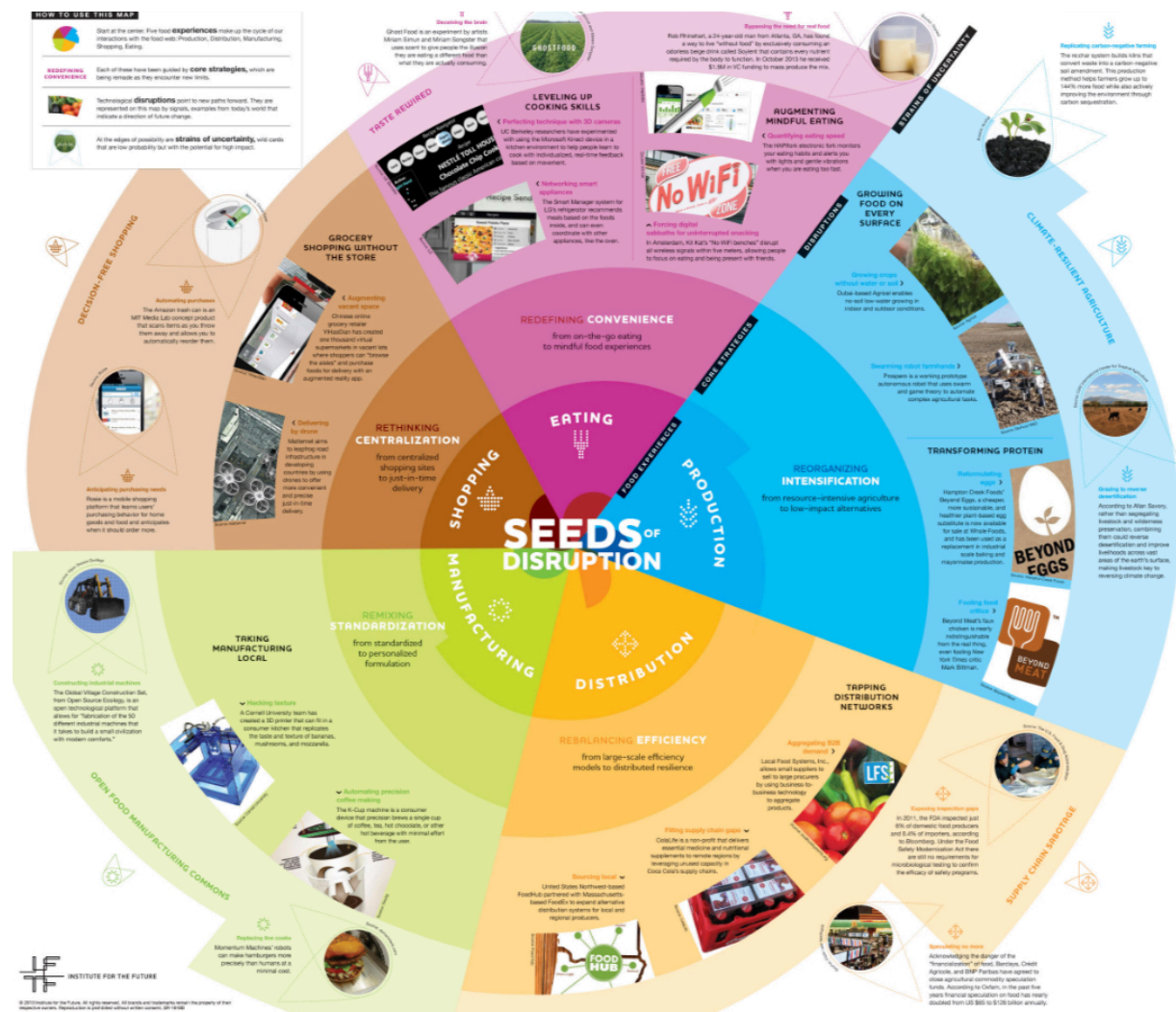


## Kellogg Rural Leadership Programme (#33) Industry Project:

### How technology is disrupting New Zealand agriculture's value chain

St John Craner

June 2016



Source: Image courtesy and copyright of Institute of the Future

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## **Dedications**

This industry project is dedicated to those hard-working New Zealand farmers who at the time of this publication might be looking for new ideas and opportunities to break the constraints of the current supply chain model.

I hope its contents and findings are useful and inspires some to make brave, positive and exciting changes to their individual or group farming operations.

## **Author Contact Details**

I would welcome any industry feedback on the contents of this project and hearing from any farmers or farmer groups who wish to discuss how they extract greater value from their produce using effective marketing strategies.

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## 1. Executive Summary

*"The future is already here. It's just not evenly distributed."*

**William Gibson** (Science Fiction Author)

It makes sense to look at disruptive technology within agriculture when so many other industries have already been disrupted. Music (iTunes, Spotify, Pandora), books (Amazon, UK Book Depository), travel agents (TripAdvisor), transportation (Uber, Tesla), accommodation (AirBnB), entertainment (Netflix), insurance (Trov), recruitment (LinkedIn) or energy (Flick) have all been affected. What all have in common is a lack of physical infrastructure. None of them own stores, factories, hotels, generation sites or shopping outlets. Instead their infrastructure is digital and their domain ends in .com.

This project's literature review, case studies and industry interviews suggest disruption is already alive and well within agriculture's value chain. My prediction is that such disruption will only accelerate as new technologies become more open and affordable making it the norm rather than the exception. New Zealand agriculture is not immune and the message is clear: disrupt your own model before someone else does.

This project's specific focus is on where I believe the greatest value is being lost between farmer and consumer: the retail space. The space that is closest to the consumer and the one facing the most disruption from new players - often those founded or funded by Silicon Valley who already know plenty about disrupting industries. When you have the CEOs of Salesforce.com, Twitter or Disney (Figure 1.1 below) investing in artisan food brands you know your sector is ripe for disruption.

### PUTTING THEIR MONEY (OR TIME) WHERE THEIR MOUTHS ARE

Craft and artisanal food companies are smoking-hot these days and some prominent executives have taken note. They're investing their time or money in the growing number of buzzy startups in the category. For some CEOs, it's a passion project (with edible perks). Others view the move to smaller, more sustainable food production as an investment opportunity—and an ethically sound one to boot. **BY MICHAEL LEV-RAM**

<b>&gt; ROBERT IGER</b> CEO WALTDISNEYCO.	<b>&gt; MARC BENIOFF</b> CEO SALESFORCE.COM	<b>&gt; EVAN WILLIAMS</b> CEO / MEDIUM EX-CEO / TWITTER	<b>&gt; JACK DORSEY</b> CEO / SQUARE EX-CEO / TWITTER	<b>&gt; JONATHAN KAPLAN</b> FOUNDER / PUREDIGITAL (CREATOR OF FLIPCAMERAS)
				
<b>&gt; After sampling ice cream from Brooklyn-based Ample Hills Creamery, Iger cold-called its husband-and-wife founders and eventually offered to mentor them.</b>	<b>&gt; The colorful proselytizer for tech in the cloud contributed to Hampton Creek's most recent round of funding—a \$90 million injection that will help expand its portfolio of vegan mayo and other eggless products.</b>	<b>&gt; Williams is one of many tech founders who invested in Blue Bottle, a Bay Area-based coffee chain that has attracted purists with its intensely flavored offerings and portions brewed individually for each customer.</b>	<b>&gt; Dorsey has spoken about his various diets (veganism once turned his skin orange). More recently, he made a cameo in a video for Unreal, a startup trying to reinvent candy using healthier, more sustainable ingredients.</b>	<b>&gt; After selling his company to Cisco, Kaplan turned to grilled cheese. By year's end, he plans to expand the chain he founded, The Melt (its promise: "100% natural ingredients with names you can pronounce") to 50 locations.</b>

Figure 1.1: The War on Big Food, Fortune Magazine June 2015 (source: Getty Images AP Photo, Iger, Benioff, Dorsey, Williams, Kaplan)

This project's findings conclude the term "value chain" is an oxymoron. Something is wrong when return on assets for producer or processor is so low compared to the same returns a manufacturer or retailer enjoys. Unless our value chain changes, the fear is more family farms will decline in profitability as input costs rise with an inability to pass those costs on to consumers. Worse is the potential scenario where more New Zealand family farms fall to corporate or overseas capital. New Zealand has a long and rich history of farming and forms part of our national identity. Agriculture underpins our global exports and our rural communities are responsible for producing two thirds of our export receipt dollars (1).

This project concludes that we will come full circle seeing farmers re-gain marketing control from their large co-operatives by clustering into smaller, micro farmer producer group brands that come in "underneath" (Christensen 2013) in the same way craft beer brands such as Tuatara, Panhead, Emmersons and Garage Project have disrupted and stolen share and margin from large brewery beer brands (who have had no choice but to buy them knowing they can't beat them). Every farm will have their own marketing plan realising they can no longer abdicate their marketing responsibility to their processors who will continue to struggle and fragment due to a decline in stock units coupled with over-capacity. Some will adapt by becoming more flexible through accepting smaller, more individualised toll processing contracts to defend throughput and maintain infrastructure.

These smaller, local artisan farmer producer groups, along with existing iwi or corporate farming groups, will collectively pull resources together to promote their unique brand story fuelled by their distinct *Terroir* whilst enjoying a direct and unimpeded line of sight to a targeted niche of end consumers who are willing to pay a premium for their produce. Consumers will pay more because they value a deep connection to the food they buy and the people and story behind it such as *Kaitiakitanga*. As Simon Sinek (2) suggests with his Golden Circle Model, these customers are buying the *why* rather than the what or how. Identifying their big why, or noble purpose, will be vital for these farming groups to tell compelling and differentiated brand stories to justify higher prices.

This more direct model will create additional value through capturing efficiencies that come from shorter and more disintermediated value chains. These farmer groups will use established technology and social media platforms to regularly communicate and connect with their customers in a way they never could before creating raving fans of their produce. These brand ambassadors will share their experiences online amplifying product visibility - good and bad.

Despite the common notion that smaller family-owned farms are a declining species, this report challenges that theory and predicts small will be cool in the face of an increasing distrust of big, industrialised food companies by a new generation of more discerning caring consumers who have a healthy preference for quality over quantity.

On the basis of the findings in this report, small and local craft farming brands focussed on their distinct *terroir* and artisan produce will become the new norm and those farming groups that move first will enjoy the spoils most.

