharing technology (Services 5) are the key to cost reduction in these firms.

At Manufacturing 2 a project to gather, collect and analyse data held within the business on the production inputs from suppliers has been initiated in order to communicate back to suppliers so they understand the firm’s product requirements. As the CEO explained:

“...in the old days we just paid the producer for whatever they sent us and we didn’t encourage the supply of the right specification for the product. So now we’re bringing in smart people with better understandings of the type of raw product we need to have a sustainable business”.

The benefit of doing this is not only will the firm profit by supplying products customers wish to purchase but the supplier will also increase their profitability by earning higher prices for products that meet the firm’s specifications. However, the challenge is whether suppliers have the desire or ability to use that data, as Manufacturing 2 noted: *“we have got to have producers who can understand the data we send them, and at the moment we know they don’t”*. Their producers are also located in a distant region of Queensland, and the CEO said, *“We’ve got this group of producers out there that have never had access to technology. If they get high speed internet, doesn’t mean they know how to use it”*.

Technology as the product

In three firms (Manufacturing 3, Service 2 and Service 4), the product itself is either a piece of technology or is created from a distinct application of technology to the production process. The food product made by Manufacturing 3 represents the latter, as technologies play a key role in the manufacturing process and the product is therefore different to all similar products because of the distinctive ways in which the manufacturing technology is constructed and applied. As the owner of Manufacturing 3 explained, *“[in the factory] there’s sensors and belts that turn off and on again...all linked to the computer and phone so [owner 2] can monitor production and change settings to ensure high quality is produced...”*

Similarly, at Services 2, the way technology is combined at this firm to create a holistic energy system and customer solution underpins their growth. The Engineer at Services 2 described it as:

“...the systems are quite sophisticated with their battery management capabilities: they have data logs, fault logs and all kinds of things like that. We program the system from a huge range of settings and we have the ability to download and see exactly how it has been operating. Every minute is logged so we know exactly what load is being applied as well as how much electricity is being generated at any point in time. So we know more about the performance of the system than that the owners do”.

What this means is that they are able to have useful conversations with their customers and trouble shoot problems quickly and easily.

At Services 4 the complex software and cloud solutions they produce, based on intellectual property created and held within the firm, is key to their growth. However, as the CEO says, *“we’re not funky with IT from an internal perspective”*, but they knew their customers and had built strong relationships with them. Partnering is critical to their business model and as the CEO explained, *“if we had our own marketing then we wouldn’t get anywhere near the exposure as we have through using partners...when we first started the market was a big fat zero and now in Australia there’s something like \$4.16 billion spent on cloud”*.

Technological development and timing

Three firms stand out as products of their environment. Services 1 and Services 6 are firms which the external technological environment

enables. Services 1 is a firm that bases all decisions on complex data analysis, which was enabled by technologies that facilitate the gathering, coding, collation analysis and interpretation of multiple forms of data. Big data gathering tools and analytics processes enable Services 1 to succeed.

Services 6, as a pure mobile player, is enabled by the capability and spread of mobile technology. As the Founder/CEO of Services 6 explained, *“we’re giving them technology that allows them to be able to create something that they couldn’t do before, work faster, work smarter and then share that with other people and so they are empowered to drive change”*. He went on to say, *“It’s only in the last three years or so that we’ve seen everyday people have this computing power in their pocket. The iPhone came out in ’07 and there wasn’t an app store until ’08, and it wasn’t till ’11, ’12, ’13 when cheaper phones arrived, we couldn’t have done this seven years ago”*.

However, technological change also affects manufacturing firms and Manufacturing 1 is the third business in our group of 11 that stands out as product of environment. Manufacturing 1 operates in an old industry but the way technology is used enables the firm to produce, engage, market and co-create with customers in completely different ways to traditional firms. As the Founder/CEO said, *“our business doesn’t really exist without digital”*.

These firms could not have existed in their current form in earlier times. But while the nature of the environment matters, so too does the way these firms are organised and the drive of the people leading them. In each of these three firms the Founder/CEO/Owner could clearly articulate the problem they wanted to solve using an innovative application of technology. For example, the Founder of Services 1 said, *“technology is just the conduit to solving a problem and doing it in a better way”*.

Technology enabling high growth

Clearly technology underpins business innovations whether to the product, organisational process, sales and marketing efforts. The technologies they use are, by and large, widely available and easily accessible. As such, technology does not comply with the four conditions of a resource being the source of competitive advantage (as discussed in Chapter 2). Nevo and Wade [73] suggest that *“neither organizational resources nor IT assets need to be strategic in and of themselves as long as their combination creates strategic IT-enabled resources”* (p.180).

Clearly across these 11 high growth firms, the impact of technology on growth is quite different. What was similar across all firms studied, however, was the sophisticated way they keep the customer central to the activities undertaken within the firm, whether that is in terms of the characteristics of the product or service or in the trust they build through their sales and marketing techniques.

In the 11 firms studied, the effects of technology on high growth are quite divergent. As the Founder/CEO of Manufacturing 1 articulates, *“I guess digital was [sic] why we’re a high-growth firm.”* Similarly, the Founder/CEO of Services 6 explained, *“Technology is in our DNA”*. On the other hand, the Founder 1 of Manufacturing 3 articulates, *“There’s, yeah, there’s—digital itself has been neither a driver for growth but neither has it particularly helped the growth and neither has it hampered.”* Or as the Founder 1 of Manufacturing 3 said, *“I’m not sure how much digital technology has either fostered our growth, or hindered the growth.”*

But as the Founder 2 of Services 3 suggested, *“I’m ready for growth because of what we’ve implemented technology wise.”* Or as Founder 1 of Services 1 summarised, *“if you don’t have a great product and you don’t have a compelling problem to solve or your business culture is oriented to making money rather than doing something interesting for people, then technology isn’t really going to get you anywhere.”*

Clearly, across these 11 high-growth firms the impact of technology on growth is quite different. In terms of the digital economy, three of these firms (Services 1, Services 6 and Manufacturing 1) represent stereotypical, high-tech, high-growth firms. These three firms are exploring and exploiting activities, channels, resources and partnerships to generate and fulfil customer demand and are growing as a result. What the other nine firms have in common with these three is the sophisticated way they keep the customer central to the activities undertaken within the firm, whether that is in terms of the characteristics of the product or service or in the trust they build through their sales and marketing techniques. The communication channels firms used varied, although the use of social media and digital technologies was common across all firms whether they communicated widely to, or focussed specially on, individual customers.

Even in those firms making complex products or services (such as in Services 4), simple modes of communication to build awareness and acceptance are required. So while the techniques might be sophisticated, the technology itself is relatively simple and easily accessible: websites; blogs; phone calls; online ordering and sales; electronic newsletters and fact sheets; and, amongst other forms of social media, Facebook, Instagram, Twitter, Pinterest, etc. Nonetheless, these simple attributes have had a formidable impact on building rapport, particularly with customers as well as streamlining processes, bringing new products/services to market and exploring market opportunities; all of which underpin business success.

