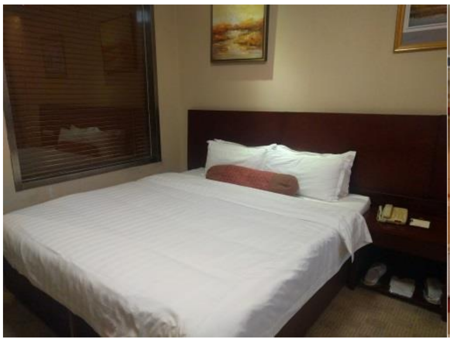
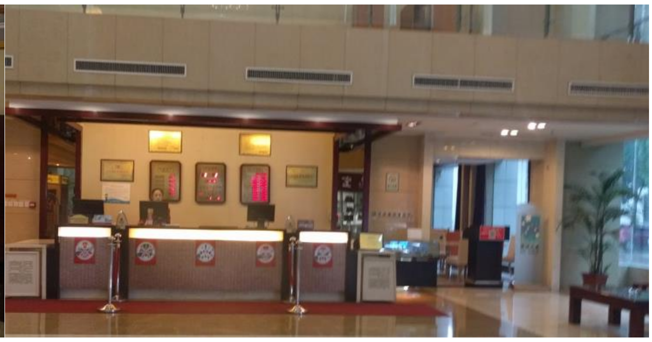
Jason Rolfe Nuffield 2017

Developing an Online Sales Strategy for New Zealand Food

"How New Zealand Agri-food producers can leverage mobile technology to add more value"

A Story to Begin…………

During my travels this year as part of our Global Focus Group we ventured into what was considered rural China and Shandong province. Our accommodation for the night was Qihe Hotel, a very modest establishment and one of only a few hotels in the town. The Hotel advised us that we should wear shoes in the rooms at all times (due to previous guest's tendency to spit on the floor) before asking us how we would like to pay. Pulling out our credit card, as we had done in our previous hotels, the front desk advised that they do not accept non-Chinese cards. Plan B was cash and luckily we had enough to cover the $20NZD a head price for the rooms. We were then advised that the hotels preferred method of payment was WeChat pay (Tencent). Not having WeChat pay as we were only visiting for a short time we were very limited in our options. Thankfully our host stepped up to negotiate with the Hotel. In order to avoid a cash surcharge our host then kindly paid using her own Wechat account and we reimbursed her with cash. When prompted as to why it was so much more to pay cash, we were advised that WeChat was intentionally the cheapest form of payment as it encouraged membership and consumers to utilise the payment wallet.

This was further backed up in the markets of both Shanghai and Beijing where the preferred payment method from street merchants was WeChat and Alipay wallet payment systems rather than traditional cash. Electronic cards such as credit had being skipped completely. Merchants had a simple barcode scanner on their stall which customers would scan and then pay the merchant. This transaction was instant and money changed hands safely, without the risk to the merchant of holding cash on the stand. The added benefit following the transaction was the vendor and purchaser were connected through the App allowing the Vendor to share future price promotions and product availability and even profile local farmers. This created future sales and lasting relationships.


These examples introduced me to the global future of payments systems and the importance of the mobile technology and ecommerce and how they are both disrupting conventional supply chains.

Executive Summary

New Zealand exported a total of $37 billion in agri-food products in 2015-yet KPMG (2016) estimates those same products ultimately generated more than $0.25 trillion dollars in retail sales when sold to consumers around the world. The challenge was how we forge new pathways that will help us capture more share of the export pie?

The aim of this report is to investigate how New Zealand could utilise ecommerce as a sales channel to get closer to our customers and provide less volatility in niche markets. My study involved immersing myself in global markets to observe how customer's and consumers purchased our products, how we could get closer to them and how we could build world leading ecommerce solutions.

When I started my research into ecommerce sales I focussed initially on the internet. However this quickly changed to looking at mobile sales platforms and how they were disrupting our traditional supply chains. How we buy and consume our food and beverage products is changing globally and traditional supermarkets are struggling to find ways to be relevant.

The key insights that I observed was the growth of mobile first ecommerce platforms globally, and the frequency of transactions involving food and drink products particularly in Asian countries. One important statistic was that one in five Chinese e-shoppers wants to buy products from New Zealand which is currently 156 million people. Ecommerce was also the fastest growing sales channel globally with double digit growth. Another important statistic for New Zealand was the growth in B2B selling via ecommerce which will be twice the size in value of the B2C market by 2020.

Key elements of a successful online sales strategy that need to be considered are mobile first platforms, leveraging the dominant ecommerce marketplaces and accepting foreign forms of payment relevant to the market you are selling in. In addition to this businesses need to consider both B2B and B2C strategies that are different but both online in nature. New Zealand agri-food companies also need to collaborate together to have 'pop up stores' in crucial New Zealand markets to attract customers to the online offering. The final finding is how you leverage existing companies with dominant ecommerce marketplaces and customer bases to grow your brand without losing to much of your margin.

Traditional relationship based sales channels have served New Zealand well in the past. However as we move into the future both business customers and consumers will be made up of millennial and Gen Z individuals who have lived their whole lives immersed in mobile technology. They no longer value face to face relationships like previous generations and prefer convenience and speed of technology when doing business and consuming products. We need to focus more on these consumers as they will be the dominant purchaser by 2030.

The humble mobile phone has not replaced retail or the face to face selling of food, it has just internationalised it and made it more accessible globally with simpler supply chains connecting producers direct to the customer. Businesses such as Alibaba, Tenpay and Amazon are disrupting how consumers interact with retailers and farmer producers and bypassing the traditional banking systems we are so used to. If you want your business to remain relevant in a constantly changing global market place you need to read this report!

Acknowledgements and Self Reflections

Eighteen months ago when I was lucky enough to be awarded a 2017 Nuffield scholarship I could never imagine the journey ahead that would unfold. During this past year I was lucky enough to visit seventeen countries, meet with over 200 farmers, business leaders, organisations and individuals as well as creating a network of over 60 Nuffield scholars from around the world.

The Nuffield experience has given me a global understanding of food production, New Zealand's place in this chain and allowed me to form opinions on things I never even knew about. When starting out on my journey, I was struggling to come up with a topic I would be able to convey in this report and ended up struggling to narrow it down to one topic.

The topic I have chosen is a vast fast moving space and constantly changing every day. Because of this, the report is by no means a complete summary of the modern e-commerce environment. I have attempted to summarise a series of insights that I have gained from my travels. I have also left some insights out of the report due to future commercial sensitivities.

Firstly I would like to thank the Nuffield organisation and in particular Juliet and the trustees for providing the opportunity of a Nuffield Scholarship. I would also like to acknowledge Anne, Desley and Lisa for their support during this scholarship.

I would like to thank my employer FMG for their amazing support during 2017 as I undertook my Nuffield scholarship. I am extremely grateful for the support they provided including seconding my day to day role for 6 months so I didn't have to worry about work as I explored the world.

Thank you to those who have offered mentoring support this year in particular Marise James, Mark Paine & Lain Jager. Also big thanks to Patrick Aldwell, Hamish Gow and Susanne Rolfe for their help and guidance in providing some direction around writing this report.

Without the support of the major partners, Dairy NZ, FMG, Beef & Lamb and Agmart none of this would have been possible. I would also like to acknowledge the programme partners for their support

I would also like to thank my fellow 2017 NZ Nuffield Scholars, Mat, Becs, Nadine, Dave & Ryan, who I got to travel with at times during the year as well as bounce ideas and have great discussion with which helped me form some of my opinions as well as seek further answers. I look forward to continuing this journey with you as we present back our findings in the coming year.

My fellow Nuffield scholars from around the world who I also had the pleasure of spending time with, I also thank you for your support through the year and look forward to hosting you all, when you visit New Zealand. A special shout out to the China Global Focus Programme group who I was lucky enough to spend 6 weeks travelling with and dissecting various visits and topics in the evenings.

To the over 200 farmers, businesses and individuals who hosted me either for part of the day or provided a bed at night thank you for your kindness and support of this scholarship. It certainly helped the scholarship go further and made my experience so much richer.

Finally most importantly I would like to thank my lovely wife Christina, who held the fort at home while I travelled, and managed to grow our baby son Hugo who we welcomed in January 2018, all while juggling her own study with fulltime work. Without her on-going support and arm twisting to apply for a Nuffield Scholarship, none of what I experienced or produced in this report would have been possible.

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New Zealand Scholars on return from our travels

Introduction

Reading through the KPMG (2016) Agenda Volume 2 prior to our Nuffield New Zealand industry briefings in 2016 the main problem statement proposed to us was how do we capture our missing share of an estimated $0.25 trillion dollar in export value and become the leading agri-food producer on the planet?

New Zealand exported a total of $37 billion in agri-food products in 2015-yet KPMG (2016) estimates those same products ultimately generated more than $0.25 trillion dollars in retail sales when sold to consumers around the world. The challenge put to us was how we forge new pathways that will enable us to move up the supply chain and capture more share of the export pie.

I wanted to focus on a topic that would not only provide me with significant personal stretch and learning, but that would also focus on capturing the lost value for the benefit of New Zealand Agri-food producers. Coming from a sales background I was fascinated by how New Zealand businesses went about interacting and dealing with our customers around the world and decided to focus on how we could improve our sales channels to not only gain efficiencies but importantly add value to both New Zealand agri-food businesses and the farmers and growers that supply them. The topic I chose to focus on was ecommerce and how we can leverage this as a potential sales channel.

When I started my research into ecommerce sales I focussed initially on the internet. However this quickly changed to looking at mobile sales platforms and how they were disrupting our traditional supply chains. I reviewed the latest technology and how this was being used to link producers with consumers, creating stability in previously volatile niche markets. I also looked at how advances in this space were allowing producers and processors to dictate where value was created in the supply chain instead of importers and retailers.

During many interviews the overall feeling I got was that New Zealand and Australian agri-food businesses were aware of the growing demand for ecommerce. However many felt the internet still had a long way to go to connect customers in our major markets to be an immediate concern or they were more focussed on selling direct to other businesses rather than consumers. The New Zealand government is starting to put some focus on this channel with trade negotiations as many other countries look to digital free trade agreements.

Advances in technology, logistics, payments and trust have created a US$7 trillion industry (Statista 2016) where millions of consumers and business customers no longer ‘go’ shopping, but literally ‘are’ shopping at every moment everywhere. This has been driven by increased internet and mobile access as well as a demand for convenience from the modern consumer.