## 2. Acknowledgements

Special thanks need to go to the following people who have been generous with their time and assisted me greatly in compiling this project:

Mike Barton QSM - Owner, Taupo Beef

Peter Cullinane - CEO, Lewis Road Creamery

Craig Hickson - CEO, Progressive Meats

Richard Jones - Chief Ideas Officer, Poutama Trust

Prof. Mark Wilson - Faculty of Agribusiness and Commerce, Lincoln University

Steve O'Connor - CEO, Flick Electricity Co.

Ian Proudfoot - Global Head of Agribusiness, KPMG

A special mention must go to Dr Patrick Aldwell for his time and commitment to me, my #33 Kellogg colleagues and the last 32 Kellogg programmes before which can now proudly boast 700 Kellogg alumni that will benefit New Zealand's agricultural industry in years to come.

I would also like to acknowledge strategic partners AGMARDT, Beef + Lamb NZ, Dairy NZ and FMG as well as my employer and colleagues at TRACTA ([www.tracta.co.nz](http://www.tracta.co.nz)) for giving me the time and resources to attend the programme and compile this industry report.

A final mention must go to my patient and supportive wife Maria Chalmers.

Thank you everyone.

### 3. Introduction

New Zealand already has a history of using technology to disrupt value chains. It started on the 15<sup>th</sup> February 1882 when the first refrigerated ship Dunedin set sail from Port Chalmers reaching the United Kingdom 94 days later. In the following five years following this maiden voyage, 172 shipments of frozen meat were sent. Since then technology has accelerated over the decades whether it be rotary sheds, robotic meat plant processing, 3D printing, vertical farms or drone delivery.

One effect of technology in all its forms is to drive greater efficiency by reducing the number of intermediaries within a traditional supply chain. You only have to look at the disruptive changes within the insurance, travel or music industries. Brokers or “middle men” have reduced or disappeared because they weren’t able to convince the paying consumer of their role or value. Technology is a great leveller.

Through the distribution of readily available information, technology is now arming end consumers with an increasing level of knowledge and insight where, as Daniel Pink (3) tells us, it’s more a case of caveat venditor (seller beware) rather than caveat emptor (buyer beware). Booking a holiday can happen easily online with the aid of Trip Advisor reviews to reduce the risk for a consumer choosing a poor hotel or holiday location. The power of the crowd is powerful and people increasingly trust their peers’ recommendations rather than messages from the brand owners themselves. Nielsen Research suggests as much as 92% of people trust message from peers over traditional advertising (4) beating TV or magazine advertising nearly twice over. The world has shifted from a traditional advertising model to a new influencer model where the words of which mouths count.

However, before we can assess technology’s impact or disruption on the value chain we have to define what we mean by the terms “disruption” and “supply chain” first.

Disruption as a marketing term gets a lot of press. It’s the big marketing buzz word right now. Uber and disruption seem to be synonymously linked in many Google searches and often features in conversations about disruption. However, Uber is only disrupting the taxi and transportation sector. It is not being innovative because disruption only happens in an existing market where innovation creates new markets. We need to not confuse the two.

Peter Thiel, founder of PayPal and Facebook offers his own definition of disruption:

“A disruptive technology is one that displaces an established technology and shakes up the industry or a ground-breaking product that creates a completely new industry.”

A clear example that backs this definition is the the personal computer, or PC, replacing the mainframe computers and in turn smartphones such as iPhones and Androids replacing the PC.



## Disruptive Innovations transform complicated, expensive products into simpler and more affordable ones.

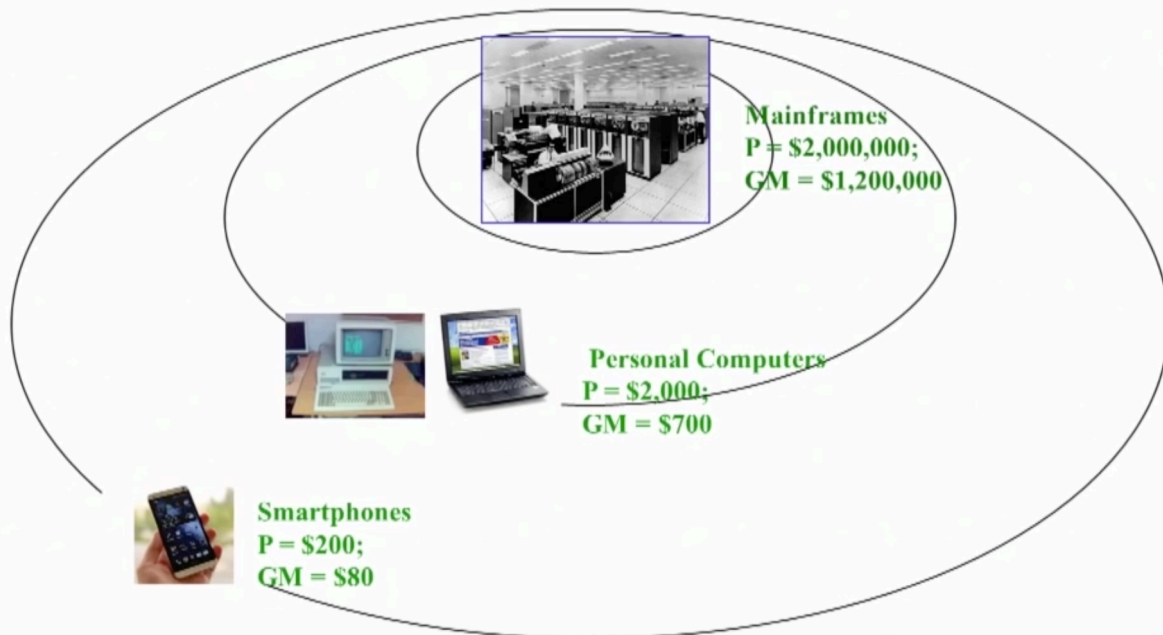


Figure 3.1: Clay Christensen Disruptive Innovation, Oxford University Lecture, 2013

Clay Christensen, regarded as the pioneer of Disruptive Innovation, challenges the concept of disruption and offers a different definition:

*“A **disruptive innovation** is an innovation that creates a new market and value network and eventually disrupts an existing market and value network, displacing established market leaders and alliances.”*

Rather than focussing on disruption, Christensen (5) argues we need to innovate. Christensen makes a case that there are three distinct forms of disruption: **disruptive innovation, sustainable innovation and efficient innovation**. He also suggests the reason most of the world’s developing economies are in decline or stagnate is because there is a heavy reliance on efficient innovation which only produces the same products to the same customers at a lower price (what Christensen refers to as the Walmart model). Efficient innovation he argues are the reason why each recession becomes longer in its recovery because there isn’t sufficient innovation out there to create more jobs. He cites Japan as an example of a country renowned for its innovation in the 1980s with the likes of Toyota, Atari, Sony and Nintendo. This country now has been overtaken by over countries now innovating faster and more disruptively (including the US) whilst the Japanese economy stagnates and stalls.



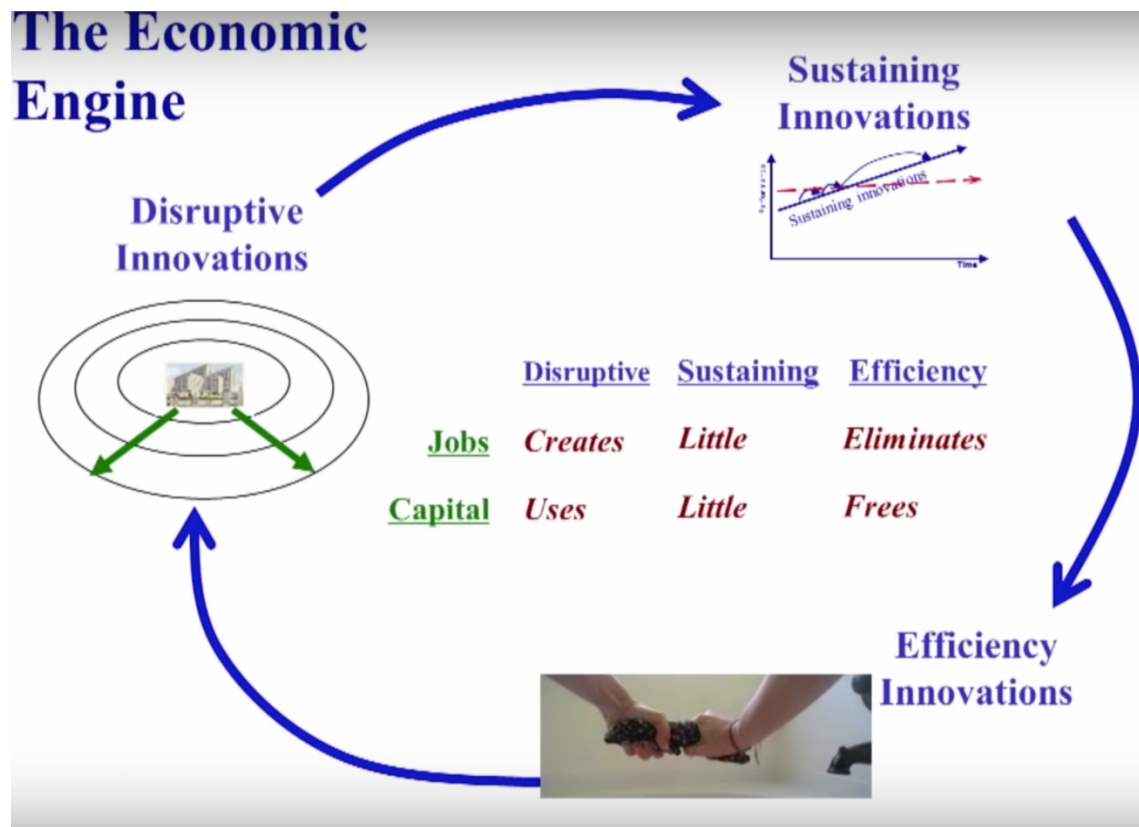


Figure 3.2: Clay Christensen Disruptive Innovation Lecture, Oxford University 2013