PUBLIC POLICY

What do these findings about the way technology and high growth interact mean for government policy to help facilitate the development of high-growth firms? These firms, although we broadly identified them as operating in the manufacturing and services sectors of the economy, came from an array of industry sub-sectors. The firms ranged in age, with Services 5 being the oldest and Services 7 the youngest. They created complex products and/or services (Services 2 and Services 4) to quite simple ones (Manufacturing 4 and Manufacturing 2). A mix of nationwide and international markets were the firms’ focus. In fact, the only two firms that only operated in Australia-wide markets (Services 1 and Services 5) did so because of the particular regulatory environment in which their key services were provided. Customers ranged from individuals to businesses, with each firm being clear about the customer segment they targeted or the niche their product or service addressed. Technology enabled internal communications, particularly when staff were spread across locations (particularly in

Services 6, Services 5, Services 4 and Services 1). While these were all high-growth firms, there is little which is specifically something public policy can do to enable picking the next crop of high-growth firms. As Morris et al [50] argue, “when it comes to proactive approaches to facilitating entrepreneurship, public policy is a rough and generally limited tool” (p. 723).

All interviewees were questioned about their thoughts on how government could support high-growth firms. Beyond the usual suspects of payroll tax relief, broadband infrastructure and, in two cases (Services 7 and Manufacturing 4), industrial relations reform to reduce the cost of employment there was little interviewees expected of or actually sought from government apart from an enabling business environment. Part of the environment is infrastructure. On the National Broadband Network (NBN), one of the founders of Service 3 told an interesting story:

“...we pay ridiculous money to make sure that our phones run smoothly and our internet runs fast. I don’t really know a lot about the NBN, but it’s funny...we were driving up on the Sunshine Coast and my grandma’s farm, which is vacant on ten acres, has got a post out the front saying ‘NBN installed’. There’s no house on the farm. There’s nothing. Yet we’re in the middle of the city and we’ve got nothing! Obviously there’s different roll outs of the NBN and everything like that, but you look at that sign and go “why?” We’re on a dirt road in the middle of nowhere and there’s NBN support. What’s happening?”

Items that were mentioned as ‘things government could do to help’ included:

- Assistance with accessing export markets. This was a request from the CEO of Services 4, whose firm was looking to expanding Asian markets. The CEO said, “it would be nice to be able to get some help about how we deal with those countries, what goes on there and with the whole relationship of working with someone from Indonesia or something like that. That sort of thing would be very useful to us.”
- One-to-one mentoring. Business owners do not have much spare time and the idea of having someone in the firm who understood the nuances of the firm was appealing. One of the founders of Manufacturing 4 said, “So a more ideal way, rather than offering any training, would be to place someone in the business, and then they see what we do, and they could maybe say, ‘why are you doing it like that? Here’s a different way that it could be done’. Something like that will save you a bit of time but they need to understand what the business is and does.”
- Networking groups. For example, one of the founders of Services 3 said, “I think what new businesses are all about is collaborating and working together, so it’s not really a government thing, but support might be given through organising little clubs; entrepreneurial clubs things like that where those who are like-minded can talk about what their strengths are and how they can work together.” One way to do this is through ambassador programs around technology. As the CEO of Services 6 mentioned, “Build ambassadors around technology, tell the stories, educate firms on how technology plays a part. The best people to tell these stories are probably the innovators. And so the government can bring those people together.”
- Advice on technological solutions relevant to the firm. This is similar to one-to-one mentoring as the Founder of Services 1 argued, “there is no shortage of ideas, there’s a shortage of people who can then take these ideas and execute them.” Participants expressed a desire for digital tools and assessment, stating the information was useful to identify strategies to improve business. Founder 1 of Manufacturing 3 mentioned, “we had someone from the local council to do a free digital assessment of our business and they gave us a report about what sorts of digital advances would help our business”.
- Access to government procurement and contracts. One argument was that the government often goes outside Queensland and to overseas firms for procurement when smaller Queensland companies could be used. As the CEO of Services 4 said, “there would be at least ten good cloud companies in Queensland but the Government doesn’t buy anything from them.... they should be given a go.” The CEO of Services 4 explained his view as, “our involvement with state government in any form of assistance has been non-existent, nor could I ever say we’ve ever been contacted or anything like that. You get the feeling they don’t know we exist. We’re not really getting that worried. We’ll just go and do our own thing. I mean sure, it would be nice to be sort of helped with some education from the government on what opportunities there are out there.” Running practicals about how to access procurement for the smaller firms

might enable them to access government procurement and contracts.

- Building and attracting talent. Entrepreneurial and digital skills are necessary across the population if high-growth firms are to be created. Ensuring training and education for skill development is critical to success. Creating business and innovation hubs would be the way of attracting talent and big companies. As the CEO of Services 6 said, *"We need to be promoting ... you know the Sunshine Coast is a phenomenal place to live. Quality of life extremely high, close to the international airport, all that stuff. There's a bit of a silicon beach movement down there—Gold Coast has got some of that too. We can attract some of those companies. You know, there are much lower rents than particularly Californian places, so we can do more to bring that talent in."*

In this study, the business founders and managers were concerned more about the effect of government policy on conditions in the wider business environment (i.e. business access to human capital and consumer confidence) than on their firm in particular. As the Founder/CEO of Services 6 argued, *"there are some real costs associated with scaling up. And the government had certainly helped us with that. Although, I don't think it's the government's job to give away free money. Certainly what they should be doing is facilitating and bringing together people who can share ideas and build belief about what's*

possible". However, this Founder/CEO also saw this as a responsibility of high-growth firms, saying, *"I think the one role that we do play, anytime we get the opportunity to, is sharing our story. So that it builds belief about what's possible. Because you know, people come in here now and they go, 'wow, this is amazing, you guys have raised \$15 million' and they can see we're building stuff and we've got real revenue. But it was just an idea at the beginning"*. Similarly, Founder 1 of Services 1 pointed out, *"I think that each business needs to make their own decision about what sort of digital technology they're going to utilise and I think it would be hard for the government to go 'oh well we're going to provide this' because you may go 'I don't want the same as everybody else'"*.

These high-growth firms were not a product of public incentives, but were instead a product of the interrelationship between the environment, the firm's purpose and the people building the firm. As such, government can indirectly facilitate the interactions between technology and high growth by ensuring that institutions and systems help build human capital and capability to explore and exploit technology. Within firms, organisational capabilities need to be developed to take advantage of technological change and environmental conditions that are conducive to the application of technologies in pursuit of growth.



CHAPTER 5: FINAL REMARKS

Until now relatively little has been known about technology's interaction with high growth for a diverse range of firms. There has been a scarcity of research on the drivers of high growth in the Australian context and the ways technology interacts with that high growth.