This report will focus on the opportunities available to New Zealand agri-food businesses through ecommerce channels, how to create a user friendly platform, what the main challenges are and finally the overall benefit if executed well. The key to success will also involve major collaboration across sectors. This report’s targeted audience is the leadership teams and sales and marketing specialists of New Zealand’s agri-food businesses and the New Zealand government.

Literature Review

First & Second Waves

The term electronic commerce or ecommerce is defined broadly as the process of buying, selling or exchanging products, services and information through the Internet. Ecommerce operates in all four of the major market segments of business to business (B2B), business to consumer (B2C), peer to peer (P2P) and business to governments (B2G). It has also being described as all electronically mediated transactions between a business and a third party (Chaffey 2009) and is reshaping many aspects of business transactions and social life. E-commerce not only provides businesses with a huge amount of information, increased speed of transactions and decreased costs; it is also reshaping how businesses market their products. Businesses need to adapt their strategies to the new realities if they want to be competitive in the marketplace.

The reasons for implementing an Ecommerce strategy into a business model will vary from company to company. According to Xu and Quaddas (2009), bigger companies motives to adopt an online strategy tend to be to improve efficiencies in their internal processes; while smaller businesses tend to adopt an online strategy to keep them competitive.

Ecommerce has rapidly changed the marketplace for products and along with the internet has allowed for a global reach for companies. This has created tremendous opportunities to expand a business's customer base and increase market share (Allen & Fjermestad 2001). According to Chaffey (2002) digital channels also give opportunities to sell more existing products to the same markets resulting in increased market penetration.

The literature describes the development of ecommerce in two main stages or waves. The first wave described in Schneider (2011) is where ecommerce was adopted by large companies in the United States who had easy access to capital, usually from external sources such as venture capital funds. Evans and Wurster (1999) refer to ecommerce in this early stage as a bit of a land grab. A whole new market was formed overnight and those businesses who had sufficient resources and the willingness to, could grab a share of the action or land grab. Many of these companies had to develop their own technology and offering of ecommerce that was dependant on the capital from external investors and achieving a profit was relatively rare. This made it hard for smaller businesses to be involved as they lacked the funds and could not absorb the losses to that part of the business. In this first wave, the technology used was very simple and inexpensive compared to modern day and internet connections were very slow. The websites were only available in English and integrating ecommerce channels into other parts of the business was non-existent. (Evans & Wurster 1999)

The second wave is described as occurring post 2001 in the technological boom. This was when we viewed widespread role out of broadband internet which increased the speed of online activity at a lower cost. The land or market had already been captured by the big companies so they then shifted their attention from capturing market share to defending it. They focussed their attention more on identifying their competitive advantage and developing strategies to achieve it (Evans & Wurster 1999). This lead to development and adoption of ecommerce selling platforms from smaller companies and with more wide spread technology available, growth was possible by using internal resources rather than the need for external capital.

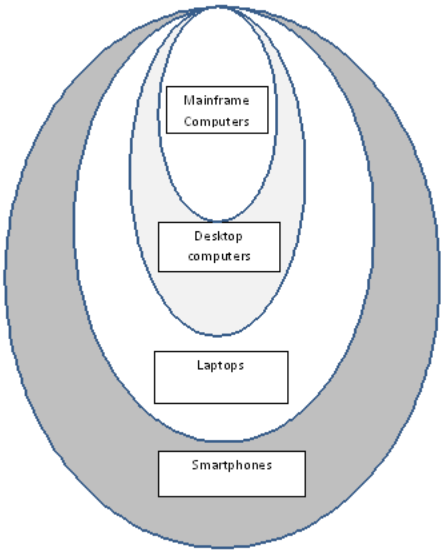
Chaffey (2009) divides the benefits of having an ecommerce platform as tangible and intangible. Tangible benefits include increased sales, reduced marketing costs; supply chain cost reduction and decreased administrative costs. Some of the intangible benefits that were harder to measure were identified as increased brand awareness, better corporate image, improved marketing communication through social media and feedback from customers which results in improved effectiveness of market information and insights. Abid, Rahim and Sheepers (2011) stated that the most important benefits were connected with a business's competitive environment rather than just cost savings on internal processes. The key elements relevant to New Zealand were an increase in sales and an increased ability to compete on a global stage. Xu and Quaddus (2009) state that in the very near future ecommerce won't just become another sales channel, it will become a necessity for survival in ever increasing market competition.

The third wave I believe is the disruption in the markets of mobile technology, in particular the Smart Phone that the majority of consumers now have on them all day every day.

The Third Wave: Emergence of Mobile

The mobile Smart Phone has now become a staple with an estimated number of consumers using them expected to reach 3 billion by 2020 (Statista 2016). It is well and truly displacing the computer and internet sector and transforming ecommerce through a process of disruptive innovation. This is the process by which a product or service takes root initially in simple low cost applications at the bottom of a market and then relentlessly moves up market, displacing established competitors (C. Christensen presentation to Oxford University 2013). In some developing markets, it has even beaten some competition as they have failed to even target those places like China and India.

The below table shows an example of disruptive innovations transforming complicated and expensive products (mainframe computers) into simpler and more affordable ones (smartphone).



Mainframe Computers	Desktop Computers	Laptops	Smartphones
Product Cost (P) = $2,000,000	P= $2,000	P= $1200	P=$200
Gross Margin (GM) = $1,200,000	GM= $700	GM= $300	GM= $80

Figure 1 Smart Phone Disruption. Source: C. Christensen presentation to Oxford University 2013

While desktop computers were the initial disruptor in the market, mobile Smart Phones have become the final disruptor in the market for computers.

Conceptual framework

The below is a conceptual framework I have developed to outline what New Zealand's current state is around thick and thin markets with our agri-food produce and how utilising mobile technology can take us into the ideal future state.

The concept of thick and thin markets is not new, however it is normally referred to when discussing investment markets such as the Stock Exchange. Thick markets are where the majority of transactions take place, with the highest number of both buyers and sellers. These markets have less margin available, but also less risk. A thin market is the opposite where there is a low number of buyers and sellers and traditionally more volatility. They can also be referred to as deep or narrow markets. The concept of thick and thin markets can just as easily be applied to global food trade.

In the stock market and online dating apps you want thick margins and the same could be said for food, however this is limited to the consumers benefit. Thick markets allow for more options and choice for the consumer but because there is much more competition there are fewer margins for the producer. Gan and Li (2004) proposed that getting sales matches is significantly harder in a thin market than those in a thick market.

In a thick market, having so many choices delays a consumer's decision making on a product and also means they are less sticky to a particular brand as they move around trying different brands before settling on their favourite. Thin markets create fewer opportunities and less choice for consumers. Because of this there is more margin in it for the producers and consumers are stickier.

The conceptual framework below (figure 2) outlines where I believe New Zealand's agri-food sector is currently sitting in terms of our positioning in the global market. The framework has a north and south axis which outlines the number of consumers (buyers) and producers (sellers) in the market. The east to west axis outlines net profit, with the further west meaning a negative profit and further east a more positive profit. The red lines indicate the position on the axis. Finally I have put New Zealand on the map where we are currently sitting around the middle of the axis. This is the thickest area of the market and is where commodity products sit.

Figure 2: Global Food Market Current State

The problem with thin markets traditionally is they have been a lot harder to do business in for New Zealand producers, as they are more volatile with less buyers and consumers, so we have avoided them and worked in the mainstream where there are plenty of buyers. In these thin markets or niches it has been hard to find the buyers willing to pay the premium as they are a smaller number which has increased the potential risk for producers to have product sitting in containers without a home. New Zealand has focussed on finding a market for what we produce, rather than producing to demand. This has meant through default, we have fallen into the middle of the framework representing the commodity markets. This has limited our exposure to volatility and protected our producers often returning a small profit in the good years and a small loss in the bad years.

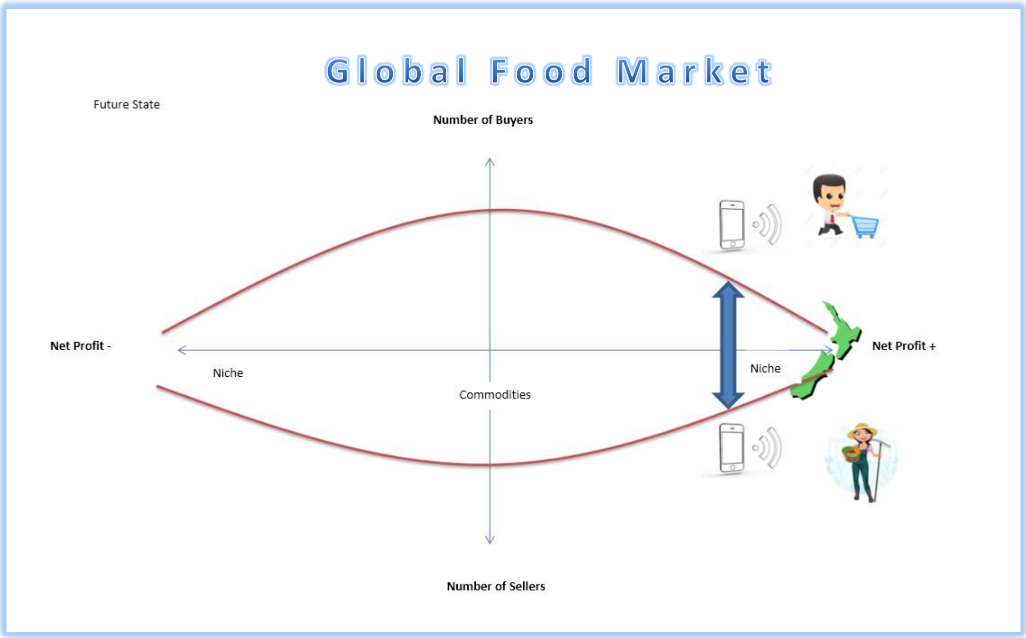


Figure 3: Global Food Market Future State

Mobile technology provides the missing link that allows us to target these thin markets at the profitable end of the axis and link producers directly with consumers. The above conceptual framework Figure 3 outlines the future state for New Zealand moving into the thin market space and my report will outline how we keep to the right (net profit +) side of the axis and not the left side (net profit -). For some businesses, this may require an initial sacrifice on profit through investing in online selling platforms and systems. As the saying goes "short term pain for long term gain".

I firmly believe New Zealand's size is small and nimble which allows us the flexibility to pursue these thin markets and the niches of the global food markets.

