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Developing Provenance Strategy for Premium Exports – Connecting consumer with producer

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Executive Summary

In a knowledge driven world, changes to the buying behaviour of consumers is shaping the need for New Zealand exporters to pivot towards a consumer centric model. This requires us to shape the way we produce and market New Zealand products to fit the demands of the discerning consumer.

Changing consumer buying behaviour and the increasing threat from alternative protein products means that we must reposition New Zealand exports to capture the premium market. Putting a focus on building trust with the end consumer is imperative.

A fast-moving consumer market requires products that are fresh, convenient, nutritious and safe to eat, while making the consumer feel good about their purchase.

Provenance is the ability for an end consumer to form an understanding of where products they purchase come from and how the key attributes of that product aligns with their own values. These key attributes include answering the questions; Is this product safe to consume? Where has this product come from? Was it produced in a sustainable and ethical manner?

Our provenance strategy is made up of three key features; brand, supply chain transparency and social licence to operate. Brand represents the way we tell the story of our products to the end consumer, while supply chain transparency provides the evidence. Social licence to operate is achieved through the approval of the end consumer in the way that we produce our products.

For years New Zealand has leveraged off the clean green image as a key brand attribute for our products by creating a vision of sustainable and ethical production. With the rise of digital platforms, trust in the information available to consumers is decreasing. As a result, we can no longer just tell the consumer our story through brand alone, the consumer now demands that we prove it.

Providing authenticated data from across the supply chain in a comprehensive format provides evidence to the consumer that from creation to consumption, that product is aligned with their values. Tools such as Blockchain technology seek to deliver to the consumer a single source of truth of a products lifecycle. Trust in a brand has never been more important. We must seek to find new ways to demonstrate the value of our products to the consumer.

In order to successfully implement our provenance strategy, we need to make changes to our business practices. This research will look at the key demands of the premium consumer and how that effects the way we produce our products behind the farm gate.

This work will be vital for all industry stakeholders who are reliant on exports of our food and fibre products as a means of income. It will also identify key changes that we need to make to our business practices in order to successfully penetrate the premium market.

This research uses a combination of in-depth literature review and qualitative analysis. Including interviews with key industry stakeholders and leaders. This allowed me to develop critical thinking, draw conclusions on our provenance strategy and the effect it has on New Zealand farmers.

From this research, the three key recommendations include the need to move to a consumer centric model, implement minimum standards for the way we produce our products on farm and the need for rapid uptake of digital recording from behind the farm gate.

In implementing minimum food production standards across all sectors, a framework will allow us to ensure we are lifting the operating standards of all New Zealand producers and mitigating the risk of damage to the national brand. Processor driven incentive schemes will encourage producers to lift the bar on best practice production standards.

Essentially, for us to contribute information about the lifecycle of a product from behind the farm gate we require NZ producers to provide information relating to it. Adoption of on farm digital recording is imperative in order to capture data to contribute to the value chain. More work is required to understand how we can generate the resources required to lift the level of digital literacy of New Zealand farmers.

With change, comes the opportunity to evolve our market strategy and return further value to New Zealand farmers for their efforts.

Introduction

As buying behaviour in international markets continues to change and diversify, New Zealand's market penetration strategy is at a crossroads. For generations, New Zealand has been at the heartbeat of the food and fibre production market and we must make changes to retain our position.

With the global population expected to grow to over 8.5 billion by 2030 (UN, 2015) the international food market is rapidly changing. The rise of alternative proteins, changing consumer food trends and the volatility of the commodity market require New Zealand to take a fresh look at our market strategy. Now we must adapt and grow in order to survive this changing landscape.

Our premiumisation strategy allows us to penetrate the market at the high end, but to do so we must meet the increasing demands of the discerning consumer. These consumers seek to purchase products that are aligned with their own personal values, from a brand that they trust. Making purchasing these products a feel-good experience.

In our knowledge driven world, access to information is literally at your fingertips. As a result, the consumer is demanding a greater understanding of every touch point along the supply chain, including from behind the farm gate.