This study fills some of the gaps by looking at 11 high-growth firms in Queensland and the ways technology is employed within these firms with a view to inform policy.

Below are the final remarks from the study, grouped by research question.

Research Question 1: What are the similarities across the business models of high-growth firms?

- **Customer centricity** is a key feature of these high-growth firms. In particular, these high-growth firms emphasise understanding customer 'pain' and create innovative solutions to relieve that pain. High-growth firms are equally effective in articulating unique value to their customers.
- In high-growth firms, **workplace culture and agile management processes** are integral to success. High-growth firms build a culture of co-creation, idea sharing and team work. High-growth firms adapt quickly and keep planning for their future expansion.
- High-growth firms **adopt digital technologies at varying levels** and in different aspects of their business model. Technology can be used across all parts of the business model. Technology can be an output of the business model or underpin the value proposition the firm delivers to customers.

Research Question 2: What is the relationship between technology and high growth? In what ways do high-growth firms use technology?

- **Technology provides strategic advantage** across all aspects of the firm. However, how these firms achieve high growth through technology varies.

- **High-growth firms are not necessarily high-tech firms.** These firms operate in all sectors of the economy. They are most likely to be knowledge-intensive and the technology they use is relatively simple and easily accessible. High-growth firms combine creativity and technical capabilities to solve problems.
- High-growth firms build technology usage and application by **developing and deploying critical complementary capabilities**, such as operational and managerial skills and training.

Research Question 3: What can governments do to support high-growth firms?

- Public policy is not the no.1 concern for high-growth firms. However, governments can enable a growth-oriented business environment by:
 - **Building confidence** through bringing people together to share stories of success with others.
 - **Providing incentives** that reduce the cost of doing business.
 - **Enabling talent** with the knowledge, skills and ability to build strong firms, manage effectively and help others to achieve success.



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APPENDICES

APPENDIX 1: INTERVIEW DETAILS

Firm Code/Sector	Type of Interview	No. of Interviewers	No. of Interviewees
Services 1	Face to face	2	2
Services 2	Face to face	1	2
Services 3	Face to face	2	2
Services 4	Face to face	2	1
Services 5	Face to face	2	1
Services 6	Face to face	1	1
Services 7	Telephone	2	1
Manufacturing 1	Face to face	2	1
Manufacturing 2	Face to face	2	3
Manufacturing 3	Telephone	2	1
Manufacturing 4	Face to face	2	2

APPENDIX 2: BUSINESS MODEL CANVASES

SERVICES 1

Year Established
Organisational Form
Number of Founders/Owners
Founders/Owners Industry Experience
Founders/Owners Education
Number of Employees
Number of Business Locations
Interviewees