Methodology

> "If you travel on a theme, the theme has to develop with the travel. At the beginning your interests can be broad and scattered. But then they must be more focussed and the different stages of travel cannot simply be versions of one another. It depends on the people you meet and the little illuminations you had"
>
> **V.S. Naipaul, Travel Writer**

The method I chose to undertake my Nuffield research report was a qualitative exploratory study as this is a valuable way to find out what is happening in a topic and gain new insights. Given the purpose of Nuffield to gain these Insights and bring them back to share in New Zealand (NZ) this was a good fit.

Exploratory research has been likened to travelling and exploring (Adams & Schvaneveldt 1991) which was exactly what I was doing on my Nuffield travels. It was important for me to remain flexible and adaptable, and change where I was heading as the result of new insights gained or information gathered.

The three stages to conducting my exploratory research were:

- Analysis of research and literature on my chosen topic
- Interviews of individuals and businesses in person
- Interviews of individuals over the phone/email

The strategy I decided to undertake for my research was to initially read up on research and literature on the topic of Ecommerce. I started out prior to my trip very broadly and then on return from my study travels, researched literature that was more specific to mobile ecommerce.

I managed to travel to a number of countries during the year including Argentina, Brazil, Singapore, Philippines, Hong Kong, China, Japan, South Korea, United Arab Emirates, Germany, Netherlands, United Kingdom, Ireland, Iceland, Canada and the United States. During my travels I met with a number of individuals, companies, governments and trade officials.

Upon my return I conducted some further interview meetings over the phone and via email.

General Ethical Issues

A number of ethical issues that I considered during different stages of my research were

- Privacy of individuals and businesses
- Making sure all participants to interviews were happy to consent
- Maintaining confidentiality of data provided by individuals or businesses and keeping them anonymous if they requested it.

In order to alleviate some of these ethical issues I have only named individuals or businesses that were happy to be identified. Any individual who did not feel comfortable to be identified will simply be "Individual A", "Individual B" and so on. Any business who also wished to remain anonymous will be identified as "Company 1", "Company 2" etc.

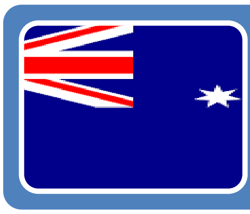
Key Findings

Online Shopping population

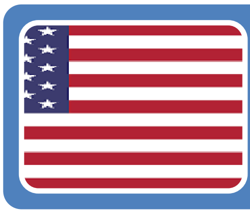
Table 1 outlines New Zealand's top 5 export destination countries for 2017 in terms of value (Statistics NZ, 2017) and what their online shopping population is. Online shopping population is the total number of individuals buying via online methods, not just using the internet. I have also included Indonesia to show the opportunity for New Zealand in developing countries where online shopping has the most upside. The majority of these countries will be the examples I refer to throughout my report.

Table 1: Online Shopping Population

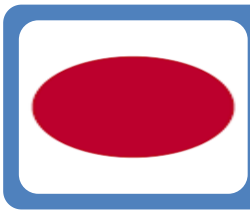
China
Number of E-shoppers: 448 Million
Proportion of total population: 32.5%
E-Shopper Growth: 15.6%



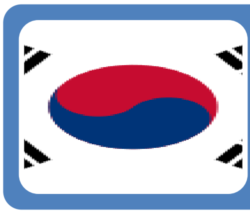
Australia
Number of E-shoppers: 14.1 million
Proportion of total population: 57%
E-Shopper Growth: 7.35%



USA
Number of E-shoppers: 198 million
Proportion of total population: 61%
E-Shopper Growth: 4.12%



Japan
Number of E-shoppers: 88.8 million
Proportion of total population: 70.5%
E-Shopper Growth: 3.14%



Korea
Number of E-shoppers: 33.8 million
Proportion of total population: 66.7%
E-Shopper Growth: 3%

Indonesia
Number of E-shoppers: 11.4 million
Proportion of total population: 4.3%
E-Shopper Growth: 25%

Country Spotlight: Chinese want to buy from New Zealand

China has quickly become our number one destination for exports with over $13 billion of goods and services heading there in the year ended June 2017 (Statistics NZ, 2017). Of that total figure, over $5.5 billion of those goods came from Dairy, Meat, Fish and Horticulture products.

Much of the growth in becoming our main trading partner has been due to the Free Trade Agreement (FTA) with China, signed in April 2008, with exports increasing over four times since then (MFAT, 2017). New Zealand was the first country to gain this with China, giving us an early competitive advantage on other countries. While this is in the process of currently been upgraded to a stronger free trade agreement, countries such as Australia and Korea also now have these agreements and many of the European nations are lining up to get better market access to China. In order to fully capitalise on our relationship with China, mobile ecommerce will play a crucial role.

Research conducted in China shows that 1 in 5 (iResearch China, 2017) Chinese e-shoppers stated that they were willing to buy products from New Zealand e-commerce sites. Because we were projected as the 7th most favourite cross border shopping target country of China, there is the perception that we have a lot to of work to do to compete with countries like the United States, Japan & South Korea. However while 1 in 2 e-shoppers might want to buy from the United States, 1 in 5 e-shoppers buying from NZ is still 156 Million people and that is only one export market. According to figures from New Zealand Trade and Enterprise (NZTE), we only have the capability to feed just over 40 million people. We don't have enough products to feed this demand!

While travelling through China in 2017, I found that consumers were much more likely to pay in advance for food products in order to guarantee supply. A number of farmers I visited had taken advantage of this; however one that stood out was a farm near Jinan in Shandong. They were an organic fruit and vegetable producer who had a loyal customer base of 3000 clients who all paid a lump sum of $10,000 Chinese Yuan ($2,200 NZD) to guarantee there supply of fresh produce every week through the year. This entitled them to a box of seasonal fruit and vegetables every week delivered to their door. Members also get complimentary entry to the farm in a park setting on weekends, to show their families around and pick additional products for themselves at a cost. This cements their buyer experience and guarantees the farm an income, as well as confirming what the weekly minimum demand will be for products.

Chinese consumers are far more tech-savvy than those from Europe or the Americas. They are far more likely to use mobile phones than anywhere in the world and have effectively skipped the desktop computer. In fact the first domestic computer to arrive in China was brought in by Jack Ma in the late 1990s (Clarke 2016). Online purchasing was almost exclusive to portable computers in 2011 with 98.5% of all transactions in China but this has dropped to 38% (iResearch China 2017) in 2017. Mobile has filled the void, now accounting for nearly 2 in every 3 online transactions.

"Ecommerce Uptake by Chinese consumers is immense, yet only around 3% of NZ and Australia's Ag product was sold via this method in the last few years. It is a huge opportunity to link NZ directly to over 500 million customers on their Smart Phones. It also creates efficiencies in the supply chain, meaning more margin for the producers"

Andy Whitford, Regional Head of Greater China, Westpac Group

Internet Penetration

The common perception I had talking to a number of New Zealand businesses was that some of our major trading partners such as China & South East Asia had low Internet connectivity so were much less likely to be able to purchase products online. While this is backed up by research which shows the UK, South Korea, Japan, Australia, Canada and Germany as all having over 90% (Ecommerce Foundation 2017) internet penetration, what is often ignored is the number of consumers who are connected to the internet in these developing nations and markets.

Two very good examples of this are China & Indonesia. China, which was New Zealand's top export destination in 2017 (Stats NZ, 2017) is estimated to have internet penetration of only 56% (Ecommerce foundation 2017). However this is estimated at 781 million people. This is more than twice the online population of the top 5 countries mentioned above. Indonesia ranks one of the lowest in countries surveyed with only 29% internet penetration measured. This does however equate to 76 million online users, which is more than the United Kingdom total population which has a 98% internet usage. Asia Pacific region also continues to have the fastest growing increase in fixed broadband connections.

On top of this our 2nd, 5th and 6th ranked export destinations in Australia, Japan and South Korea (stats NZ) are 2nd, 3rd, and 4th (Ecommerce foundation 2017) in the world in terms of internet connectivity. This in itself presents a greater opportunity to be targeting many of the consumers that our products are already sold to, directly online.

Online not just desktop computers and laptops

Mcommerce, which is ecommerce exclusively on a mobile device like a Smart Phone is the fastest growing global sales channel worldwide with double digit growth the last two years. Businesses that are utilising mobile first strategies in both selling and payments, particularly in Asia, are seeing considerably higher success rates.

Research suggests that on average 75% of mobile internet users globally have purchased either a product or a service via their Smart Phone or tablet in the last year (IAB 2016). Countries that are leading growth in mobile adoption are China, India, Turkey and the United Kingdom (UK).

In China the growth in this sector has been immense. Currently 61.7 %of all ecommerce transactions are completed via Mobile devices, up from only 1.5% in 2011 (iResearch China 2016). While some of these studies can be misleading as the audience may be more likely to have mobile phones. This research was backed up by my observations in China where all consumers had Smart Phones and the majority of them were on them when using public transport.

The biggest barrier globally to more uptake of mobile ecommerce is trust, with 44% of those surveyed who don't use mobile, citing this as the reason. The main reason for this is concern around their privacy and also security of payment systems, particularly credit card.

Because of the global growth of mobile use in online shopping, businesses in New Zealand need to ensure that any sales platform they utilise is 'mobile friendly'. Mobile friendly means that the site works with all the same functionality and options that it would on a desktop or computer plus the added need to be smaller and fit a Smart Phone screen. Some common failures around this include, but are not limited to site not fitting a mobile screen, links to products not working, having to scroll or zoom too much to see details and 'going back' not taking you back to previous page. It must also load faster than a traditional website page, as often connections are over cellular data or Wi-Fi.

"One of the reasons China is so mobile centric is because third party payment systems using mobile apps are so widely accepted in China both online and in shops. Another reason is the high penetration of Smart Phones – largely due to the number of local manufacturers and competitive prices. Lastly a lot of people have leapfrogged to ecommerce because of a lack of shops and brands available to them. The Smart Phone literally brings shops to rural consumers for the first time"

Jessie Qia, Head of Consumer Markets, KPMG in China

Offline is the New Online

One of the biggest observations I have made from my travels was the number of pure online ecommerce players that are making moves offline in the retail space. For many of these businesses, it means investing in old-style bricks and mortar retail sites, but operating them anything but traditionally. One of the reasons for this was traditional online customer acquisition channels like Google and Facebook are reaching saturation and even starting to offer diminishing returns. Ecommerce giants are now looking offline for new customers and to create a better sales experience. In addition to this they are gaining improved logistics with many of these bricks and mortar stores doubling as fulfilment centres for what is known as the last mile.