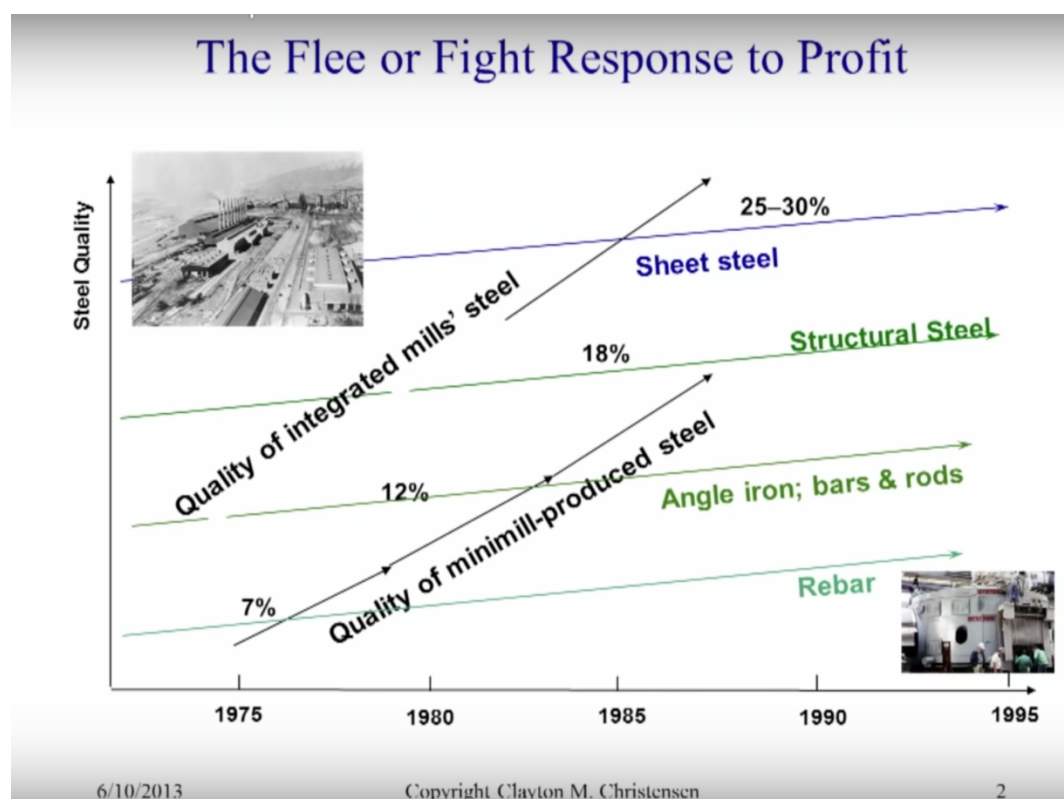


Figure 3.3: Clay Christensen Disruptive Innovation Lecture, Oxford University 2013

In their "pursuit for profit" Christensen argues companies will abandon markets where they

are challenged by new entrants that are happy with accepting lower margins at the bottom of the market. He uses the example of the steel industry (Figure 3.3) where mini-mill steel producers entered at the bottom taking the lower margin rebar market which then became a “dog eat dog marketplace”. The integrated steel mills were only too happy to leave such a competitive and low margin market and instead focus on where better margins (12%) could be enjoyed further up in the structural steel market. Then when the mini-mills worked their way up into the structural steel market the same thing happened. The integrated steel mills left that market as margins declined due to increased competition and focussed their attention on the more profitable sheet steel market where better margins could be had. The mini mills then attacked this market and the rest is history. The same scenario played out with the US car industry where Toyota in the 1970s started out at the bottom of the car market making cheap Coronas. Over the past 30 years they have successfully worked their way up the market capturing greater margin with the Corolla, Camry, Prius, Highlander and Prado models. Today they also compete in the higher margin markets with their Lexus brand fighting BMW, Audi, Volkswagen and Mercedes.

As Christensen cautiously reminds us, it pays to keep an eye on the bottom as disruptors rarely start at the top:

*“People in pursuit of profit have to go up...they come in at the bottom so the giant is motivated to flee rather than attack.”*

In terms of defining the value chain there are many theoretical frameworks on offer but the one that made the most sense to me was from Ian Proudfoot who heads up Global Agriculture for multi-national consulting firm KMPG:

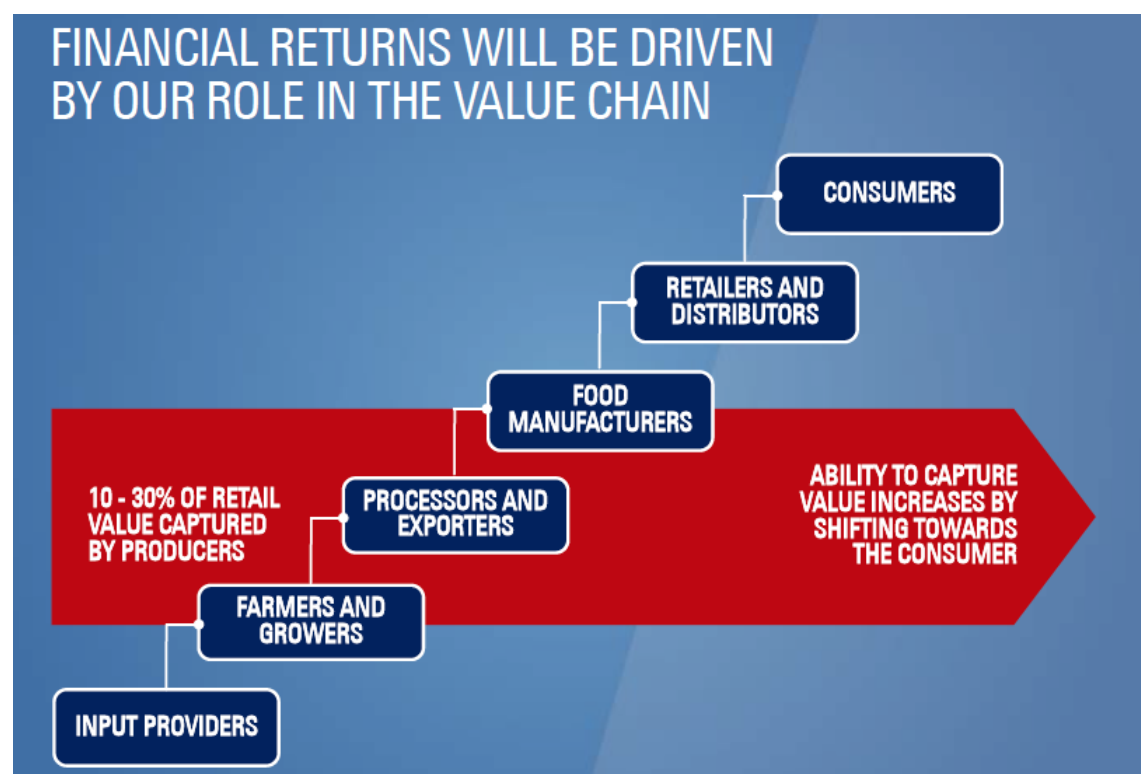


Figure 3.4: Proudfoot I, Presentation to Kellogg Rural leadership Programme April 2016

In his presentation, he makes a compelling case suggesting the closer you get to the consumer the more likely those parties have of capturing more value. In the current value chain this is the manufacturers and retailers.

Furthermore, in his AgriPulse column (6) Proudfoot goes further:

*“To my mind it presents the industry with a great opportunity. The work we have done on the value chain indicates that the majority of value is captured by the organisation that has the closest relationship with the consumer. To date this has been the supermarket, but as premium consumers start to optimise their buying the opportunity for suppliers anywhere in the world to build direct links to premium consumers grows, creating opportunities to secure more of the value our products generate than ever before.”*

Petr Thiel, co-founder of Facebook, Space X, Tesla and co-founder of PayPal in his book *Zero to One* argues that disruption is the most over-hyped word in Silicon Valley and that people have become obsessed with it. Maybe he’s right and that Christensen articulates it better when he describes his concept of disruptive innovation.

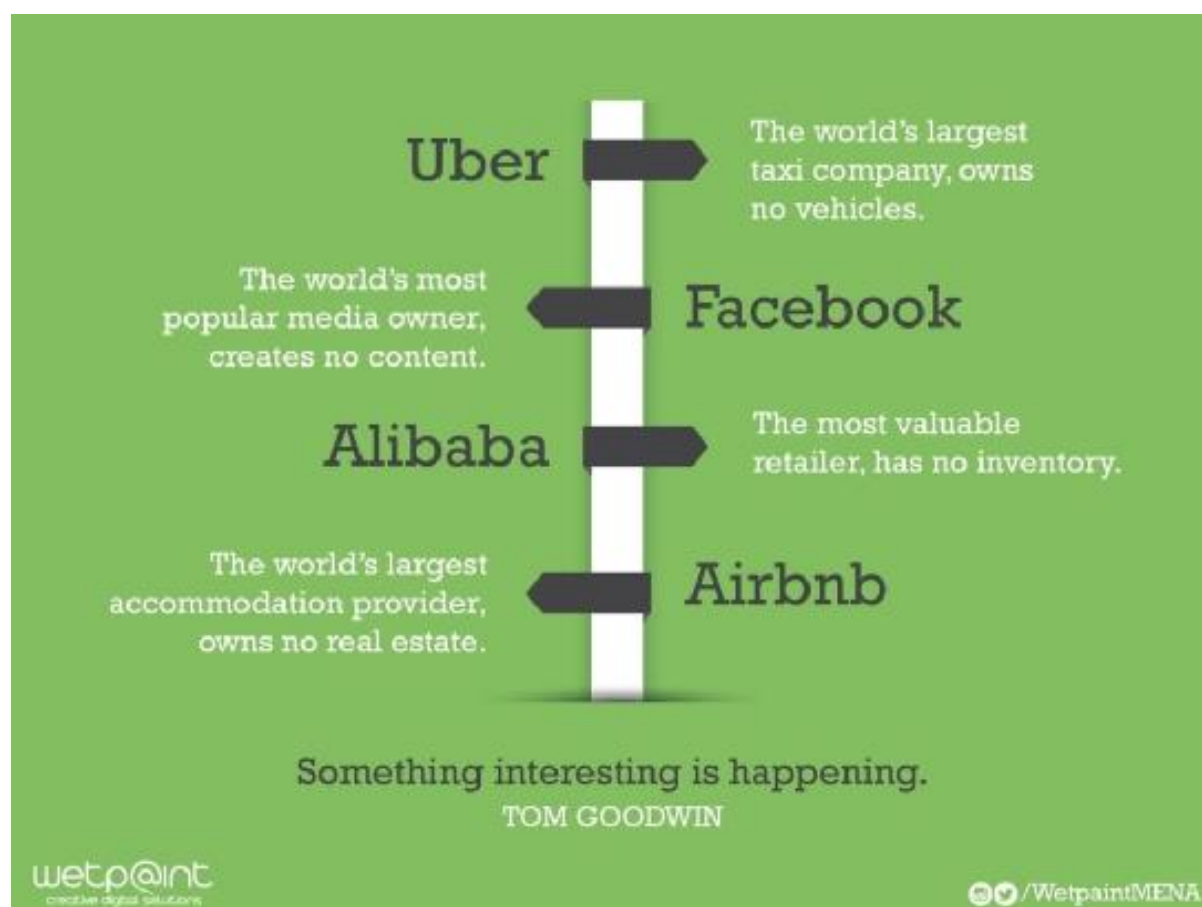


Figure 3.5: Source: Image courtesy of Wetpaint MENA, April 2015 (via Twitter)