2005

Public unlisted company with 50 shareholders

2

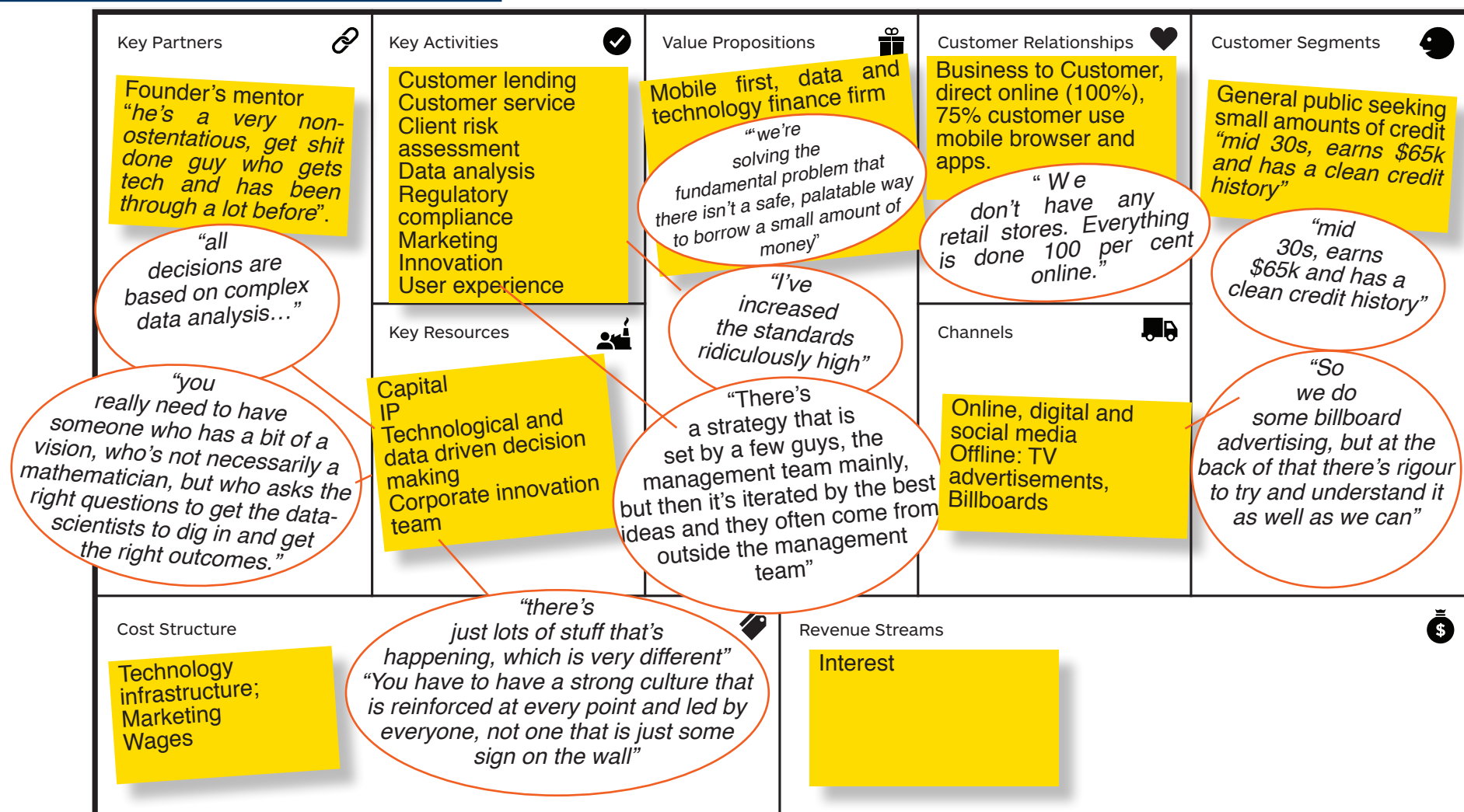
Yes

Tertiary

200+ in Australia with 2 technical specialists teams in overseas locations

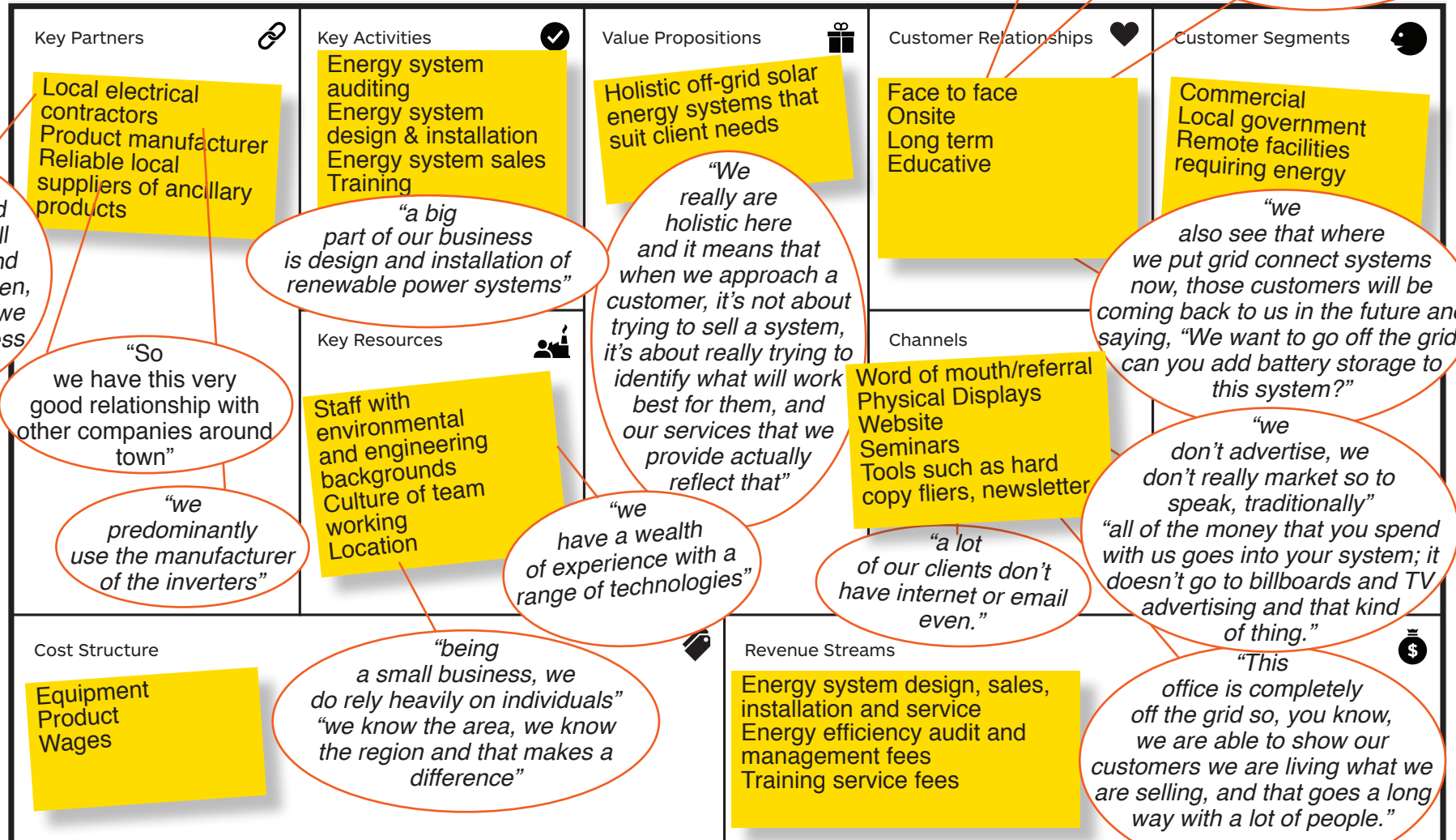
1

Founder 1, CEO



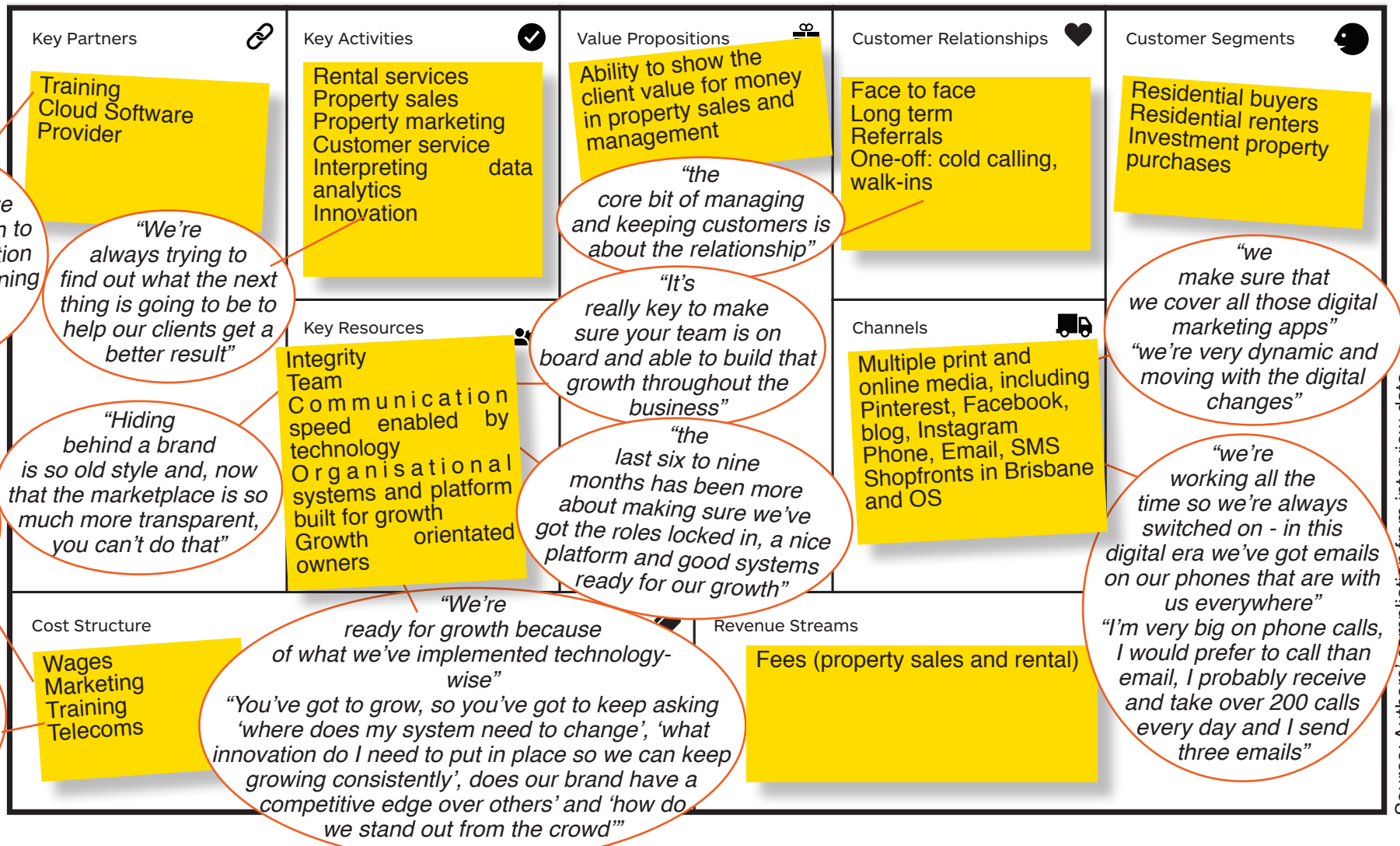
SERVICES 2

Year Established	2007
Organisational Form	Family trust
Number of Founders/Owners	1
Founders/Owners Industry Experience	Yes
Founders/Owners Education	Tertiary
Number of Employees	5
Number of Business Locations	1
Interviewees	Business Manager, Engineer