The last mile is defined as the last step in a products journey from fulfilment centre to the consumer's doorstep. This area has become increasingly more competitive with many start-ups getting into this space. This has created a very thick market in many countries driving the cost of logistics down, to the benefit of ecommerce players. Huge venture capital has flown into this area which has meant many start-ups have had loss leading strategies in order to gain market share.

These retail stores are also used as marketing stores where consumers can come in and try products 'in store' and then buy online. This allows new products the opportunity to quickly attract buyers, similar to a trade stand setting, as well as providing live demonstrations on how to use the products correctly so consumers don't have a poor experience when cooking at home.

Whether businesses are online, in physical stores or a combination of both they are all facing similar challenges. They have to deliver a seamless customer experience at every touch point and live up to their promises. They also need to create a strong brand that creates brand loyalty.

Some companies I witnessed who are launching the omni-channel approach (both online and offline) from online to retail are:

1) Fruit Day.com, have recently invested capital in 15 supermarkets, located in and around Shanghai and Beijing. This is in direct contrast to their previous strategy of online fresh produce targeting famous brands. Their founder Loren Zhao, who I was lucky enough to meet in Shanghai, explained that this was about covering both sales channels, and still targeting the same level of premium customers. The focus in-store was more about a showroom of the products where consumers could purchase week to week like they normally would or come in and try items before buying online. The supermarkets had the added strategy of premium experience with in store chefs able to prepare meals from produce picked off the shelf by the customer. Loren also made the point that the margin on some smaller items like toiletries was not high enough to justify having an online presence.
2) Ecommerce giant Alibaba has launched what they call 'new retail' with their Hema supermarkets. I was lucky enough to visit one of these in Beijing. This was possibly the most pleasant grocery shopping experience I had, despite not understanding any of the language. The idea of these stores was that consumers visit once and it was all App based with a huge array of information available on all products. Consumers could purchase products, have them cooked in store or even delivered. The main goal was using them as fulfilment centres to deliver an online order via scooter, within 30 minutes scooter ride from the store.

3) Amazon, the major western player on the ecommerce playing field has also made headlines in the last 12 months with their purchase of premium supermarket chain Whole Foods in the United States. The company gained hundreds of grocery stores all located in high income density areas of the United States. The strategy for them was simple to jump start its lagging online grocery business as well as providing small fulfilment centres for the last mile logistics.
4) ZALORA, a leading fashion online only company in Southeast Asia, has now moved into the offline space in order to acquire more customers and build trust. They have developed 'pop up stores' in 2015 where customers are able to see the products, try them on and then scan the barcode to process their order. This order is then delivered to them at home. They have managed to maintain their competitive advantage over offline retailers as they do not need to carry as much inventory in the stores, which while lowering their overheads, also allows shop assistants to spend more time advising clients. ZALORA also mentions that having the physical 'pop up' stores gives them some credibility with consumers who don't trust online only, as they can touch the products, try them on and check the quality before purchasing.

Ecommerce is clearly a long way from being an online only affair. Both online and offline channels are effective in creating consumer awareness and demand, especially when they are used together. This is a real challenge for New Zealand with our distance to markets and lack of any owned retail space in our markets.

One proposed solution to this, I believe, is the formation of our own multipurpose landing pads, or 'pop up' stores in some of our major export markets, as well as those close to home that are developing an online appetite. These stores could be themed as 'middle earth' for example having a range of New Zealand products available to trial with links to where they are available online, as well as their live branding linking back to producers and telling their story. The stores could be shared sites with other sectors such as Tourism New Zealand who would be showcasing New Zealand from a different point of view but still supporting the overall pop up store.

A more permanent store could be established in Auckland International Airport allowing customers to scan QR codes of produce they have liked and be linked to business websites where they can purchase that product.

"Customer experiences should not happen by accident, but must be engineered. This means that one should really understand their customer's journey and its moment of truth and base your next actions on smart and predictive data analytics. An omni-channel approach to service and sales is powering businesses ability to win hearts, minds and revenue share"

Gert-Jan Morsink, Webhelp Group Executive Board.

Creating Awareness: An Individual Country Strategy

While the concept of Ecommerce may no longer be considered new, an important part of it that is still relatively new is the use of social media, such as Facebook, Instagram, Twitter and Wechat as a way for online based businesses to connect directly with customers. Historically businesses have used social media to advertise to customers but now they have shifted the focus to connecting with them instead and offering benefits such as discounts or first pick of new releases to retain them. Social media also allows customers to connect directly with online companies and offer real time feedback on their products and services. It is this real time feedback that presents an opportunity to New Zealand agri-food businesses.

A KPMG (2017) study titled 'the truth about online consumers' showed that 55% of consumers researched the product they were going to buy online by searching social media for reviews and recommendations. Therefore if a business is looking after and engaging its consumers on social media platforms they can expect higher ratings. The opportunity exists for New Zealand farmers and growers to also get real time feedback on the taste of their products which may help them make farming decisions. Depending on results, it may also affect who they get to process their products, if for example, one meat processor produces 5 star reviews and another 3 star for the last animals they sent.

Another example I witnessed was businesses partnering with other completely unrelated businesses to build mutual awareness of their brand, by offering incentives to either shop in their stores or online. ZALORA, the online clothing retailer, has partnered with ride hailing (taxi) company Grab in Singapore to deliver promotions. When a client of Grabs is ending their ride in the vicinity of one of ZALORAS 'pop up' stores, they automatically get a notification of a voucher code they can use in store. If they are a regular customer, it will also offer deals on products they regularly buy. This same technology can be used by restaurants or grocery stores to get new customers in the door. The promotion is mutually beneficial as shoppers who shop in the 'pop up' store are given Grab vouchers with their purchase to then use the ride hailing business. This also creates a complete personalised value experience for the consumer as soon as they leave their house.

It is important that businesses have an individual strategy for their online business that is unique to the country it is selling into. Many businesses have failed in differentiating their online operations from country to country. For instance a simple translation of a website into a foreign language can look like a disaster and make no sense at all. From my observations, getting the correct language on products is an area New Zealand has struggled with on the world stage and needs to be tidied up before consumers can even get online.

Photo:New Zealand lamb on the shelves of Life supermarket in Japan. Branded in English and French, however the majority of locals only speak Japanese.

Mobile Payment Systems

Businesses often make the mistake, particularly in the B2B space, of listing products for sale, with the intention of having businesses contact each other to make the sale. However it is vital that companies wanting to sell their products online particularly food, provide prospective customers have the ability to purchase online rather than requiring another step in the process. Having a seamless payment system that is in the customers own currency is crucial to the success of an online sales channel.

The definition of money as anything that is generally accepted as payment for goods and services, tells us that money is therefore defined by peoples behaviours. As we have seen many different assets have performed this role in history, ranging from gold to paper currency to bank cheque accounts (Mishkin, 2011). With the increase in the internet, E-money (credit/debit, internet banking, peer to peer payments, and payment wallets) has become the most common form of payment worldwide.

The most common form of online payment is still credit or debit card (over 80 %(KPMG 2017)). However this is skewed by western cultures obsessed with having now and paying later. The biggest trend globally is the growth in demand for secure and convenient ways of payment via mobile devices. In some of the biggest markets for food globally, such as China and South East Asia, peer to peer and business to business mobile payments are in their highest demand.

As mentioned in my opening story, places like China and South East Asia have effectively skipped the credit card market and moved to payment wallets as their preferred method of purchasing goods. Products like Alipay, WeChat pay and Go-Pay are examples of systems that have created de-centralised marketplaces that don't need traditional banks. Both of these Chinese payment wallets, I was lucky enough to experience first-hand both from a B2C and B2B point of view. As mentioned in my intro, they were widely available and the preferred method of payment from the big lights of Shanghai and Beijing right out to the rural markets of many smaller tier 3 cities. The reason for such huge uptake was as we experienced, the offering of discounts on transactions so people would use it initially and then would get used to the technology, then would not go back to cash. For example at the markets a consumer may look to purchase some meat produce and pay with cash. The price would be advertised but the vendor would offer it at 10% cheaper if they signed up to WeChat pay or Alipay for the transaction. This meant the customer saved and the vendor would get a signing bonus from the payment provider as incentive to convert customers.

Wechat pay – WeChat is the most popular social media instant messaging application in mainland China. The pay system was added to the application to make it into an online community. Owned by Tencent, WeChat pay is the second biggest mobile payment system behind Alipay. WeChat's big advantages include connecting businesses with consumers via the online social media, allowing marketing campaigns and product pushes. If Chinese consumers are overseas they are also able to pay for products through Wechat pay in their own currency if the vendor is also on Wechat.

Alipay – created by ecommerce giant Alibaba.com and its founder Jack Ma, Alipay now has over 520 million users (Alipay.com) as well as over 500,000 businesses both online and in stores. Initially set up as a third party payment system for its parent company, it is now the largest third party payment system in the world (Clarke, 2016). The payment platform is set up based on a trust as one of its key pillars and it now has introduced facial recognition payment approval to create one of the most secure payment methods in the world.

Go-Pay – is the mobile payment platform for Indonesia's alternative to taxi company Go-Jek. The company is similar to its more well-known rival Uber, offering cheaper fares and mobile ride hailing. Its fleet includes cars, motorbikes and trucks. Currently it is only available in Indonesia, however its peer to peer payment system is starting to branch out into South East Asia.