The key questions the premium consumer seeks to answer include:

- Where has this product come from?
- Is this product safe for me to consume?
- Has it been produced in an ethical and sustainable manner?

Our Provenance Strategy is the way in which we answer these questions, both in our branding and transparency of supply chain. These claims, when aligned with the consumers values will allow us to retain our social licence.

Aims & Objectives

The purpose of this research is to answer three key questions regarding provenance strategy for premium exports of New Zealand Food products:

1. What is Provenance and why is it important for New Zealand producers?
2. What role does brand and transparency of supply chain play in provenance strategy?
3. What does this mean for New Zealand farmers?

Throughout the research I will seek to understand what supply chain transparency means for New Zealand farmers and what changes we will need to make to our current business model.

I aim to use this research as a discussion piece for industry on our strategy to grow our premium markets and increase returns to New Zealand farmers.

Methodology

The methodology used for this research paper included an in-depth literature review of the three key areas of study – Brand, Supply Chain Transparency and Social Licence to operate. The resources included both domestic and international research papers, opinion pieces, industry reports and case studies.

Secondly, a qualitative approach was conducted using interviews with key industry stakeholders and leaders. This allowed me to develop my thinking and draw conclusions on our provenance strategy and the effect it has on New Zealand farmers.

1. Key drivers of Provenance Strategy for NZ Exports

1.1 Defining Provenance

As an exporter of premium food products to the world market our landscape, business practices and operational standards play a major role in the reputation of our products. Leveraging off New Zealand's desirable attributes allows us to differentiate our products from those of other countries. The story that we tell about these products, and how we align these with the end consumer is our Provenance strategy.

The term Provenance is defined as 'The records or documents authenticating such an object or the history of its ownership (*AH Dictionary, 2016*). In context provenance is how we tell the story of the lifecycle of the food products produced in New Zealand to the end consumer. There is a rising demand for greater visibility of all touch points along the supply chain. Therefore, we now associate provenance with the journey of a product from creation to consumption.

Aligning our products to the values of the consumer is effective in driving positive buying behaviour. This allows us to make a stronger connection and promotes customer loyalty.

Transparency of all touch points along the supply chain is imperative in ensuring that the story we tell about our product is trusted. Providing evidence of our claims allows consumers to further validate their buying decision.

A strong provenance strategy is made up of three key features; Brand, Supply chain transparency and Social licence to operate. These features all play a key role in connecting with the consumer. Our brand is the voice we use to tell the consumer about our products. Transparency of supply chain provides the evidence behind the story we are telling using data from the lifecycle of the product. Our social licence is our credibility earned from the way we produce our products being socially accepted by the end consumer. A successful provenance strategy communicates using all three features to build trust and credibility with the consumer.

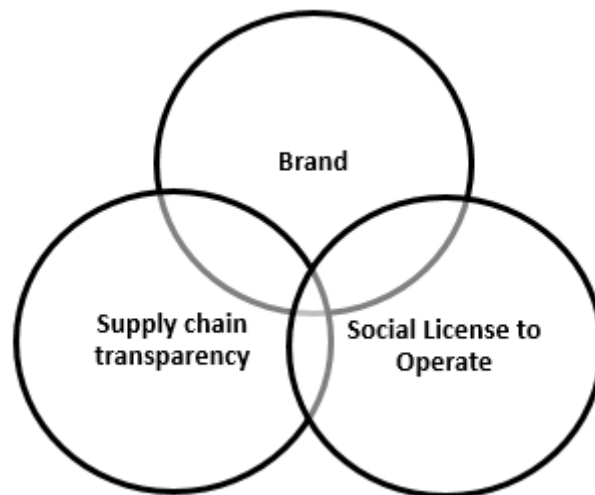


Figure 1: Key features for developing provenance strategy

1.2 Chasing the premium price point

Who is our consumer? Those that won't just pick any meat, but pick a meat that they feel good about eating'. (Beeby, 2018)

Following the conclusion of recent Beef and Lamb NZ market research Mark Wan, GM of The Red Meat story, concludes that health conscious consumers are choosing to consume red meat less frequently. When they are choosing to consume it they are looking for high quality premium red meat that is more naturally raised, free from hormones, growth promotants, anti-biotics, and non-GMO. Premium grass-fed red meat is very much on the rise.