SERVICES 3

Year Established	2009
Organisational Form	Family trust
Number of Founders/Owners	2 (husband and wife)
Founders/Owners Industry experience	No
Founders/Owners Education	Tertiary
Number of Employees	27
Number of Business Locations	2 Brisbane locations and marketing office overseas
Interviewees	Founder 1, Founder 2



SERVICES 4

Year Established	2001
Organisational Form	Private Company
Number of Founders/Owners	1
Founders/Owners Industry Experience	Yes
Founders/Owners Education	Tertiary
Number of Employees	42 staff in Australia and 12 contractors overseas
Number of Business Locations	3 Australian locations
Interviewees	Founder/CEO

"So our full effort really these days is going train up engineers about what we can do, they then manage the problems they are given by sales and then the product goes out the front door"

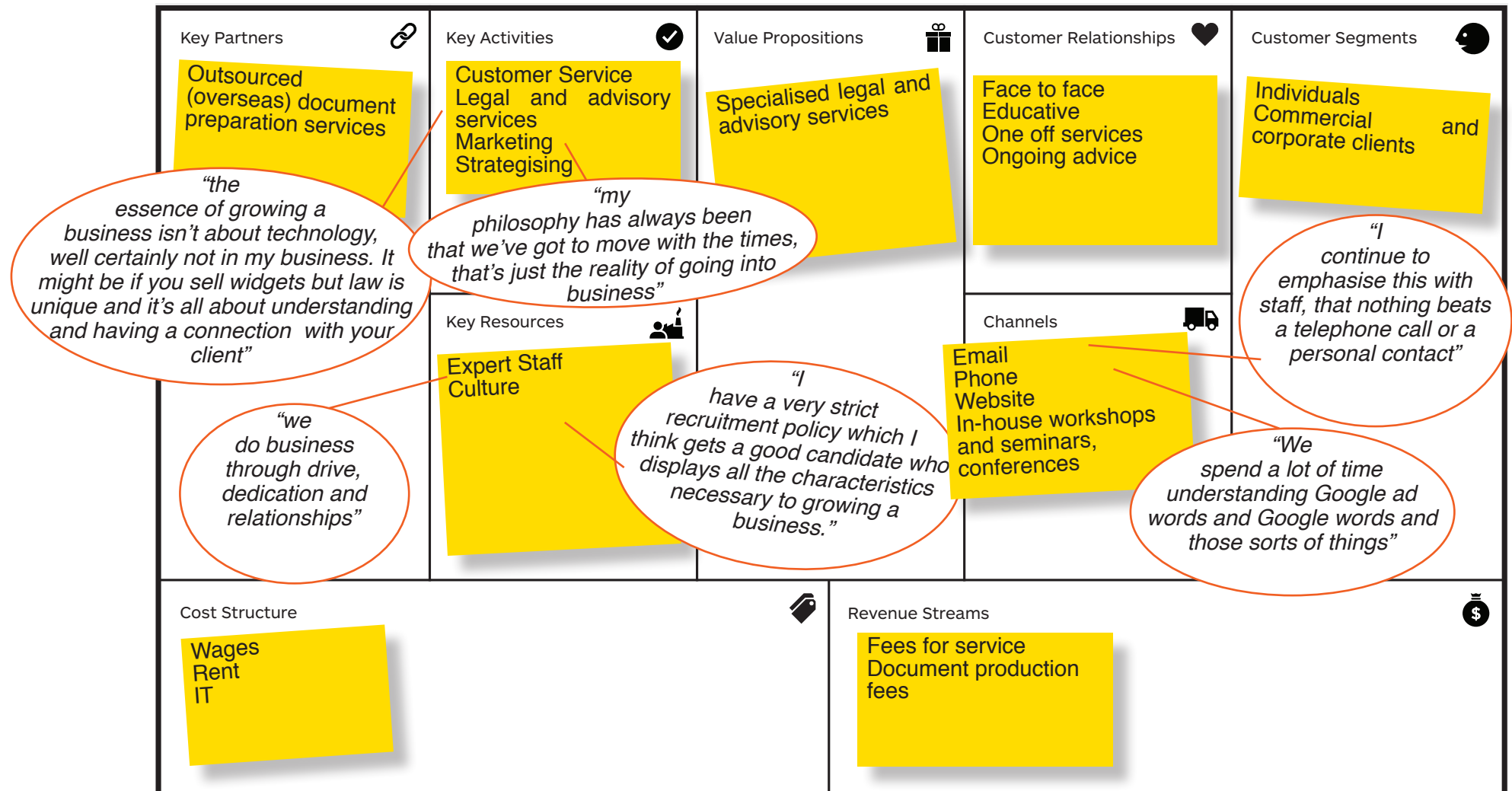
"we don't have the relationship with the end-user"



Source: Authors' compilation from interview data

SERVICES 5

Year Established	1975 (as partnership)
Organisational Form	Incorporated (2008)
Number of Founders/Owners	N/A
CEO Industry Experience	No
CEO Education	Tertiary
Number of Employees	250
Number of Business Locations	8 Australian locations
Interviewees	CEO