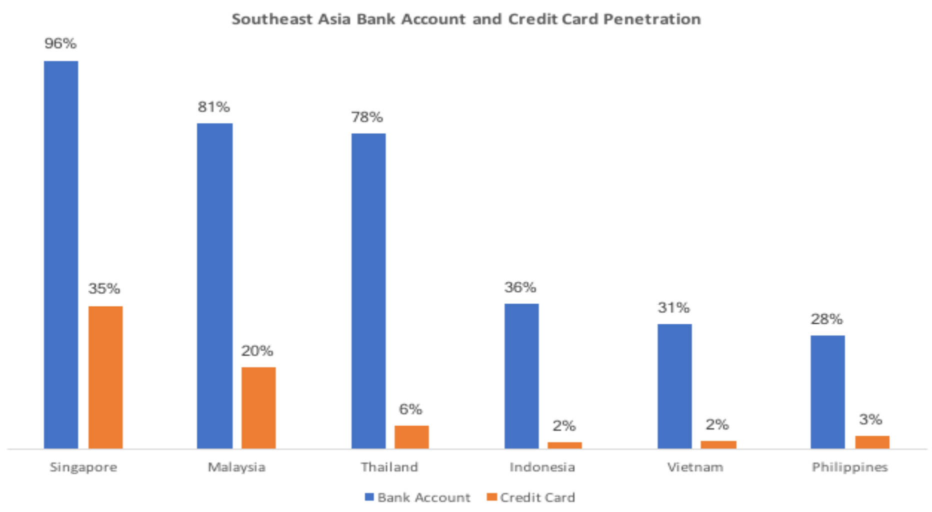


Figure 4: Bank Account and Credit Card Penetration Source: Global Findex. World Bank 2017

The above figure shows in most of emerging South East Asia, credit card penetration is in single digits and the majority of people don't even have bank accounts. It is not surprising that many business to business transactions (as high as 70%) are still completed with cash on delivery in Thailand, Indonesia, Vietnam and the Philippines. What Go-pay has successfully done is created a peer to peer payment platform to help facilitate these transactions. Furthermore the technology does not require a traditional bank account or credit card as consumers can top up their accounts via cash in shops, or to Go-Jek drivers, similar to how you would traditionally top up your mobile phone. This has created an advantage over its competitor Uber whose accounts still need to be linked to a credit card. With the company's recent purchase of Midtrans, they are now launching a B2C and B2B platform.

The good news for NZ businesses is that accessing and having these payment options available on your sales platform is readily available. Businesses like Epayments Limited, based in New Zealand and Australia, can integrate these payment systems into your business both online and offline. The benefits of this are that for example Chinese consumers pay for your products in Chinese Yuan, but the transaction is completed in New Zealand or Australian dollars. You can also complete this yourself without a third party business.

NZ companies looking to set up E-commerce sites need to consider the most popular and most accepted local payment options in their target market. Globally this is still credit and debit cards as well as long term credit, but in markets like China and South East Asia, consumers prefer to use payment wallet technologies such as Alipay and Go-pay. Without familiar and trusted payment systems, sellers will lose a large share of customers.

Online selling isn't just Business to Consumer

During my travels both internally around New Zealand and then around the world, the overwhelming perception from many companies and individuals was that online selling and in particular mobile ecommerce was business direct to consumer sales (B2C) and not business to business (B2B) sales. The common theme was that if you wanted to get direct to your customer, ecommerce was a viable sales channel. Many believed B2B should be more relationship based and I got the distinct feeling ecommerce was not a priority. My findings from my travel were quite the opposite of this and while there are certain differences in strategy when it comes to ecommerce sales channels, and very much a different online offering required, you are still dealing with a much more connected customer. Face to face relationships will still play a role in food product sales. Contact with customers will be more frequent but expect less in-person contact than New Zealand agri-food businesses currently offer as part of their B2B service models.

Many of the major players, including for example Alibaba.com founded in April 1999 started out as an online B2B marketplace, and have evolved their offerings in the B2C space. It wasn't until 2003 that Taobao.com, which was Alibaba B2C offering was finally launched.

According to market research analysts Frost and Sullivan (2016) the global B2B ecommerce market is predicted to be twice as large as the B2C market by 2020. It is estimated it will account for US $6.7 - trillion in sales. It is important that New Zealand agri- food companies position themselves to get their share of these sales.

A large portion of our primary exports are intended for the food service industry such as hotels, restaurants and catering companies. We also sell a large number of key ingredients which are then included in other final products. What I found during my travels is that these customers are even more time poor than general consumers and are operating more and more in the mobile space. Furthermore, their personal experience as individual consumers had inflated their expectations of what they should see in a B2B offering. As the millennial and Gen Z moves into more managerial positions over the next 20 years, we can expect demand to soar.

In today's fast paced world, B2B buyers are short on time and expect even better service when buying online than your average consumer. Traditional relationship selling has served New Zealand very well and this personal approach is not lost when operating in the B2B space. In fact, buyers expect there to be a personal touch with their ecommerce experience. Having a customised buying experience that provides the relevant pricing and product information for that client not only saves the buyer time, it creates a positive experience with your business.

The main differences between a B2B ecommerce and B2C that businesses need to consider are:

- Multiple decision makers involved – an Oracle (2013) research paper into B2B commerce showed that 70% of B2B transactions involved two or more decision makers. In B2C a lot of focus is put on consumer's feelings and getting them to trust your business. It's also all about emotion and any facts provided are being used to justify an emotional decision. When it comes to B2B, the buyers are a group of purchasers and as they are buying on behalf of a company it is much more fact based. Buyers need to ensure they are buying products that have the correct components (ingredients) to help keep their own company running, not because they like it. Therefore the online offering needs to have much more detail and facts about a specific product than would be put on packaging. They will also want specific information about claims and any brand story. Allow business accounts to have multiple employees registered to use them and a separate approval log in for managers may also be requested.

- Larger order sizes – Your online offering needs to be set up to handle large bulk orders and potentially multiple product categories.
- Fixed consumer prices vs. Customer specific prices. – in a direct to consumer market, prices are usually fixed (except for promotions) whereas business customers will have pricing that is specific to them and often the order size. It is important that this pricing is accessible to everyone you are dealing with from that company.
- Repeat purchases – B2B sites will have more repeat purchases than a B2C site. Because of this, good options to include on your site may be a customer's own log in portal where they can manage their own product orders and access their own specific pricing. Showing a full order history will allow multiple people from that company to place repeat specific orders.
- Longer lasting relationships – the real positive of these sites for the traditional seller is that these websites still enable long term relationships with businesses. There is still value in face to face contact, however expect this to be less frequent as customers rely less on personal contact. Things like new product releases and hosting are still important factors particularly in Asian countries like China, Japan and Korea where business meetings over meals is still important to building rapport and gaining trust.

With ecommerce most transactions are paid for in real time or in advance of getting the products. This means no more 150 days payment terms for products. However this may not be part of a business's competitive advantage and having credit terms may be important to the B2B relationship. By having a customer log in to the site all pricing and other commercially sensitive information is also kept secure.

When building your B2B online offering it is important to not 'tack on' these features to an existing B2C site. Company 2, who I met with in Japan, did just that and the big learning they advised me was that the existing site could not cope with the complexity of B2B or the needs of their buyers. They advised that the best place to start is with your B2B customers and analyse what their needs are in an online platform. Focus should be paid to their job requirements and the tools they need to effectively buy online.

Overall though it is important to remember that an effective B2B ecommerce offering should act as a one stop shop and information source for buyers and provide an excellent first impression of your company. Businesses want to have a choice to do practically everything they need online via a web store rather than calling a sales team.

"B2B sellers can learn a great from watching B2C sellers, but the two cannot be treated the same. B2B tends to involve longer relationships, both before the initial purchase, and as additional or repeat purchases are made"

Marcel Munoz, Thanx Media

Not Just Clothing and Travel

A common misconception I found during my Nuffield travels was the number of businesses, particularly in the food and beverage sector, who believed online shopping or e-commerce was for selling travel (flights, accommodation and activities), books and clothing (clothes, shoes etc.), and there was not much of a market for selling food products online.

In many western cultures, I found that this was more than likely the case and businesses had a point. In Australia for example the most popular shopping categories were department stores (30.1%) Fashion (22.2%) and Home Appliances (14.8%), with food and beverages only making up 6% of purchases. (Australian Post, 2017).

The United States also has similar leading online categories with 3 out of 4 people purchasing books, video games or music mostly online. Consumer electronics is the next most popular category with 1 in 2 people buying mainly online. This drops to 1 in 10 people mainly buying online for groceries. (National Retail Federation 2017)

Global industry averages of online shopping also back this up with the highest category also clothing and fashion. (Royal Mail 2017)

However I believe this is leading many businesses to not focus enough attention on this sales channel particularly in New Zealand and the agri sector. With our main exporters sending large amounts of product into Asia and particularly China, how these consumers purchase online is much more important than how we do it ourselves. Looking at two country examples in China and Japan it is very easy to see the opportunity for New Zealand businesses.

The below research results conducted by the Royal Mail (2016) shows the most popular online categories for shoppers in Japan compared to that of the UK and Global Industry averages (IA). As you can see the UK, like many other western countries, ranks highest for clothes and books. However it is the statistic on Japan that is of the most interest. The leading online category for ecommerce is food and drink with nearly 2 in every 5 purchases online in this category.

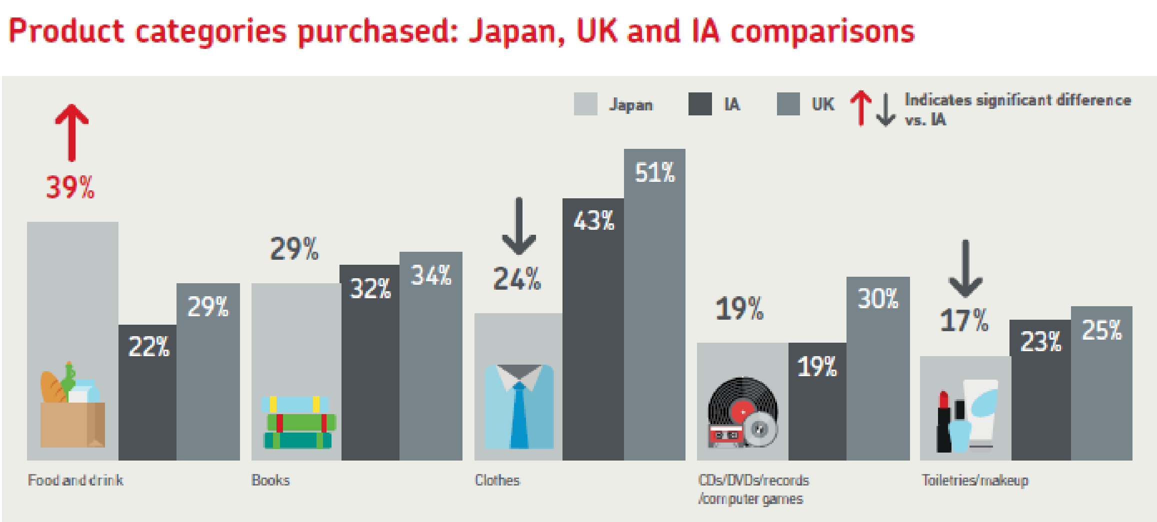


Figure 5: Product Categories purchased: Japan, UK and International Average (Royal Mail 2016)

With the recent agreement of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) which includes Japan, this presents a great prospect for NZ's food sector.