New Zealand farmers are facing a period of change greater than ever before. With change comes opportunity to achieve greater returns through adapting our market strategy to sell to the premium consumer. Premium consumers are seeking to form a higher level of trust in the products that they purchase and as a result have a higher willingness to pay for that product.

Changing consumer food trends are challenging traditional markets that New Zealand occupies. As a result, New Zealand is seeking to occupy the premium market. Premium is defined by the perceived value of the quality of the product to the end consumer. Consumers in this market are developing a greater demand for information about the food they are consuming.

The table below demonstrates the perception by Japanese consumers of New Zealand products. This sits in the top left quadrant on the food trust vs price matrix. This means that they see our products as safe to consume and at a lower price point. By targeting the premium consumer, we aim to move our position to the top right quadrant where our products are at a higher price point and food safety is maximised.

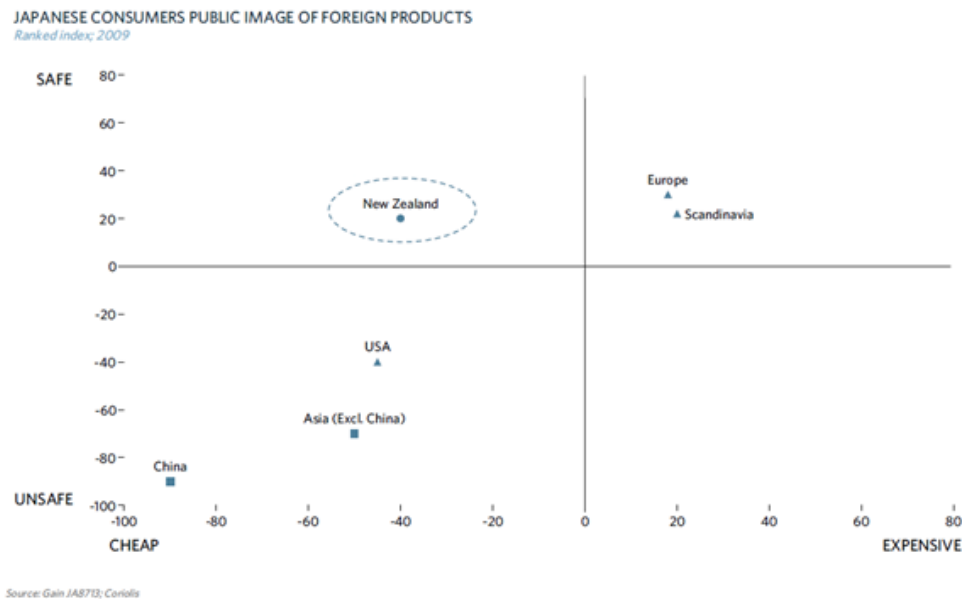


Figure 2 – Japanese Consumers public image of foreign products

Source: *The investor's guide to the New Zealand Food and Beverage Industry (2015)*

Positioning our products in the high-end market will require meeting the increased demands from these consumers. These include full traceability of the products and transparency of the conditions that product has been subject to in its lifetime. Successfully meeting these demands will allow us to extract a premium for our products, increasing returns to all members along the supply chain.

Providing full transparency of our operations makes it imperative that we are operating in a way that is consistent with our branding. New Zealand farmers must strive to continually improve business processes and mitigate the risk of negative exposure.

1.3 Changing consumer food trends

To many in the world the purpose of food is to provide sustenance. But to a growing group of consumers the attitude towards food is changing. Four key trends are emerging in food consumption. Demand for social responsibility of production, growth in popularity of plant based diets, the rise of alternative proteins to mainstream consumption and the evolution of lifestyle diets.

Demand for social responsibility in the way food is produced is influencing purchasing decisions of consumers. They are now seeking to understand where the product comes from and the conditions that product has been subject to at all touch points along the supply chain. The directive is for food to meet a desired set of criteria including a high level of food safety, minimal environmental impact and fair treatment of animals. This creates the demand for values driven production.