SERVICES 6

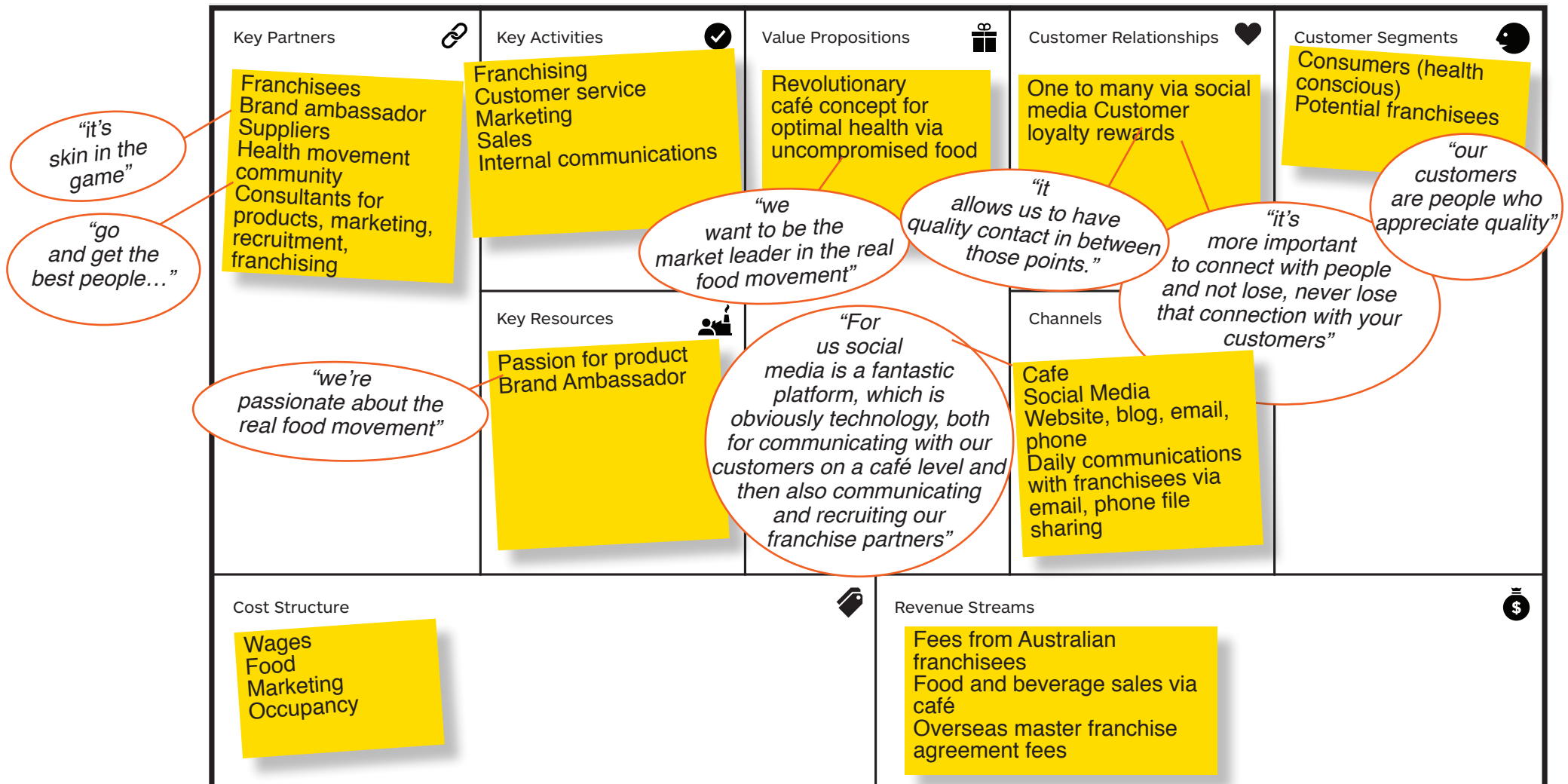
Year Established	2004
Organisational Form	Private Company
Number of Founders/Owners	1
Founders/Owners Industry Experience	Yes
Founders/Owners Education	Tertiary
Number of Employees	60+ staff
Number of Business Locations	2 Australian locations and 1 overseas office
Interviewees	Founder/CEO



Source: Authors' compilation from interview data

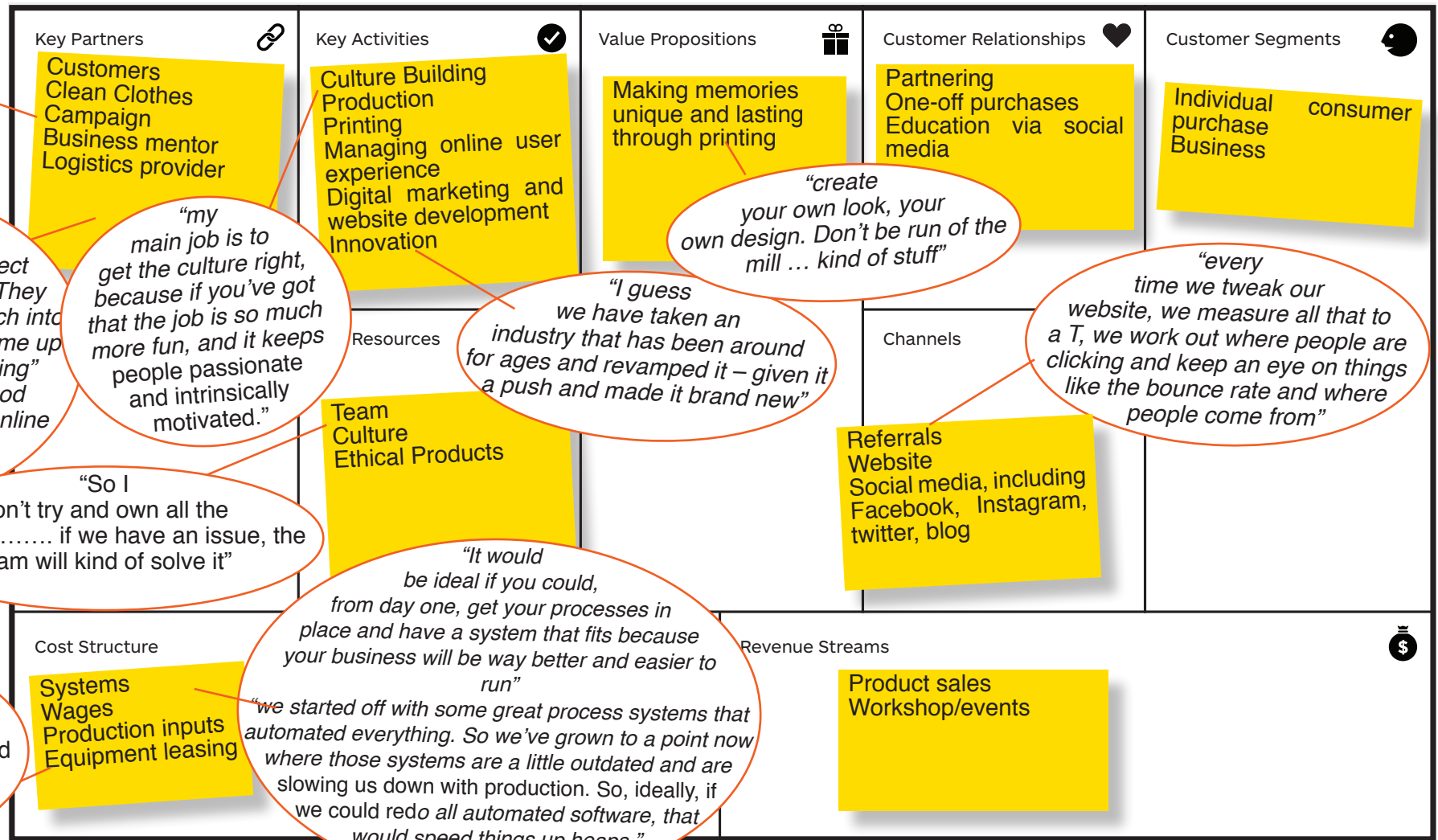
SERVICES 7

Year Established	2012
Organisational Form	Franchisor
Number of Founders/Owners	2 (husband and wife)
Founders/Owners Industry Experience	No
Founders/Owners Education	Tertiary
Number of Employees	5-10 in their café and 3 in HO
Number of Business Locations	10 franchised cafés across Australia, 2 overseas master franchise agreements
Interviewees	Founder/CEO