China is different again in terms of online purchasing of products. Research conducted by IResearch (2016) in China was carried out to determine the most popular purchases from foreign countries by Chinese consumers. The below table outlines that while cosmetics is the leading product category in cross border purchases, second and third on that list is food and child products (including baby formula).

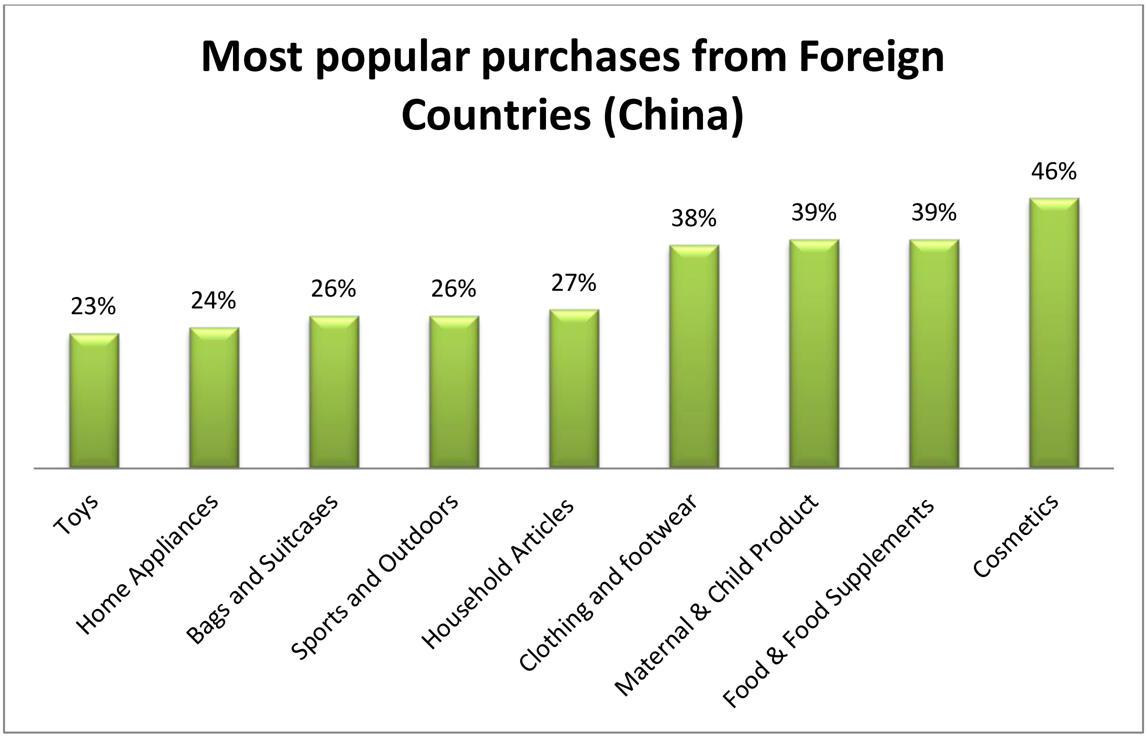


Figure 6 Foreign Purchases, Source: IResearch China, 2016

This research shows that nearly 40% of Chinese consumers who are purchasing from a foreign ecommerce platform are purchasing food or baby products such as infant formula. In addition to the above research, 3 out of 5 consumers said they buy from foreign ecommerce platforms due to quality guarantee and trust which is something NZ prides itself on when it comes to the food products we produce.

Chinese consumers are also a lot less price sensitive when it comes to buying food products across the border, as they simply do not trust their local producers of food.

"Clearly ecommerce has been growing globally across many of the usual suspect categories like apparel, books and music. But what we are now starting to see, and where we expect more growth from is grocery retail. Very few retailers have managed to get their online model right, but when they do it can be very successful. Winning companies in this segment have focussed on the millennial and young professionals groups, where the focus on fresh prepared meals is the main driver."

Willy Kruh, Global chair, Consumer Markets, KPMG International

Building Trust through Traceability with Block-Chains

Given the nature of online shopping where consumers are buying products sight unseen, providing personal data online, often paying in advance for products, building trust with your customer base whether that be B2C or B2B is critical. Having the cheapest prices or free delivery may be what sways a customer to purchase from you, however at the end of the day; customers and businesses will only buy from websites or companies they trust. This is even more important with food.

Companies need to focus on ensuring the quality and safety of the products they produce and sell. Any breach along the supply chain in this area can have serious and long lasting consequences in terms of consumer trust. Modern technology has meant with mainstream media and social media an issue with product quality can spread out of control and any hard earned brand reputation can be extinguished overnight. Those companies selling under brand NZ could not only tarnish their own reputation but that of our whole country. But modern technology can also offer a solution to building and maintaining that trust.

Use of Block-Chain technology is also becoming more common and has some real potential in the agri-food sector to help build this trust. It allows for a transparent supply chain and gives consumers wanting to make an ethical decision the information to do so. Block-Chain is a digital decentralised ledger of certain transactions. While currently it is used mainly for financial transactions or crypto currencies, it can be used for recording any form of event digitally.

Consumers increasingly want to know that the ethical claims companies make about their products are real. Distributed digital ledgers provide an easy way to certify that the backstories of the things we buy are genuine. Transparency comes with block chain based time stamping of a date and location — on ethical diamonds, for instance — that corresponds to a product number. Given the increased number of food scandals around fake food globally, this technology could guarantee that trust.

The seafood industry is one sector that has started to lead the way in trialling this technology. Once a fish is caught Block-Chain captures the journey of that fish in a digital manner and allows anyone including the consumer to see the journey of that fish. From the time it was caught and the location, to when and where it was processed and then how long it has taken to get to market, all this information helps a customer make an ethical choice. The UK-based business Provenance offers supply chain auditing for a range of consumer goods. Making use of the Ethereum block chain, a Provenance pilot project ensures that fish sold in Sushi restaurants in Japan has been sustainably harvested by its suppliers in Indonesia.

Provenance focuses its technology on the ethical wants of its clients end customers. For example they track products like coconuts that have slave labour concerns to verify that the product was produced by people earning the minimum living wage (pictured). They also track clothing such as wool from sheep's back all the way to the finished product.

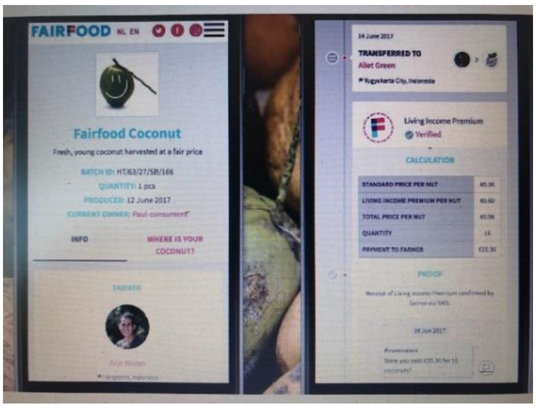


Figure 7: FairFood Blockchain

Wal-Mart in China has also trialled the technology in China on local pork from paddock to plate and mangos from South America into China. They're building the technology with IBM, which has been among the most active technology firms pushing Block-Chain solutions to corporate technology departments. If Wal-Mart is successful, the project could fundamentally alter the way information is secured, stored, and shared across the food and retail industry, ushering in an era where an item of produce can be tracked in real-time from farm to table, by producers and consumers.

The potential is there for our meat and dairy industry also where every antibiotic treatment, drench or dip could be recorded right through an animal's life and once processed that animal's DNA forms a trace marker for any of the products available to the consumer. It allows the consumer to scan a quick reference (QR) code in the shop to verify the product is in fact raised in the country it says it is and is free range. Alibaba announced plans to trial this in New Zealand and Australia last year. One of their biggest rivals JD.com, already uses the technology with its beef products.

Case Study: JD.com use of Block Chain

JD.com sells many of its products like the one pictured below, with QR codes that link to additional information. In this example the code is linked to the companies Block-Chain technology.

Scanning the code using the retailer's app loads a webpage titled "The wonderful journey of the beef." Underneath those words is an image of a cow sitting in a paddock. The next page shows the cow's serial number and a 64-digit alphanumeric code that refers to the sales number.

The kind of information on the App ranged from the date of slaughter, the age of the cow when slaughtered, what the cow weighed, who the local vet was. In the above example, it shows a Simmental breed, from a farm identified as "1556," that was fed a diet of corn, wheat, and straw.

Imagine the potential for New Zealand farmers with the above statement replaced with a statement saying, Pure New Zealand Angus cattle from David Kidd's farm that was fed a diet of grass, fresh NZ water and was free range.

In terms of building trust, the App also shows that after the cow was slaughtered, its meat was then subjected to a number of tests to detect bacteria, water content, and animal-growth promoters. This is particularly important in Asia as making sure meat is declared free of ractopamine, a drug banned in China that's used to bulk up animals weeks before they are slaughtered, helps build that trust and gain customers.

Use of 'live' branding to improve buyer experience

One common theme globally for premium food products was the effort that businesses put in to marketing aimed at enticing the consumer to purchase their product. While a large amount of budget and effort goes in to making a product's packaging look presentable and attractive to consumers, many businesses are starting to get more creative through the use of quick reference codes (QR) to keep their message fresh to consumers.

Similar to the last insights around Block-Chain technology, consumers scan the QR code on their mobile device to gain insights into the product they are about to purchase. The great advantage to these is you are not limited to space on packaging with your message. However you still need to grab the buyer's attention.

Information can be related to the product, or the company and many of the ones I observed offered recipes and similar products in the same supermarket that went with that recipe.

I believe the big opportunity exists for additional 'live' branding to be used on these QR codes. This could include but is not limited to, latest farmer interviews, live promotions, videos on health benefits and more importantly for a business with their own ecommerce offering, links to the site to purchase a wider product offering than what is available in store along with delivery options.

It would also be important to include a customer rating feature where farmers and growers as well as processors could get real time feedback on their products, which may change how they run their farming system or how products are processed. In the event of any food safety recall affected batches can also be quickly recalled. The potential for a NZ lamb leg for example to be rated for taste, ease of use, appearance and price is all great data that can be used to make on farm and processing decisions. QR codes can also provide real time feedback or heat maps to where high demand is, so targeted messaging can be pushed relevant to the market the product is in.