The likes of Uber and Airbnb are held up by some as disruption heroes who are widely celebrated for their smarts and technology to challenge and compete with established and traditional players wedded to an old business model. However, Christensen says they haven't disrupted because they still work and compete within the same category. Yet what these disruptors do have in common is that none of them own any infrastructure unlike their traditional foes which gives them immense flexibility in terms of freed up capital and marketing power to offer greater value to their customers through enhanced efficiencies and seamless customer experiences.

Adoption of new technology is speeding up too.

Most marketers will be familiar with the Everett Rogers Diffusion of Innovation model. The irony is that this model was based on a 1960s Iowa farmers buying hybrid seed corn (remembering it took these same farmers 13 years to adopt the new corn).

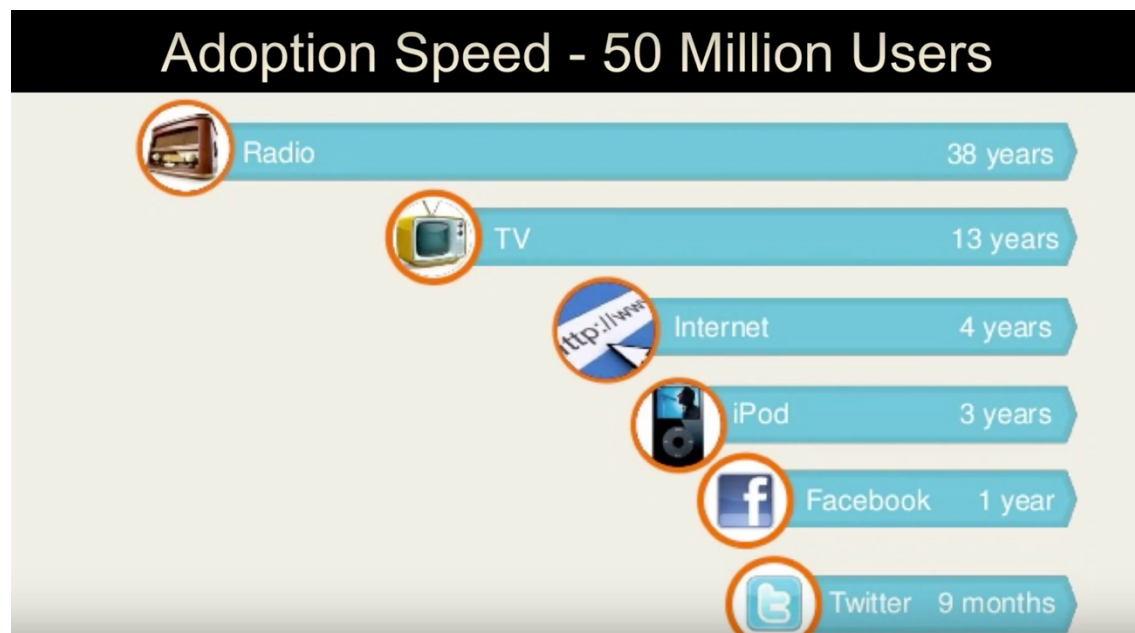


Figure 3.6: Frey T, TruTest Beyond the Line of Sight Event, November 2015

In his book *Crossing the Chasm*, Moore (7) suggests that the 2.5% innovators are “enthusiasts” (Figure 3.7) who because of their financial position and standing are happy to experiment even when new models are in beta. They’ll forgive you for a few bugs or delays and it’s also cool for them to try and experiment with new ideas and technology. But for the early majority (or pragmatists), where 34% of the real market sits, they have more at stake such as lower income levels or debt and can’t afford to take the same risk. They want people to try it out before them. Moore argues a new product must prove it provides a return greater than its expense, even more so for the late majority (or conservatives) who believe more in tradition than progress. At 34% they still represent a big majority of the market but will be the hardest to crack because they’re cost conscious and resistant to change unless it’s utterly proven. As for laggards (or skeptics), they block rather than buy, so Moore suggests you’ll be wasting time there.

That's why you see the innovators and early adopters either queuing outside an Apple store for the latest iPhone or new urban families climbing into My Food Bag. However, cracking that tipping point can be a hurdle for many companies because often they focus incorrectly on the size of the market rather than focus on size of the influence which they can then leverage. Lessons can be learnt.

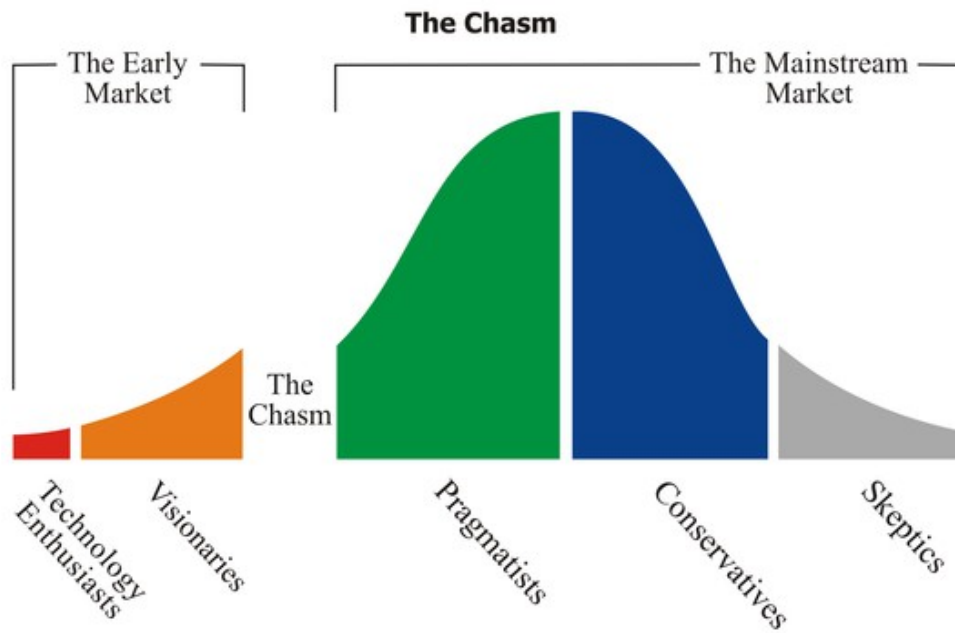


Figure 3.7: Moore G, *Crossing the Chasm*, Collins Business Books (2006)

#### 4. Aims and Objectives

This project's aim is a study and examination into the disruptive effects of technology on the New Zealand agricultural supply chain using real life case studies, rather than theory.

It also tries to identify where in the supply chain the most value is being lost so more value can be re-captured by farmer or growers.

The question is: **value chain or chain round our neck?**

The answer depends on where you're sitting. For the majority of farmers it will be the latter. For manufacturers and retailers it is the former.

What this project argues for and suggests is a need for a re-distribution of value and for change.



A literature review into this project's theme provided a wide range of articles, books and publications discussing how the value chain across many different sectors is being disrupted from academics, research institutions and futurists. From this, I narrowed my search to focus specifically on the retail part of the value chain and where disruption was occurring and from whom.

Keit suggests that we are “hitting limits with our core strategies” when it comes to the sectors within our value chain, namely production, distribution, manufacturing, shopping and eating. He covers many live case studies including Hampton Creek Foods which was the first company to produce a plant based egg protein which food critics admired.

[illegible]

**KELLOGG**  
**Rural Leadership**

## **5.2 Steve Hoover and Lawrence Lee, Disruptive Technologies & the future of Making Things, Research-Technology Management (2015)**

Hooper and Lee argue that new technologies unleash two powerful forces on an industry: democratisation and disintermediation. They use the examples of the big printing presses which held up the subscriptions and readership of the likes of the New York Times and The Wall Street Journal. Nowadays Wordpress dominates with 4 billion page views a month. Citizen journalism is having its effect too. The Khan Academy is threatening to disintermediate large University educational providers by democratising education for all but without the bricks and mortar.

Hooper & Lee conclude by making a case that new technologies will enable millions of new people to be their own creators in a vast new network value.

## **5.3 The Rise of the Food Renegades, Despian D, IFT (Institute of Food Technologies), February (2016)**

Despian discusses how the the equivalent of \$US18billion in market share has moved from mass food brands to smaller rivals since 2009 and suggests the main reason for this being the rise of the millenials (also known as Gen Y).

*“Mintel (2015a) indicates that 43% of Millenials do not trust large food manufacturers. Similarly nearly three quarters (74%) of Millenials want food companies to be more transparent about their products. With growing distrust and a greater desire for transparency from food manufacturers, Millenials want brands to form a genuine authentic connection with them.”*

Instead of the Titanic, these new food disruptors are more like the Sea Shepherd making little snatch and run raids on Japanese whaling trawlers. As Christensen says they get a foothold by “coming in from underneath” and then move up the margin ladder in the pursuit of profit.

As Christensen reminds us, disruptors rarely come in from the top. It’s from the bottom where they attack which is where they are less likely to be detected by incumbents. This might explain why the likes of Kodak, Nokia, Blackberry and Blockbuster didn’t see the skirmishes coming.