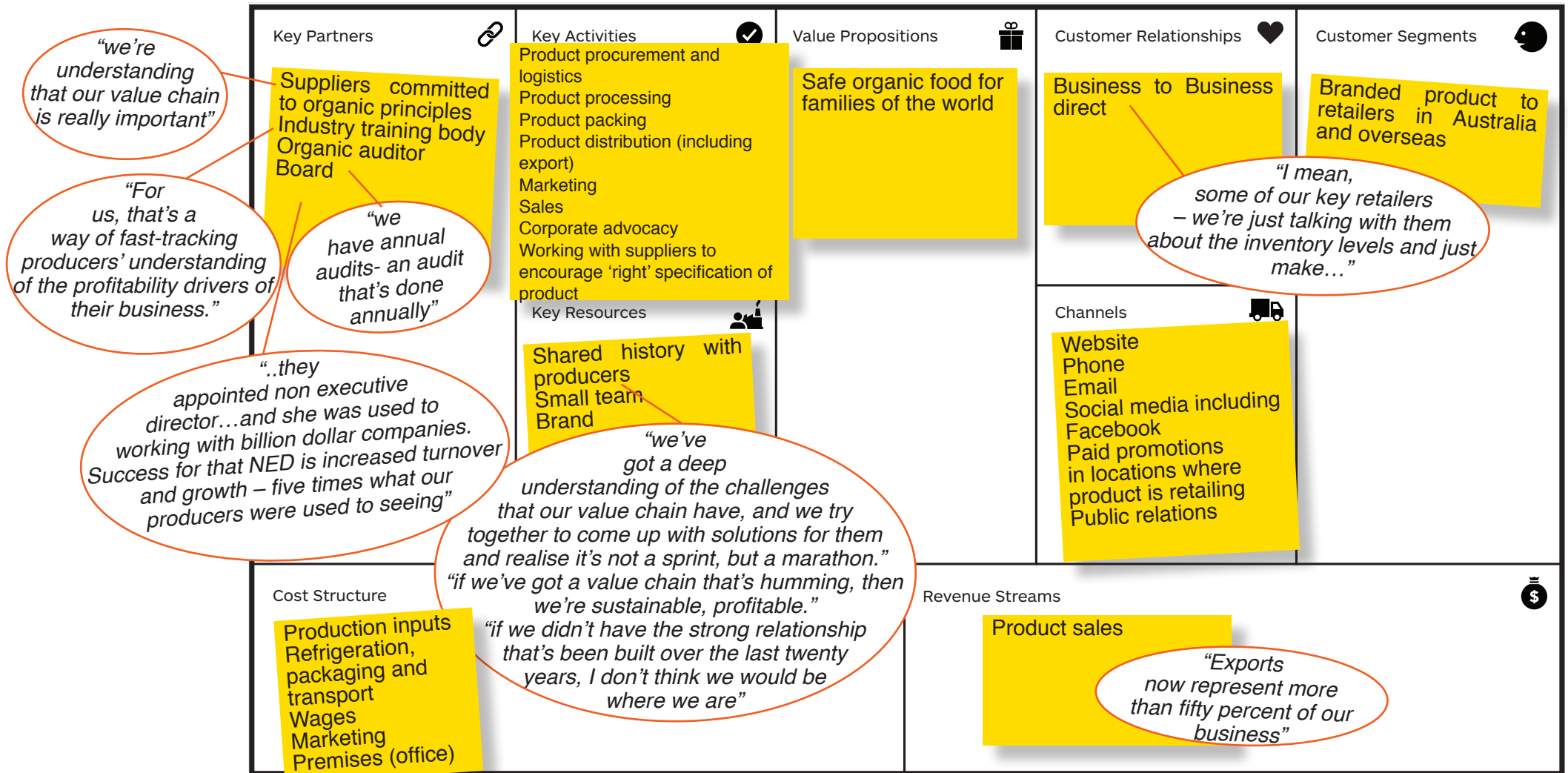
MANUFACTURING 1

Year Established	2011
Organisational Form	Family trust
Number of Founders/Owners	1
Founders/Owners Industry experience	No
Founders/Owners Education	Tertiary
Number of Employees	18
Number of Business Locations	1
Interviewees	Founder/CEO