In countries like China this live branding can feature local stars that will provide paid reviews live to consumers during peak times creating huge demand for our products. Businesses can get these stars out to their properties even, to show how products are made and feed this back to Chinese consumers.

Closer to home, Fonterra has also launched QR codes on their infant formula brand Anmum. The code links to the Anmum website which allows you to enter in the product code and determine if the infant formula is in fact authentic. Some other interesting observations are the date and where the formula was manufactured. However from there it is hard to find information on the product and everything else is very general to the Anmum brand, with some great information but not specific to the individual product. This is however a great start and provides a solid platform to build more information around that individual tin of formula.

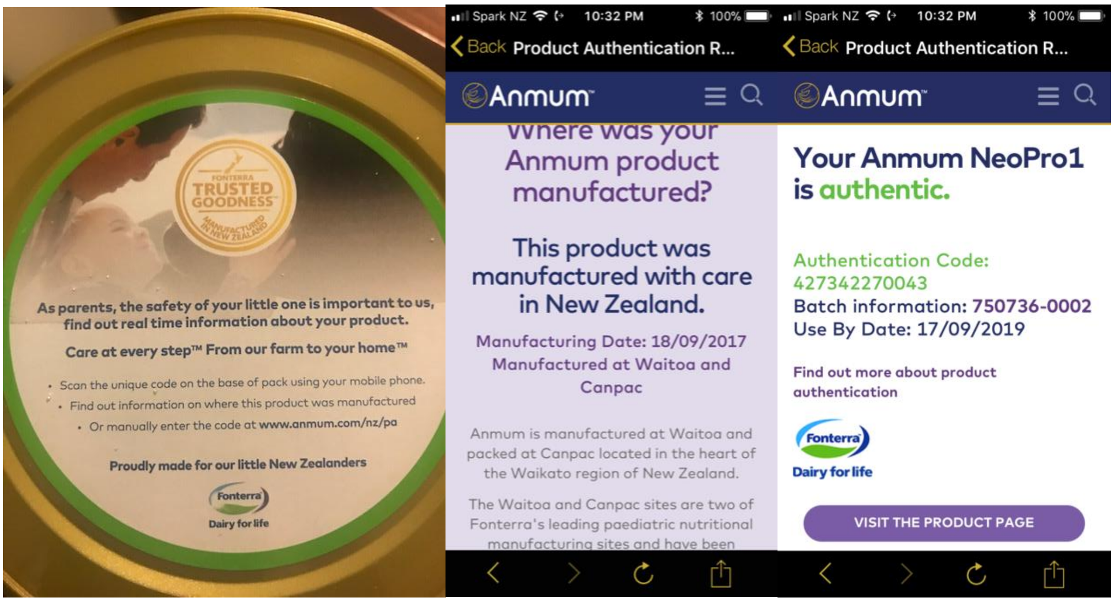


Figure 8: Anmum QR Code

The other form of 'live' branding companies are now turning to is virtual reality technology (VR or augmented reality) as a way of providing a richer and more improved buying experience. Whilst traveling in South America, I was fortunate enough to experience VR in an arable setting as I was taken on a journey of wheat production from planting all the way through to processing and eventually the final product (a loaf of bread). This was experienced all without leaving the couch or store. In the United States this technology is used by many retail brands and one in particular was New Balance. Whilst customers were shopping for a new pair of running shoes they could use VR to visit the factory and see how their future shoes were produced as well as meeting the people responsible.

There is no reason why this technology could not be utilised by New Zealand to showcase our farms and orchards and the hard working people responsible for producing our products. While widespread VR has been labelled an 'attention grabber' by many tech experts, I believe once it reaches an affordable price point it will see much greater adoption. It also has potential to be utilised as an education tool in schools and urban communities to show how food is produced and to promote careers in the agri-food sector, one of our other challenges as an industry.

"The customer should be considered the top of any online strategic plan. Design your virtual experience from top to bottom but then build your online platform from bottom to top in the supply chain." (farmer /grower to consumer)

IBM Stand, Mobile World Congress 2017, Barcelona Spain

Leveraging Dominant Players

With many of the major ecommerce marketplaces such as Amazon, E-bay, Alibaba.com and Rakuten seen as the 'in' places to list your products, they also can be detrimental to your sales often eroding some of the margin on products. One strategy I witnessed that was having an effect on third party businesses were rising sales commissions once products became successful.

The biggest threat to businesses from dominant players in the market was that many of these companies are developing their own 'budget brands' that then compete with successful products launched by third party businesses. This then effectively commoditises the product and the original business misses out, as they often don't have the scale to compete with these giants.

These dominant ecommerce marketplaces are often missing out on what is perceived as premium products due to the perception of grey markets on their sites. Grey Markets are basically merchants who sell counterfeit products like they are the real thing. While this is more common with cosmetic products and clothes, the concept is the same and we don't have to look far in New Zealand to see what brand damage can occur if a product turns out to not be what it was sold as. A recent example in 2013 was the milk powder recalls by Fonterra for suspected botulism. Alibaba has recently launched virtual recognition of online products to try to eliminate fake products.

Many brands are wary of selling on major ecommerce platforms such as Amazon or Alibaba, fearful of losing control over their brand and also those profit margins. Businesses are best to think of these platforms as just another sales channel and use them as leverage to access their customers. Businesses should partner with these market places by offering only selected products and by utilising 'live branding', they can develop stronger relationships with these consumers visiting the businesses own website or social media platforms for a much broader sales experience.

Two businesses that have had success in this have being Costco, the American warehouse chain and Vibram originally an Italian brand known for the barefoot style running shoe. Costco rather than launching a huge amount of products on Chinese ecommerce sites, just started with a single product offering of mixed nuts. They targeted singles day promotions to great success and have since introduced other products. Conversely their own websites have a complete range of products available. Vibram went the other way as they initially were selling through these giants including Amazon very successfully. However when growth started to slow, the company made the decision to invest heavily in their own digital offering which included social media and mobile first platforms. As a result of this now over a quarter of their business sales are direct and most of their growth is coming through this channel.

Another interesting example is the Washington Apple Commission in the North Western corner of the United States. They have sold apples onto Tmall Global sites the last few years also targeting certain days in the Chinese calendar. This year they added a QR code which linked back to their own website. While this is not yet featuring as a selling channel the potential is very much there. Ben and Jerry's Ice cream and American cherries are further examples.

By having your own site, you own your customer data, have control of your brand image and can offer things like subscription commerce. The customer also has a relationship with your business.

Consistency and convenience is more important than 'on demand'

Another commonly held perception as I travelled around interviewing different businesses both overseas and back home in New Zealand was that many were very concerned about immediate home service delivery options that some businesses were offering. In the United States, companies like Amazon and Uber are offering delivery of products within the hour to people's door steps. This has gained a lot of media attention, which is forcing many to consider its implications. Use of technology such as drones and driverless cars is also helping this movement gain publicity and traction.

On demand however does not seem to be a key factor outside of the United States as people are not willing to pay a premium for the service. In fact, in Asia many start-up businesses such as Kiram and Spoonjoy have folded because the demand is not there. Home service is a nice to have as the product is at your doorstop almost immediately or within the hour, but it is not a must have. People won't pay a premium for it and in most cases the unit economics don't add up.

What I observed was consistency of service and convenience of the product was more important than on demand. For example, having your groceries delivered at the same time on the same days every week was of far more value to consumers than last minute purchases. Many of the urban consumers in major cities around the world are very time poor and lead busy lives so being organised and having consistency is super important to them.

These observations were backed up by IABs (2016) research into ecommerce that showed the main reasons consumers purchase online is convenience and to save time. In North America instant delivery was higher than other regions. A strategy in areas where instant delivery is more important to consumers would be to sell into the B2B space servicing these demands. From my travels, I witnessed that many of these instant delivery options were targeting already prepared meals such as restaurants and fast food outlets. The exception to this was Amazon with Whole Foods in the United States who were seeing some success in one hour delivery times.

Figure 9:Consumer Opinions: Mobile Purchasing Reasons (IAB 2016)

> "Cross border ecommerce is booming. Speed of delivery is important but it is not everything. Shoppers want better control over how, when and where their goods are delivered. They want flexibility over delivery times and locations"
>
> **Renaud Marliere, Chief Marketing and Sales Officer Asendia**

Key learning's from others Mistakes

During my travels I was fortunate enough to meet with a number of businesses who had ventured into selling their products via e-commerce and for various reasons this had not been successful. The businesses sold products ranging from fresh fruit and vegetables to less perishable products such as coffee and long life milk. I also spoke to some businesses selling electronics and clothing. Many of these businesses had common themes to why their online platforms had failed. I appreciated the openness of these businesses sharing some insights. Some of these key themes were:

Mobile friendly website

- As discussed earlier in my report, the growth of mobile online shopping is the fastest growing sales channel and therefore is a crucial part of any online offering in this day and age. HMC Fruit who I met in California had launched various attempts at an online store. Their key fundamental failure especially as their biggest market was Los Angeles and San Francisco, was they did not have a mobile friendly website. In fact they had two separate websites, one for the business providing sales updates and recipe options as well as farmer blogs and then a retail site. Unfortunately both sites were for desktop computer only and did not work on mobile very well. There were also some other minor mistakes that made the site hard to use such as links between the two sites not working, clicking on the logo just zooming it rather than returning to the home page and articles on the site that were outdated making it seem like the site was over 3 years old.
- These observations were backed up by research done by Dynamic Yield a consultancy firm based in the United States. They found 67% of people said the biggest impediment to online shopping was pages and links that were too small to click or didn't fit the screen.

Not accepting popular payment options of your target market

- Company 1 who I met with in Germany was an interesting case, due to Germans having another popular preferred payment style of invoicing. They were a local business selling food into superette type shops similar to New Zealand's Four Squares. In order to save on administration costs, they changed payment systems with clients to mobile payments on delivery that they had trialled in their other market of the UK. Unfortunately for Company 1, Germany has an obsession with invoicing for payment or bank account based payment systems, and therefore many of their customers started to look elsewhere. This forced a rapid backtrack from the business to retain the relationships.

Produce selling for more expensive online than in stores

- HMC Fruit also were running into trouble with their online store around this issue. Most of their fruit left the store in bulk bins destined for supermarkets both locally in the United States and overseas including Australia and New Zealand. Due to high postage costs incorporated into the price, a box of a dozen peaches was selling online for nearly $50 USD. HMC had done a good job of trying to make the product look like a gift box, however the reality was that these same dozen peaches were 1/5th the price in a local supermarket.