## **5.4 The War on Big Food, Kowitt B, Fortune Magazine, June 2015**

In her article, Kowitt outlines the meteoric rise in smaller food brands and the revenue they are stealing from the traditional big food brands like Campbell (Figure 5.2) or Great Western Foods. It estimates that the \$US1Trillion annual retail business market is close to a tipping point. Campbell Foods, famous for their soup, bought Bolthouse Farms for \$US1.5 billion in 2012 and then in the next year bought Plum Organics, makers of baby food, for \$US249 million when it only had \$US90 million in sales. This are not small acquisitions although they are small in comparison to the parent companies that acquired them. These big food

companies bought these smaller niche food brands for what they stood for and how they could help re-shape their big industrial food brands. They offered brand equity and provenance that their own food brands didn't have again proving the adage "if you can't beat 'em, buy 'em".



Figure 5.2: Courtesy of Campbell Foods Group & Andy Warhol Art Institute USA

"Major packaged food companies lost \$4billion in market share alone as shoppers swerved to fresh and organic alternatives..." Can the supermarket giants win you back it asks.

"Analysis by Moskow found that the top 25 US food and beverage companies have lost an equivalent of \$US18Billion in market share since 2009. I would like to think of them like melting icebergs...every year they become a little less relevant...big food is starting to look like the underdog."

To put it in context, \$US18Billion in market lost is 18% out of a \$US1Trillion food and beverage market in the US.

The report goes on to describe the concept of the "the perimeter" which is the outer ring of the supermarket where fresh foods are stocked. They go on to predict this is where the big growth is. And I agree the perimeter is where competition will come from, grow and erode supermarket share. In the case of New Zealand these perimeter players are the likes of Nosh, Farro or Moore Wilsons. People are increasingly enjoying a more local and personal shopping experience that offers a closer to home and higher quality story.

Ironically, it talks about the method of processing our food which stems from ancient times using salting and curing to ensure the food we ate didn't make us sick. Yet today the use of industrialised ingredients and processing makes consumers fear that processed food is in itself making us sick. A recent 2014 Bernstein survey stated 50% of shoppers said they distrust the food system: *"The pendulum has definitely shifted in their minds. They have more and more questions about why this bread lasts 25 days without going stale."*

Artificial colourings and preservatives don't conjure up natural whole food connotations. It hardly makes us salivate or gravitate towards such descriptors either.

The other concept the article put forward was the idea of the "barn on the package". In the same way commentators have accused big companies like BP and Exxon Mobil of "green washing", food companies were using simplistic, cosmetic cues to try and reassure consumers of their wholesome, natural credentials. These companies know they have to go deeper and substantiate such claims because marketing veneer is tracing paper thin and educated and discerning customers not only see through it, they'll poke holes through it and then post it very publicly to all their network on social media. This is a reminder to us all to recognise there is no longer anywhere to hide for brands that don't have integrity.

### 5.5 Bradley C & O'Toole C, An Incumbents Guide to Disruption, McKinsey (2016)

In their recent article McKinsey (8) authors Bradley and O'Toole share a very poignant quote from Reed Hastings, CEO of Netflix:

***"Companies rarely die from moving too fast, they frequently die from moving too slowly."***

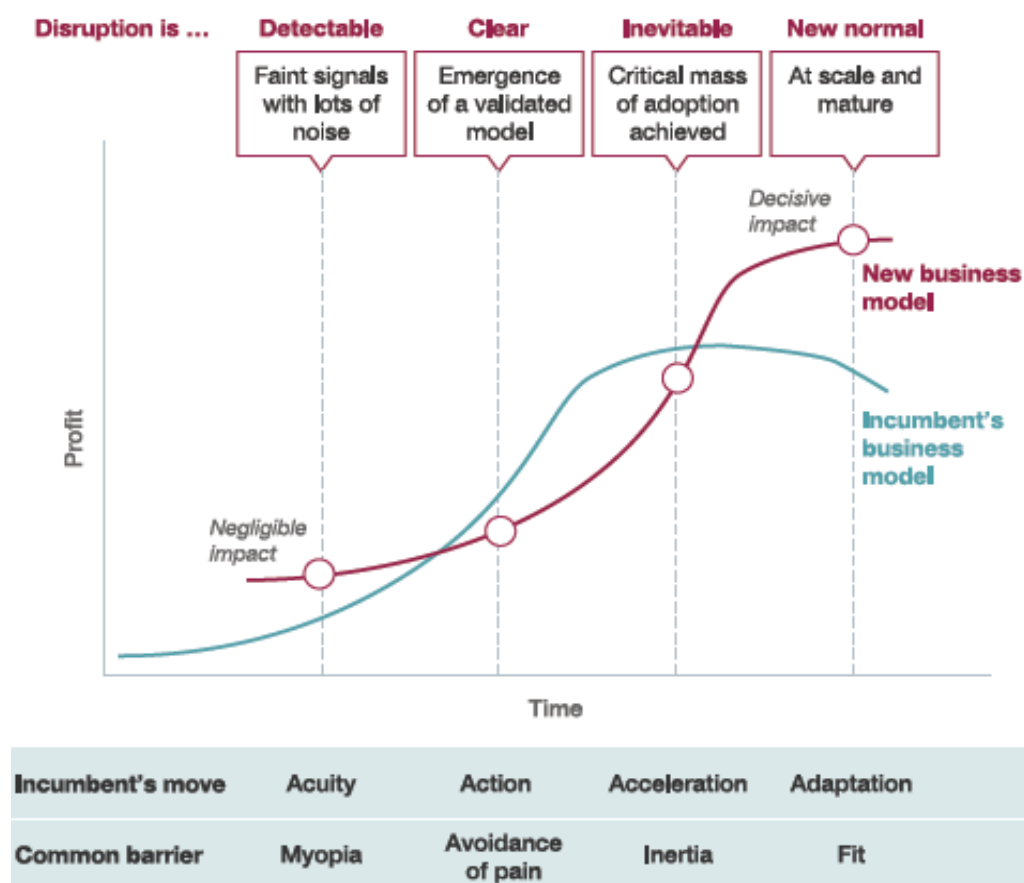


Figure 5.3: McKinsey & Company, An Incumbents Guide to Disruption, 2016

Netflix made a very brave decision back in 2011 when it shifted from its core DVD delivery service to online streaming. It's share price dropped by 80%. As Bradley and O'Toole argue there are few Boards, CEOs or investors that could handle, let alone approve, that kind of business model move. They suggest:

"...the vague longer-term threat that doesn't seem as dangerous as the immediate hardship...after all incumbents have existing revenue streams to protect, start ups only have upside to capture."

+++

In summary, common themes emerge from the literature review:

- disruption starts small and from underneath
- incumbents often can't detect or see these new disruptors or don't want to see it because they are committed to an existing infrastructure and revenue model (also known as 'The Innovators Dilemma')
- big industrialised food companies are not trusted by the new generation of consumers
- core strategies are reaching their use by date with a new rulebook being required

This review demonstrates the increasing threat of smaller, more artisan food and beverage brands taking market share from big, industrialised food companies. These bigger companies then have no other choice than to buy these smaller companies in the hope of being able to leverage this new-found brand equity. All of these smaller companies have started as Christensen states from coming in underneath at the bottom often undetected in the early days.

Finally, Christensen reminds us poignantly again of the concept of the **"Innovator's Dilemma whereby incumbent companies fail to look for new ways of serving their customers in the fear of hurting their core business."**

New Zealand Agriculture would be wise to take note of the disruptive forces and players they have witnessed in other sectors and the speed in which disruption is happening. Some commentators argue we are about to witness rapid technological changes and a rate of adoption that we've never seen before.

Time we and our business strategies prepared for that.

## 6. Methodology

To support my literature review, I undertook a series of 1:1 qualitative interviews across a range of industry leaders both inside and out of the New Zealand agricultural sector (the Discussion Guide for these interviews can be found in the Appendices section).

My focus was on qualitative research instead of quantitative because I was more interested in unpicking the why (qualitative) as opposed to the what (quantitative). I also felt I wouldn't get deep enough insights from a quantitative survey which can sometimes result in survey fatigue without the necessary depth of insights and drivers that so often sit behind such responses.

I also explored real life "farm to fridge" case studies to see who was disrupting traditional models and to what effect. There are too many to feature here in this project including overseas examples like Goodeggs.com, Hampton Creek Foods and OurHarvest.com or players like our very own Ooooby.org closer to home.

Instead I have focussed on four companies or new business models which are discussed and critiqued below.



## **7. Results/Analysis**

### **7.1 Interview with Mike Barton, Taupo Beef**

Mike Barton and his wife Sharon started Taupo Beef after 2007 legislation confirmed a set Nitrogen (N) leaching cap on their farm property. It was a simple choice because they had no other option than to drive value rather than volume because stock intensification and production had been capped.

Mike challenged the self-serving concept of disruption and preferred to “generate more value rather than capture it” so that all facets of the value chain could share in that value creation. Taupo Beef commands approximately 20-30% more premium at the retail end and only until recently have he and his team started to use two wholesalers for the Food Service & Hospitality Industries and Retail respectively.

When asked about why he hadn’t gone direct to consumer using web and online channels he suggested that it was very hard for this to work at scale especially for the export market (where 80% of all red meat ends up). He did however agree that the domestic market was better suited for a direct model but there were challenges in scale and year round demand because of climatic events, drought or de-stocking.

As egalitarian and noble as it sounds, he and his supporting farmer producers are still facing a work in progress to enjoy an acceptable return on investment for all the hard work and system changes they have implemented to comply with the strict water standards, being antibiotic and hormone free and using only on-farm feed. I suggested that perhaps he was subsidising the rest of the value chain and didn’t he expect the meat processors to be the pioneers of brand and marketing.

Mike and his team started supplying hotels in the Taupo region convinced that the consuming public also had a “social responsibility” to share and pay a premium for – rather than the burden all fall on the shoulders of farmers. They also purposely started out deciding they would be the most expensive item on the menu and this conviction has been well rewarded with Taupo Beef outselling all other items 4:1.

Mike believes this concept of broadened social responsibility will take 2 generations to take effect. I wish him all the very best.

### **7.2 Interview with Richard Jones, Chief Ideas Officer, Poutama Trust**

I came across Richard at a Mobile Tech Conference in Rotorua in early 2016 when he announced that he and his Trust were in planning mode to build a small niche multi-species dryer in Kawerau focussed on high value sheep, goat and dairy products – in my view visionary. It caught my attention. This project is currently at market validation stage having passed IRR feasibility studies.