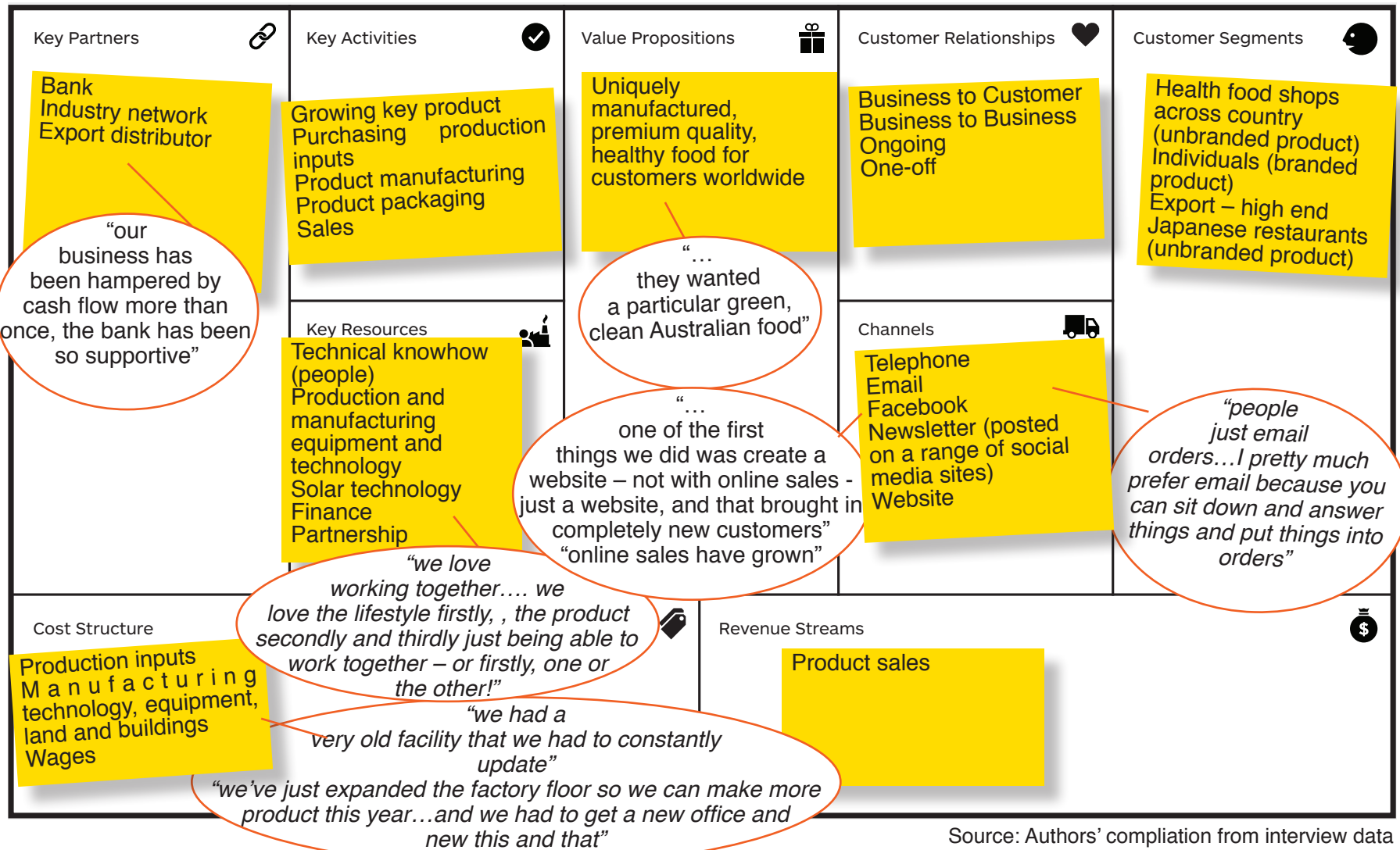
MANUFACTURING 2

Year Established	1996
Organisational Form	Private Company
Number of Founder/Owners	N/A
CEO Industry Experience	Yes
CEO Education	Tertiary
Number of Employees	10
Number of Business Locations	1
Interviewees	CEO, Data scientist, Consultant



MANUFACTURING 3

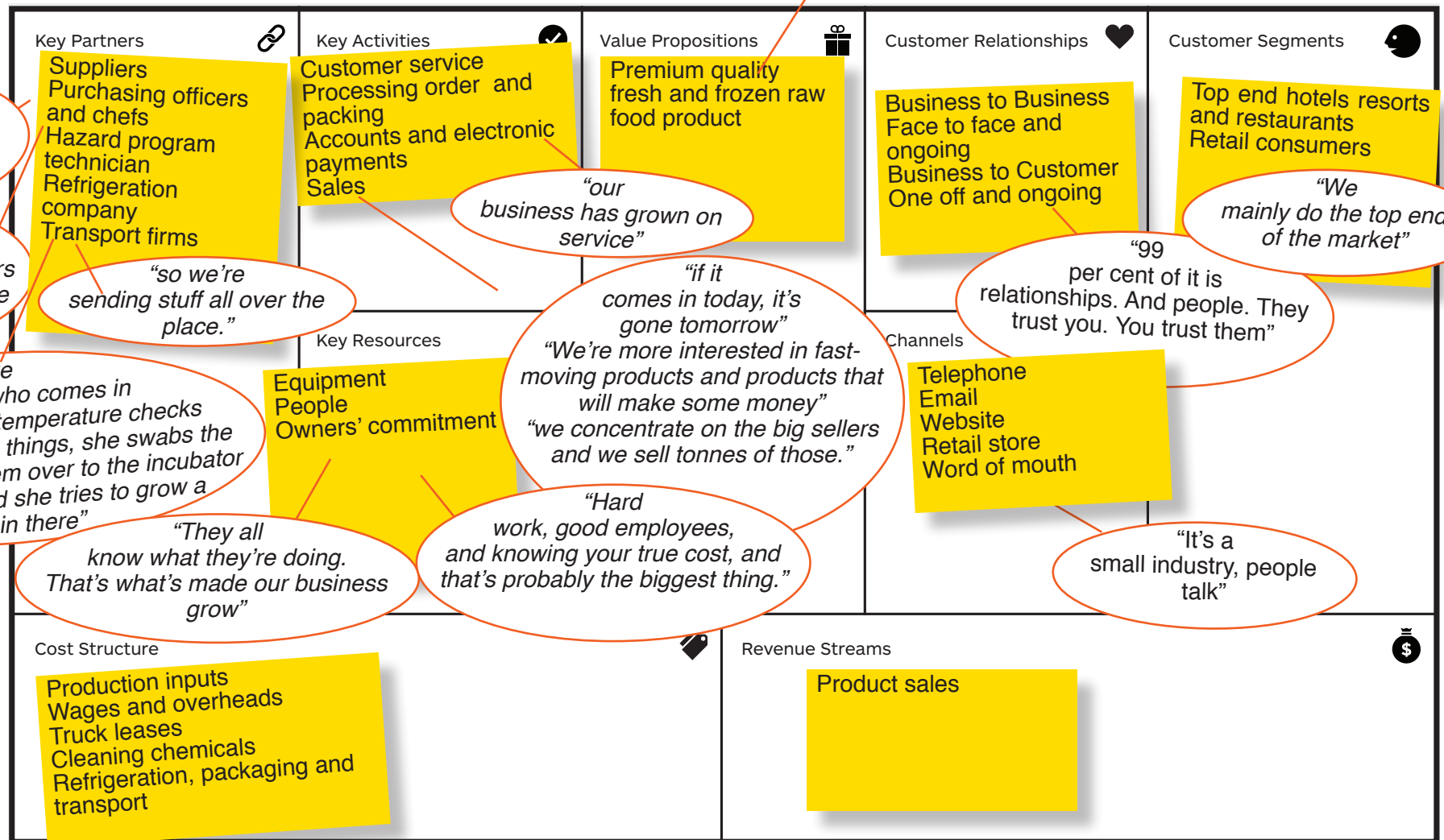
Year Established	2010
Organisational Form	Private Company
Number of Founders/Owners	2 (husband and wife)
Founders/Owners Industry experience	Yes
Founders/Owners Education	Tertiary
Number of Employees	6 (+ 20-30 casuals during harvesting)
Number of Business Locations	1
Interviewees	Founder 1



Source: Authors' compilation from interview data

MANUFACTURING 4

Year Established	2005
Organisational Form	Private Company
Number of Founders/Owners	4
Founders/Owners Industry experience	Yes
Founders/Owners Education	Secondary
Number of Employees	20
Number of Business Locations	1
Interviewees	Founder 1, Founder 2



Source: Authors’ compilation from interview data



PwC Chair in Digital Economy
Queensland University of Technology
2 George Street, BRISBANE Q 4000
www.chairdigitaleconomy.com.au
@ChairDigEconomy