Too high cost of shipment

- A New Zealand company (Company 3) and one from the United States (sporting goods company) who I met with were struggling to keep costs of shipping down and were handing this on to consumers at check out of the online store. Both these companies were noticing a trend of customers getting to check out and then not completing the purchase. Neither of these businesses were failing. However their online platforms were not performing as they were expecting and pressure was mounting on this business arm. Both companies implemented some initiatives that helped turn this around. One of these was the sporting goods company offering free shipping promotions with the United States for certain periods such as 24 hours. What they were doing was sending customers an alert to what they had left behind in their online shopping cart up to a month before and advised that for 24 hours they could get free shipping with a discount code. The end result to this was customers actually ended up purchasing more items and making the most of the promotion.

  The New Zealand based business decided to incorporate shipping into the sales price of the products and offer free shipping. This prevented the buyer shock at check out of the shipping cost as it was already incorporated in the price. This is something that due to our distance from market, is always going to be top of mind in the B2C space.

  Both of these case studies are backed up by research which shows that the number one reason (56%) shoppers don't complete an online transaction is unexpected shipping cost (IAB 2016). Other studies (Royal Mail 2016) have shown that around 60% of UK online shopping carts do not proceed through checkout. Making sure you are up front with any additional costs is key to converting these sales.

Challenges for NZ

The following are what I see as the perceived challenges for NZ businesses looking to utilise mobile ecommerce as a sales channel.

Multiple Value Chains – as we export so much of our Agri-food products we have a large number of destination countries and markets to build strategies for. This creates issues when it comes to online offerings as it is crucial that any ecommerce site is designed for the market you are selling into. While meeting this need will be challenging, it is possible, however exporters will require additional capital to get it right.

Branding from Zero – building your brand from zero through online ecommerce can be a daunting task. Ecommerce does have potential to drive up awareness faster than through other traditional advertising methods. Utilising social media to create awareness is also a great strategy, particularly Facebook in western cultures and Wechat in China.

One thing New Zealand is good at is trying to sell under a New Zealand Inc. brand. This is great to build trust as we have a good reputation, but as a number of businesses I met with pointed out, it is no longer a competitive advantage. Our 'clean green image' has being matched by many other countries and is no longer ours to have. I was also amazed at the number of individuals and businesses who had never heard of New Zealand and the number of maps we didn't feature on. Our remoteness is a great part of our story, but it also hides us from the main stream. The challenge is to build a global brand that is standalone from New Zealand, but still has that as part of the overall story. By targeting the thin or niche markets, you can create a modern day Coke or Adidas that is highly recognised in your target market. You have to stand out, be different and invest in your brand.

"The brand is pure, clean and healthy but it is hard to differentiate from other countries or even similar products from New Zealand (meat example). You need to move away from having a New Zealand brand as that is just one part of your story and move towards having a Global brand. Move away from a food company to a brand company. Zespri is one company who gets this"

Loren Zhao founder of Fruit day.com discussing brand NZ

Returns policy - Due to our distance to market and often perishable product, having a good returns policy can be difficult for New Zealand businesses. Uncertainty around returns continues to be a major concern for consumers purchasing online compared to in a retail store and this is increased when they are buying across border from a country like New Zealand. The key for New Zealand businesses I believe is to be as transparent as possible, providing as much product information up front through branding and website information. This will manage customer expectations and reduce the likelihood of returns. Businesses selling a more perishable product such as fruit and vegetables may have to factor in a slightly higher wastage rate initially to help build consumer trust and brand. Additional ways to do that is by also providing accessible and responsive contacts for consumer such as live chat in the consumer's native language.

Lack of preferred payment options- This is more an issue for developing Asian economies that are reliant on disruptive payment systems rather than traditional methods of credit or debit card. Implementing these new and exciting options into your offering is crucial to a successful online business. The increase in tourists from many of these countries also provided a domestic payment option in New Zealand which may help local business and build your brand. These tourists then, through word of mouth, will promote your product on return to their homeland.

Distance to Market – This is a major challenge for New Zealand based on our geographical location and one we cannot do much about. By targeting premium consumers in niche markets we increase margins to offset our higher cost of getting product to these markets. Logistics is still an area of the value chain that New Zealand businesses will be forced to partner with a third party provider to ensure their products reach their destination in a safe and timely matter. The positive in this area is that with advancements in technology and innovation as well as saturation of providers of both 'last mile' delivery and cold chain transport, this is only going to become more cost effective and reliable. In our biggest export market of China, increased investment in infrastructure such as air, rail and shipping has made these markets more accessible at a more competitive cost. China now has seven of the world's largest twenty ports in the world. Investment has also increased in areas such as customs and law enforcement to help speed up import and export processes as well as cracking down on corruption. The common trend in developing countries like South East Asia is a move away from state owned logistics companies to more private entities. This has allowed more access to capital and increased efficiency which has fuelled growth. This trend is encouraged by the requirements of the International Monetary Fund and the World Bank. Both organisations require emerging markets to undergo structural adjustment, including privatisation, as a condition of receiving new loans. China is a great example of where privatisation has kick started economic growth.

Recommendations

The following are six key considerations New Zealand food sector leaders need to factor in when looking at utilising an online sales channel. These recommendations will allow us to compete globally with both the street vendors of rural China to the premium imported products from the European Union. It will allow us to target the thin (niche) markets, without exposing us to the volatility that these markets have traditionally had.

Accept foreign forms of payment - NZ companies looking to set up ecommerce sites need to consider the most popular and most accepted local payment options in their target market. Globally this is still credit and debit cards as well as long term credit, but in markets like Asia, consumers prefer to use third party technologies such as Alipay, WeChat pay and Go-pay. Without familiar, trusted payment systems, sellers will lose a large share of customers. Those selling B2B still need to accept these payments as well as offer credit terms to your bigger more trusted customers.

Establish Mobile friendly websites – This is crucial to businesses to get right if you want to have a successful online presence. Businesses I interviewed particularly in the USA, who had failed in ecommerce, highlighted this as one of their main shortfalls. Mobile friendly websites need to focus on the next generation (Gen Z) as they live their whole life fully immersed in Smart Phones and social media. They will also be the main consumer by 2030 and the main business owners by 2050.

Set up 'pop up' stores in major markets – while this will involve collaboration between sectors, we are already seeing this with initiatives like the Primary Collaboration New Zealand (PCNZ) in Shanghai. These landing pads would be creating an experience of NZ with a range of products available for consumers to trial. They are then given QR codes that they can scan and be directed to where they can purchase the products either B2C or B2B. There needs to be collaboration with other sectors such as Tourism New Zealand and create a 'two way' benefit with these pop up stores.

Think B2A sales platforms – ecommerce is not just reserved for B2C selling. Think business to all (B2A) (not to be confused with business to anyone) and the opportunities this presents to New Zealand's Agri-food sector. By thinking B2A and having different platforms suited to different channels a business maximises its potential market. New Zealand exporters already have strong B2B sales channels, so can utilise ecommerce to gain efficiencies in the supply chain, reduce administration costs and encourage repeat purchasing. New Zealand businesses looking to move up the value chain and get closer to the end consumer will find dipping their toes in the B2C space also a good strategy.

Provide excessive information about your products – This will ease customer's doubts and any trust issues as well as protecting your brand in the market. Be as transparent as you can be in a commercial setting as this will create a premium and authentic brand. Don't be shy to embrace new technologies such as Block-Chain. While some of these can be costly to set up, they will provide a platform to gain trust and awareness of your products that money cannot buy.

Leverage the dominant online marketplaces - Developing demand and a customer base without losing too much margin is a major challenge. Successful brands are using the likes of Alibaba/Amazon as a mobile sales channel but not for their whole mobile offering. They use their platforms to connect with those companies customers but only offer selected products. Once a stronger relationship develops, consumers will visit the brands own website and other channels like social media and mobile for a much broader range of products, experience and information.

Conclusion

Witnessing local farmers and street vendors in developing parts of China and South East Asia utilising the latest technology to both accept payment for their products as well as telling their story, was both humbling and eye opening. New Zealand has a greater story to tell and better financial resources available to do it, but I believe we are focussing those resources on traditional methods, rather than utilising the latest technology available. If a humble Chinese market garden can do it, why not the country of New Zealand?

Online selling or E-commerce as it is more commonly known is disrupting traditional supply chains at rates faster than ever seen before. New Zealand must embrace these new sales channels if we are to be successful and achieve our goals of becoming the leading premium food producer in the world. Companies like Fonterra, Tatua, Silver Fern, ANZCO, Zespri, among others all have goals to grow their consumer and food service business and I firmly believe that the key to this is successful online platforms specifically targeting mobile phones for sales and marketing. This is a sentiment shared by the Ministry of Foreign Affairs and Trade (MFAT) who have included ecommerce as a topic for negotiation in the latest China Free Trade Agreement upgrade talks.

The humble mobile phone has not replaced retail or the face to face selling of food, it has just internationalised it and made it more accessible globally with simpler supply chains connecting producers direct to the customer. Businesses such as Alibaba, Tenpay and Amazon are disrupting how consumers interact with retailers and farmer producers and bypassing the traditional banking systems we are so used to.

Those businesses looking to grow are doing so through online mobile digital platforms accessible anywhere, and those that are not putting focus on their digital sales platform and brand are struggling. The key to the success of these businesses is being authentic, transparent and offering impeccable end to end service.

Traditional relationship based sales channels have served New Zealand well in the past. However as we move into the future both business customers and consumers will be made up of millennial and Gen Z individuals who live their whole lives immersed in technology. They no longer value face to face relationships like previous generations and prefer convenience and speed of technology when doing business and consuming products.

Does NZ agri-food sector want to struggle into the next decade or do we want to embrace mobile platforms to grow the value of our sector and get closer to our customers through live branding codes, immersing them virtually into the NZ experience from anywhere in the world. Why can't we be the online supermarket for premium food products to the world?

The future is no longer in our hands; it is in our mobile phones….

> "To prepare for the nearby future, focus on Generation Z (born Mid 1990s to mid-2000s). This next generation of consumers are the I-Brains. They are the first generation that is fully submersed with smart phones and social media. These digital natives will be the leading edge consumers that drive (mobile) disruption. By 2020 the I-brains will represent a large portion of consumers"
>
> Marco Wolters, Global Industry Lead, GFK

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