The Trust's dryers would be small batch volume using 2 x 750 kg dryers "versus the 8 Tonne dryers that the big boys have". The product mix would be cow milk, organic cow milk, sheep and goat milk. The dryer would also have greener credentials by running on geo-thermal locally produced energy which would lead to an even deeper brand story and point of difference.

When I asked Richard about who he felt was doing disruption well within New Zealand agriculture he mentioned the likes of First Light Foods, Tatua, GreenLea Meats and the Dairy Goat Co-Operative.

Richard had earlier in the year been to China with a Maori delegation and said "I don't think New Zealand has grasped how fast technology is moving and being used by our overseas markets. Everyone is using a smartphone and our biggest challenge will be having the technology to meet and keep up with these new consumer's demands. We will need the right online platforms to engage with these guys."

Richard believes the best way to get change happening is to take the farmer into the market so they can *"get their heads round it...seeing is believing."*

When asked what advice he would have for New Zealand farmers his response was simple:

*"Farmers need to stop thinking of themselves as farmers and start thinking of themselves as food producers."*

Poutama Trust should be congratulated for their visionary thinking and I, like others, look forward to watching their progress and wish them the very best of luck.

### **7.3 Interview with Craig Hickson, CEO, Progressive Meats ([www.ovation.co.nz](http://www.ovation.co.nz))**

Craig is known to many as a visionary leader in the red meat sector and has the awards and accolades to back it up (including 2012 Federated Farmers Agribusiness Person of the Year Awards and more recently EY Entrepreneur of the Year 2015).

I was fortunate enough to be able to interview Craig on a plane heading back to Hawke's Bay after Phase 3 of my Kellogg Programme (where later that same evening he picked up the Hastings District Council Industry Leader of the Year award at the Hawke's Bay Farmer of the Year Awards). I asked him about his views on disruption within the value chain and he quickly challenged me on what part of the value chain I was focussing on and what sector. Naturally we decided to focus on the red meat sector.

The main theme of his discussion was it is hard to scale and provide year round supply on an export basis because of natural biological system on which the red meat sector runs (which also happens to be our competitive advantage).

Craig also discussed the commercially challenging nature of single delivery "sale parcels" reduces when sent to households whilst the freight cost increases on a per Kg basis which

could be difficult to accommodate within existing retail margins. For export, the distance from market was a significant challenge as the goods had to cover this and can involve expensive storage costs.

Craig cited MyFoodBag and outlined the rise of meal solutions in terms of time poor families, convenience, less food wastage along with the limitations of perishable food like red meat. He also suggested that “NZ Inc” nowadays was no longer compelling enough to push margins higher in overseas markets and that in order to capture additional value we needed to go deeper by offering provincial or district brands much like the French do with their wine regions ([www.ovation.co.nz](http://www.ovation.co.nz)). This was enlightening.

Although Craig could see and accept disruption happening, my outtake from our discussion was that he was still wedded to the processor model which was understandable because of his commercial investments. He has significant infrastructure and throughput to defend which isn’t dissimilar to the other 17 processors across the country. Perhaps like them he might not want to believe disruption will come from much, less detectable smaller scale players who will start from bottom as Clay Christensen (2013) points out. To his credit, his challenge back as with all disruptive models was that AirBnB will still need houses and cleaners and Uber will still need cars and drivers. The red meat sector will still need processors. Craig acknowledged they will need to an active participant and a service provider and encouraged new disruptive forces to challenge “gate keeper supermarkets” and their current negotiating power.

#### **7.4 Interview with Peter Cullinane CEO Lewis Road Creamery**

Peter is well-known and respected in the advertising world as former CEO of Saatchis, Assignment and many high profile Directorships including SkyCity and NZME. Peter is now involved in Lewis Road Creamery and a big fan and fundamental believer in quality over quantity who feels the way we market our dairy produce currently does it a great disservice.

When asked, he felt the biggest issues facing New Zealand agriculture’s value chain today were the same issues we faced back in 1882 when the first refrigerated vessel made its way out of Port Chalmers in Dunedin:

*“The tools then of commodity, pricing, export and technology are the same tools we are using over 130 years later”.*

He argued that our value chain model is trading-led rather than consumer-led with the two being diagrammatically opposed.

He also reminded me when we look at dairy now, how we need to only look back at the wine industry in the 1980s Muldoon era when wine makers we were incentivised to pull up vines in the face of an enormous wine glut. The wine industry since then has come a long way and commands a high premium across many continents and markets. He suggested the future of Ag is in value-added brands rather than products.

When asked what advice he'd give to a New Zealand farmer and why his answer was immediate:

*"Prepare for the ability to produce high quality produce from the land you have. Look at organics too. Pay close attention to soil, animal welfare and animal health treatments too. Get used to quality rather than quantity".*

Peter also laid a challenge to farmers and industry that seem to be focussed on high volume commodity. It will be hard habit to change when the value chain is so geared towards traded commodities rather than consumer-centric value add food brands.

Time will tell if we can change our trading commodity.

## **7.5 Interview with Steve O'Connor CEO Flick Electric Co.**

I felt it was time to make sure we checked in with leaders of disruption outside industry and who better to talk to than Steve and his team who have been disrupting the way consumers buy and use energy (and winning Consumer NZ Most Recommended Energy Retailer of the Year 2016).

Steve, a self confessed digital data geek, founded Flick Electric Co with 5 others last year after a decent stint at Meridian Energy failing to nail it as an "intrapreneur". He started our interview off by talking about the concept of "content" and that content can be many things e.g. a ride (Uber), getting energy (Flick) or a roof over your head (Airbnb). He challenged us to not think about content in a physical form but flip it on its head as digital thinking does.

In terms of disruption he felt technology was a massive enabler by joining seller to buyer through choice and control – two very important levers in what he calls the "new world". He argued the new world will offer consumer abundant choice and traditional industries who run tightly held and highly controlled supply chains better be ready for this disruption. We talked about the similarities between the oligarchs of the energy sector (5 currently) and the supermarkets (even lower at 2). He argued where this was happening companies get very comfortable and fail to innovate. Digital disruptions are "unwinding" these tight and closed supply chains. Where once there were only five major energy retailers there are now over 14 companies with some predicting that amount to double or triple over the next 10 years.

When I asked him about what advice he would give to New Zealand farmers his answer was simple:

*"Don't forget about your customer. Put the customer back in the centre of your business and utilise technology to understand and meet their needs. If you're not planning for that, it will become harder for you to compete."*

Steve and his Flick team are true disruptors that took on an old and tired sector. They wanted to give consumers access to a true market. New Zealand agriculture could learn a lot from types like these because the content (food) and channel (technology) is already there.

### **7.6 Case Study: Crowd Carnivore ([www.crowdcarnivore.com.au](http://www.crowdcarnivore.com.au))**

Crowd Carnivore is the brainchild of two Ozzie blokes called Zachary Sequoia and Dan Tarasenko who set up the business using crowd funding in April 2016. Since its inception the team have 1000 members across NSW and Victoria offering approx. 12kg red meat boxes priced from \$AU220- \$AU380. They started with beef and now offer lamb and are in the process of offering pork, poultry and buffalo meat. They can see that consumers want to be educated, seek a closer connection with farmers and enjoy access to a wider range of cuts.

The concept is simple. A crowd of people, friends or family group together to make pledges to buy a grass fed steer or lamb which if successful is then distributed free of charge ensuring money stays in the pockets of local farmers and butchers – and not in the cash registers of the two big Ozzy supermarkets.

Their website is simple and easy to use with a heavy emphasis on the profiles of their supplying beef and lamb farmers. They also have strict criteria on the farmers they select as suppliers including records of biodiversity, increasing organic matter in soil fully grass fed and finished animals.

Based on this new exciting model, the power of the crowd and the democratisation of food supply and distribution seems a closer reality.

### **7.7 Case Study: Farmigo ([www.farmigo.com](http://www.farmigo.com))**

Farmigo is a New York based company that is all about connecting farmers with consumers with a healthy scepticism of the “industrial food system”. Farmigo started as an online farm software business that assisted farms. Farmigo works on a farm to neighbourhood model where groups of neighbours order their individual food and then collect it together from a Farmigo organiser who acts like a local distribution hub and member connector within that particular neighbourhood. Organisers can get big discounts much like the traditional Tupperware model. The interesting thing about Farmigo is the wealth split with 60% of every \$1 going to farmers (far more than the industry standard of 20%), 10% to the organiser and 30% to Farmigo. Farmigo CEO Benzi Ronen has the big supermarkets in his sights:

*“We call it the unbundling of the supermarket. Over the past 100 years, supermarkets have been moving in the direction of one-stop shopping. We wound up with Walmart. What’s happening now is that your phone is your one-stop shop. You can buy and optimize by category. You can buy perishables and have them delivered to your door. The biggest threat to Walmart is Amazon. Now with your phone you can buy once a week from Farmigo.”*

Farmigo raised \$10m venture funding with it now representing 40% of some farm suppliers income. It now feeds 15,000 families in 300 locations. They have 60 employees after only having 200 a year earlier. They even deliver to the likes of Google, Yahoo and Etsy.

They are even replacing the traditional school cookies fundraising methodology:  
<http://www.fastcompany.com/3036171/second-shift/move-over-bake-sales-the-new-school-fundraising-model-sells-local-organic-groce>

### 7.8 Case Study: Robbins Island Wagyu ([www.robbinsislandwagyu.com.au](http://www.robbinsislandwagyu.com.au))

If there was a case study on the power of brand story telling it would be these guys. The opening narrative about why they are excellent goes like this:

*“The world's cleanest air: Robbins Island is situated on the North Western tip of Tasmania. The prized cattle are grazed naturally and sustainably on lush pastures without supplements or hormones. Throughout the year, bands of local horsemen swim the cattle through saltwater channels at low tide to move them peacefully between grazing areas. The cool climate, salt air, and pristine environment are ideal for naturally raising some of the most tender and best tasting beef in the world. Coordinates - 40.693°S 144.918°E”*

Their brand story is classic example of how you should focus on your big why. Simon Sinek in his Ted Talk (9) ends with a powerful statement:

***“People don’t buy what you do, they buy why you do it.”***

Robbins Island Wagyu focus on specialist butchers in Tasmania and Victoria with Wagyu priced at around \$AU100/Kg. They are currently split grass fed from grain fed Wagyu. They leverage their natural assets to make a compelling story for chefs and customers.

Story telling, much like disruption, is an often over-hyped marketing term. However, like all things it comes down to execution. I have a preference and bias for the concept of truth telling as opposed to story telling because misfabrication has given marketing and branding such a bad name. When companies like Robbins Island Wagyu promote their natural strengths like clean air, pristine conditions, salt water – they are very hard to beat. They have carved out a unique and niche story that resides in the market’s mind. It has a great mouth feel.

I believe we are likely to see many more like these guys go out on their own and back themselves.



## 7.9: Case Study: National Trust UK Wimpole Farm Initiative: MyFarm

I've included this one because it is lateral. Based on "Farmville for real", the National Trust launched a new farming model with the aim of teaching and re-connecting consumers with the origins of their food. Fiona Reynolds, Director General of the National Trust said:

*"We think this is quite a brave experiment. This is about re-connecting people to where their food comes from."*

The project is an online experiment launched back in 2011 where for a UK POUND 30 fee consumers can join and dictate what crops to sow and which animals to breed. The fee also gives them a family ticket to Wimpole Farm which is in the process of being converted into an organic operation.

What we should admire about this project is not only its bravery but its level of social experimentation. It is another example of how we can get farms and farmers to connect with consumers at a deeper level and bridge the urban rural divide.

Richard Morris, Wimpole Farm Manager outlines this:

*"Each decision will be an opportunity for people to learn a little bit more. If they decide to grow wheat in one field, we will then need to work out if it should be bread wheat or biscuit making wheat or animal feed wheat. What is the soil type, what is the climate?"*

The National Trust have to be congratulated for this bold initiative. It's certainly disruptive and perhaps paves the way for suggestions towards co-ownership or leasing within the "farm to fork" model.

When reflecting and summarising on these case studies and interviews common themes come through:

- the power of the crowd or crowd sourced platforms
- the use of open and transparent supply chains (vs. closed and controlled ones) that focus on a guaranteed and set return for the farmer or grower
- the focus on quality over quantity and a challenge to our productive “big is best” addiction
- the marketing advantage of being small or artisan and the brand story you can tell
- the need for growers to take responsibility by aligning farming systems to end consumers
- the by-passing of traditional retailers like supermarkets and more direct models
- the fact that we still have a bias for volume and a commodity mind set which we need to break if we are to command a premium for our produce (like the wine industry have successfully done after transitioning through some pain in the wine glut of the 1980s)

All case studies and interviewees strongly argue that we need to focus more on our end consumer. Yet in the majority, we still think and act like commodity traders focussed on price and volume doing our natural produce, and our producers, a great disservice. This isn't a new concept. However, these case studies and successful disruptive companies are living proof that there are other working models out there connecting with end consumers using less intermediaries and extracting a premium or making better marginal returns.

We have options. We now need to decide if we have the courage to pursue them.

## 8. Discussion

So what does this all mean? What are the themes coming out? What are the implications for New Zealand farmers?

What all case studies examples have in common is that almost all don't distribute their produce through traditional supermarkets. They are all unconventional in their distribution model and either sell direct to the customers or via boutique butchers. Each of them is very aware of who is their end customer and the story they want to see, hear and experience. They are discerning on distribution. They don't do mass. They also don't own any plant or processing equipment that they have to defend as infrastructure with throughput and procurement.

A growing minority of "caring consumers" we already know are conditioned to buying direct because they want local, fresh food and because they want to make a deep and real connection with the grower. Farmers markets are becoming increasingly popular and well-attended. However, will farmer market growth hit a natural ceiling as the Rogers Everett adoption on innovation suggests? There are only so many willing consumers out there who are happy to wait for a whole week and make a special trip to buy produce. Many more crave better, more direct and convenient shopping experiences with organised meal solutions.

Supermarkets will no doubt be increasingly threatened by these new models. Online shopping and click and collect models are a new move but not a new model. It might just be a case of time where more and more farm producer groups club together to deliver direct to a buying group of consumers. And if these farms can get scale, then watch out.

Artisan locally produced small batch food will become increasingly mainstream. As costs come down (Moore's Law) more farmers will look to create their own distribution models and try capture value from the efficiencies of a more direct model.

Farmers and growers need to decide whether they want to break the volume or commodity treadmill and become food producers growing brands. Talk of milk solids or lamb percentages might in time be replaced by talk of brands, impressions and click throughs.

Marketing and brand investments might be looked upon less as a "dark art" and more of a business necessity. New trusted advisors may arrive in the form of marketing managers, brand consultants and customer experience experts.

What will farmers be willing to risk or experiment for future gain? How much longer will they abdicate marketing responsibility for their produce to their processors or shareholder co-operatives?

Time and balance sheets will tell.

## 9. Conclusions

*“If history repeats itself, and the unexpected always happens, how incapable must man be of learning from experience.”* **George Bernard Shaw**

By its nature, New Zealand’s agricultural supply chain is heavily influenced in a large part by biological constraints and seasonality. It is harder to disrupt the processing side. Many factors are outside our producer’s control such as weather, extreme climatic events or disease. The only disruption will come from a declining national flock and herd which will mean more flexibility and focus on toll-processing contracts which the likes of GreenLea Meats and Progressive Meats are well known for and Poutama Trust may become.

Processors in reality will never be chief disruptors because they are capitalily-constrained and they are committed to defending a status quo model and steel. There are also very compelling commercial reasons why Silver Fern Farms want OIO approval to proceed with Shanghai Maling deal (as of date of this project).

The greatest and easiest opportunity to disrupt, or rather innovate, is in the retail space. Books, retail, travel, energy and music have all proven disruption can happen using new digital technologies. Food retailing is starting to innovate too with the arrival of My Food Bag (now NZ’s third largest retailer with \$100m revenue after Progressive and Foodstuffs). In my view it’s likely new arrivals like MyFoodBag will only accelerate.

The new disruptors are challenging the traditional one stop shop supermarket bricks and mortar model. Those that have a “noble purpose” and can combine technology with seamless and delightful customer experience will grow.

The question then becomes by how much? These challengers come from the Silicon Valley tech world who have a passion for great food, people and new business models. Food is a social business and so too are people so it makes sense that the same founders who started the social media platforms look at the food and beverage sector that to date hasn’t been fully disrupted.

The sharing economy is coming to agriculture too. Farmigo is a great model that demonstrates the power and benefits of crowd or community buying. As diminishing returns feature in our big farmer owned co-operatives I believe we will see a return to a smaller, local, district model like our old dairy co-operative models. Big isn’t always best and big isn’t always liked. Smaller food producer groups will club together and form new, smaller niche co-operatives having lost faith, patience and money in their big co-operatives. Supply chains will be shorter and more localised like GoodEgg.com.

Great honest story telling based on fundamental truths and seamless, delightful experiences will win customers hearts, heads and then hands (aka. wallets). Ian Proudfoot (2015) talks about the importance of the intangibles like brand, culture, shared values, purpose and experience.

This soft stuff will be the hardest stuff for NZ Ag which has a historical bias for the tangible things they can see like new plant or processing equipment. Yet consumers do not care about the steel or factory, they only really care about what they get at the end of it.

These softer intangible assets have a greater value because they matter to consumers most and they live in the consumer's mind imprinted by a great customer experience.

## 10. Recommendations & Predictions

*"It is better to be roughly right than precisely wrong."* **John Maynard Keynes**

The food retailing model is changing rapidly and the domination of supermarkets and big food brands is being increasingly challenged. Farmers markets might attract the higher socio-end of consumers but they are still restrictive in terms of convenience, accessibility, supply and market share.

Farmers will continue to lose confidence and trust in their farmer owned co-operatives and processors so they will start to re-gain control because of a continued decline in the national flock and herd meaning they will have to defend steel infrastructure and fill throughput gaps with smaller toll processing contracts. They will have to be nimble and flexible like Poutama Trust's plans for its high value small batch multi-purpose driers in Kawerau. Farmers will share risk and pool resources together to create their own retailer network using online technology platforms that brings them closer to the consumer without the need to buy physical assets. They will adapt their farming systems to ensure almost all year-round supply.

The current supermarket model is already experiencing margin issues with low-cost competitors (Morrisons, Aldi) hurting high infrastructure costs. You only have to Google Tesco in the UK to see the financial and commercial pressures they are currently experiencing yet alone being fined for farms that didn't exist (9).

Predictions for the future? 2030 will look something like this:

- Closer, artisan, connected, local, organic mainstream using new technology-driven distribution models
- Small will be beautiful and celebrated
- Micro or craft farming will prosper using local producer groups to pool resources and market under a local brand
- Big, industrial food will become socially unacceptable and shunned upon
- Hand crafted batches of food will command premiums over industrial processed foods
- Supermarket revenues will slowly decline as people opt for niche shopping experiences. Supermarkets will consolidate or close their doors and real estate much like garages
- Boutique butchers and local artisan food shops will make a return to our high streets

All these predictions are fundamentally grounded in the *why* that Sinek argues for in his Golden Circle rather than the what or how. Why and a noble purpose will be the true drivers of differentiation.



Because of this, we will see a new wave of “craft farming” in the same way that craft brewing has disrupted the beer industry. Craft, or micro, farming will be celebrated and small will be beautiful and treasured. Whilst many commentators predict the demise of the smaller family farm this will not be the case. Family values, soil health, traceability, natural farming practices and small batches will all mean more to the new consumer.

The direct model isn’t going away anytime soon. It will only accelerate with more players turning up able to extract a greater premium for their produce from a high income discerning customers that they know intimately – and vice versa. Retail in its most basic form is re-marketing a product supplied by a manufacturer where little or no value is added. Their relevancy and value will be increasingly harder to justify. Big block chains will become less relevant and producers will become more relevant through deeper emotional connections, stories and experiences between growers and customers online and offline.

As Dan Tarensenko from Crowd Carnivore says regarding their model:

*“What’s ironic about our model, is it’s absolutely how things were down a hundred years ago.”*

The connection between farmer and consumer was closer last century so perhaps in the next decade we will go full circle. As the world becomes more digitally connected it allows companies to become more human and emotionally intelligent. We need to think emotionally rather than transactionally because people buy on emotions and justify purchases rationally (think about the last car, home or gift you bought). Digital technology will form deeper connections between producers and consumer rather than distant connections that have for too long been blocked by the so-called “gatekeepers”. Distance will no longer be a distorted barrier and new technologies will bring producer closer to consumer with a full and unimpeded line of sight.

In 30 years from now our children or grandchildren will ask us why did we go to the supermarket when we could have watched our food grow, leased a farm with friends and neighbours or bought tailor-made produce together as a community online? They will also ask us why we called supermarkets super.

Crowd funding and the sharing economy will not go away. It will become more mainstream and adopted by the early and late majority as time passes.

Farmers will re-gain control of their co-operatives. Splinter groups of producers will form, like Lewis Road Creamery, to challenge the larger co-operatives. There will be a growing distrust of big or industrial food companies. People will want and seek out real connections with farmers and growers.

Capital will not come from farmers alone. It will come from the crowd. Kickstarter or Snowball Effect as two examples have proven to be effective when capital raising. Farmers will no longer be islands. They will have a broader base of shareholders and the risk will be shared. Consumer groups will team up with like-minded producer groups to produce and deliver the food they want in the system they prefer.

This	Not This
Small	Big
Natural	Processed
Connected	Blocked
Open	Closed
Artisan	Industrial
Local	Multi-national

*Figure 10.1: Trait Predictions for the Future (author, St John Craner)*

**Here are my seven key recommendations for those farmers, or farming groups, wishing to get closer and market more directly with their end consumers:**

1. All farmers must create their very own Marketing Plans i.e. who is their target market, what is their unique point of difference and how can they substantiate this promise. They cannot continue to abdicate this marketing responsibility to their processors based on current returns. By aligning marketing plans and brand differentiators they can market themselves far more effectively and extract a greater margin for their produce.
2. Farmers need to actively think about their end buyers – not just the end consumer but who they could partner with for capital *and* commercial capability. The Silicon Valley technology crowd have proven to do disruption well and investment in Food & Beverage is growing rapidly (as outlined in Figure 1.1).
3. Farmers can do it alone and can share the risk by collaborating with like-minded farmer producer groups which isn't an uncommon model (like First Light Foods and one that Mike and Sharon Barton through Taupo Beef are exploring as they look to scale). Such farmer producer groups or corporate farming groups will appoint their own Marketing Managers who will sit round the management table with Finance, People & Performance and Operations.
4. Farmers will need to look at aligning their farming system to the one their specific consumer market is demanding whether it be organic, family owned, no antibiotics, no pesticides, no growth hormones, no GMO, grass-fed or free range. They will become consumer-centric rather than production-centric knowing it's no longer viable to only think up to the the farm gate.

5. Farmers need to do all they can to ensure they have a connection and deep understanding of their end consumer markets. Anyone that blocks or impedes this view does so for their own commercial interests and not that of their suppliers. Farmers should either fund individually or collaborate collectively using the appropriate industry organisations to research their end consumer markets and meet or exceed their needs.

6. New Zealand farming will begin to realise the importance of *terroir* at a regional level like the viticulture industry has monetised to great effect. It will no longer be enough to compete using NZ brand when others like Ireland Food Board's Origin Green campaign already look like us. Farmer producer groups, much like winemaker groups such as Gimblett Gravels, will pool resources together to create strong and distinct regional farming brands

7. Farmers will slowly migrate to "value makers" rather than "price takers" by actively investing in the intangible assets of great brand stories based on honest fundamental truths that are unique to them as well as seamless customer experiences that surprise and delight their end customers. The soft stuff is the hardest stuff for agriculture but also where the greatest opportunities for increased value capture lie. The battle for a unique position in their market's mind will be the prize.

These are ways in which New Zealand farmers can once again re-gain control and become masters of their own destiny. Our farmers have a long and rich history of taking calculated risks and showing real initiative just like they did with the withdrawal of subsidies in the 1980s. It is time to be brave again. They have done in the past which means they can do it again. And first movers will enjoy the spoils most.

The choice is simple for New Zealand agriculture: either disrupt or be disrupted.

## 11. Next Steps

This project's research will continue to deepen through further engagement with a wider range of industry leaders. There will be a stronger focus on who we can learn from outside our industry to accelerate our own thinking and action with New Zealand Agriculture. Silicon Valley and the tech community can add a lot of value. They've shown us that disruption and progress can be achieved in many other industries. Now it's the turn of the agriculture sector.

Our industry cannot afford to stand still. It is not immune to change and status-quo isn't an option. We must continue to innovate or we will endure the law of marginal diminishing returns. We are blessed with an abundance of natural assets (water, fertile soils, clear clean air, animal welfare and pasture based systems). We have to promote and play to our unique strengths and attributes. Intensified, industrial scale can erode this natural advantage and many would argue diminish the very ingredients of brand differentiation we have.

The good news is that the time has never been better to disrupt and innovate. Technology infrastructure already exists (social media platforms, blogs, websites and apps can all be easily plugged as templates that can be easily customised). Barriers to entry have never been lower to create loyal and passionate consumer communities. You don't need the plant. You just need the passion. You can build a brand and have an online presence simply and cheaply. You can build and communicate with a community with ease as these case studies have shown so long as you have a noble purpose where passion precedes profit.

The journey for New Zealand agriculture and new disruptive technology and innovation has only just started. For some it will be a big challenge and for others an exciting ride.

Rather than wait for it, let's walk towards it.

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### 13. Appendices

Appendix 1: KPMG Ian Proudfoot Presentation to Kellogg Rural Leadership Programme April 2016:

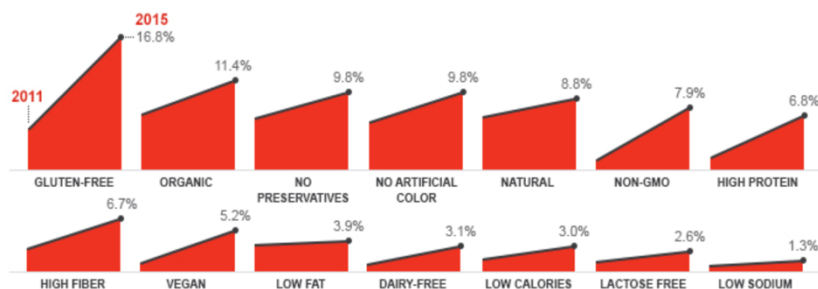


Appendix 2: DataMonitor Consumer US (source)

## THE PACKAGING TEST

These claims, on new food items that debuted from 2011 to 2015, reveal what providers think customers want.

Source: Datamonitor Consumer



### Appendix 3: Project Discussion Guide for Interviewees

Question 1: What do you think is wrong or limiting New Zealand Agriculture's value chain right now?

Question 2: Where do you think New Zealand Agriculture's value chain is being disrupted most? Which part specifically and why?

Question 3: Who's doing disruption well here or overseas? Who's doing it well outside the Agricultural sector? Who could we learn from most?

Question 4: What are your predictions for the future of New Zealand Agriculture's value chain? Where do you think the biggest opportunities are?

Question 5: If you had one piece of advice to give to a New Zealand farmer relating to the above, what would it be and why?

### Appendix 4: Word transcript of LinkedIn and AgriPulse column dated 18 December 2015

*Unbundling the supermarket experience creates more valuable pathways to the consumer for the bold entrepreneur*

My Food Bag, the distributor of meal solutions to affluent consumers in our major cities, announcing that it has grown to become an almost \$100 million annual revenue business within three years caught my attention last week. At the same time, the problems that Woolworths is facing with stalled growth in its core supermarket business in Australia, in part linked to a unilateral change to its loyalty programme, have intrigued me.



These together with an interview I read with Benzi Ronen, the CEO of Farmigo, a start up with a mission to empower people to find a better way to eat by creating farm-to-neighbourhood access to fresh food, suggest to me that we are approaching an inflection point in the transformation of the retail model that dominates the access many western consumers have to food.

Mr Ronen believes e-commerce creates the opportunity to unbundle the traditional supermarket model, shifting away from the one-stop shop towards a model where consumers take the time to optimise where they source products from; utilising a combination of mobile platforms that ultimately provide significant time savings by delivering direct to the door. He foresees a world where supermarkets cease to exist, a radical vision on the face of it, but when you pause for a moment and realise that only around 20% of the global population regularly use supermarket retail channels, the idea of a global swing towards virtual markets that connect producer and consumer is not nearly so farfetched.

The success of My Food Bag illustrates that premium customers are prepared to pay more for food solutions that fit better within their lifestyles and food that is perceived to be high quality. In reality My Food Bag is relatively inflexible, you have to buy at least three recipes a week, there are restricted menu options and delivery is limited to set days yet it has grown rapidly; it raises the question about the potential of an organisation able to deliver more tailored offerings on demand.

The supermarkets recognise this trend, many of them have been experimenting with online ordering, click and collect or delivery services, but they are often constrained by a desire to generate a return on the substantial investment they have made in the physical infrastructure of traditional retail. They argue that people will always prefer to physically shop, particularly for fresh food, as that is the only way they can be certain they will get the quality they looking for. However, Farmigo, My Food Bag and numerous other start-ups are challenging this assumption by having the flexibility, without the constraints of bricks and mortar, to design product offerings that fit neatly into an individual consumer's lifestyle; as well supplying farmer's market quality products direct to the consumer's front door, with freshness guarantees that de risk online purchasing.

So what does all this mean for the primary sector in New Zealand? To my mind it presents the industry with a great opportunity. The work we have done on the value chain indicates that the majority of value is captured by the organisation that has the closest relationship with the consumer. To date this has been the supermarket, but as premium consumers start to optimise their buying the opportunity for suppliers anywhere in the world to build direct links to premium consumers grows, creating opportunities to secure more of the value our products generate than ever before.

I had the opportunity to attend the Sanford AGM earlier this week and was interested to note that they will have a Chief Customer Officer joining their executive team early next year, with responsibility for innovation and finding new ways to present their 'Beautiful New Zealand Seafood' to customers. My Food Bag is proof that you can create an amazingly successful business by delivering a new experience direct to the consumer.

It will be interesting to see how many companies follow Sanford's lead and invest in bringing capability into their organisation to repositioning themselves, closer than ever, to the ultimate consumers of their product and capture the value from doing so.

**Ian Proudfoot**

**KPMG Global Head of Agribusiness**

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