The table below demonstrates the importance of product attributes in three of our key markets. 75% of Chinese and 65% of Indian consumers rated food safety as very important and the highest of all attributes. This is to be expected considering recent food scares in China such as the Fonterra botulism case of 2013. Similarly, China (54% rated as very important) and India (40% rated as very important) for country of origin, showing the importance consumers place on knowing where their food comes from. While the UK at 29% indicates a higher level of trust in their current supply chain. Environmental quality is also rated highly by the two Asian nations with over 50% indicating it is very important. Although slightly lower, animal welfare is still proven by all three markets as important or very important in their willingness to pay for a product.

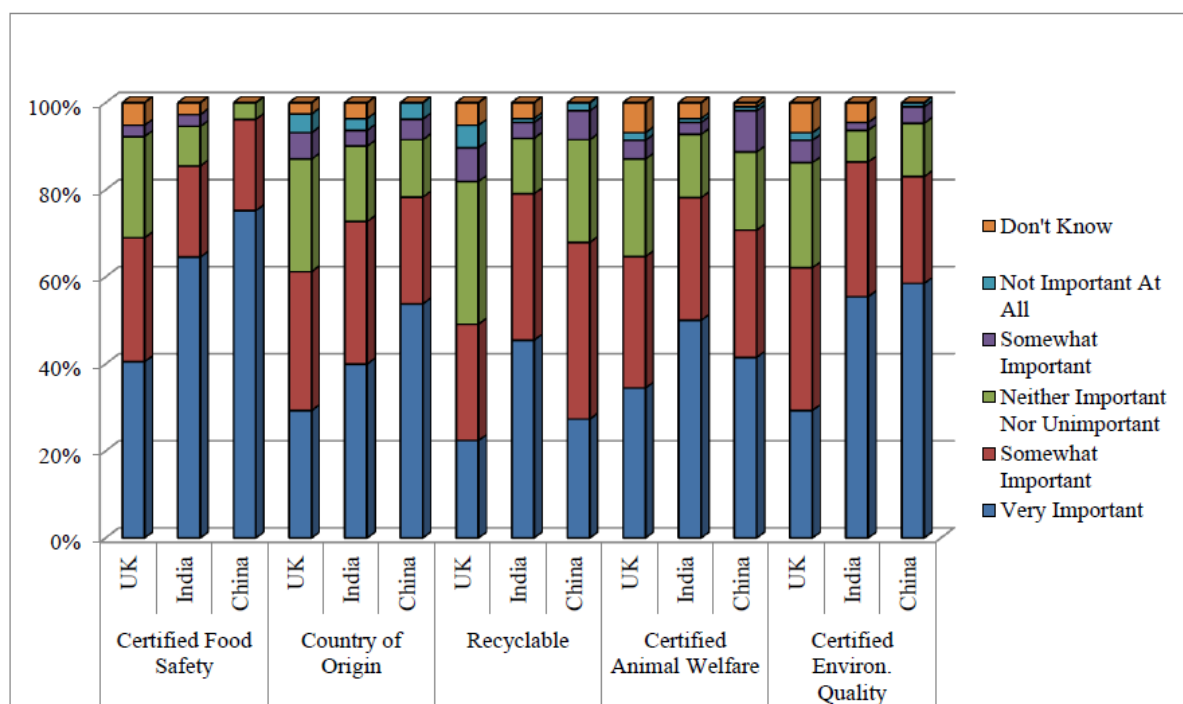


Figure 3 – Importance of attributes in New Zealand food products

Source: Saunders et al (2013) Consumer attitudes and willingness to pay for attributes of food, in particular from New Zealand.

In developed markets, vegan, vegetarian and paleo diets continue to grow in popularity. There has been a 600% increase in consumers identifying as vegans in the US in the last three years (Globaldata 2017). Likewise, the Natcen 's British Social Attitudes survey found that 29% of people in Britain have reduced the amount of meat they ate in the last 12 months. Health, climate change and animal welfare appear to be the key drivers for the change in diet preference.

While meat free diets continue to grow in popularity, such is not the case in all markets. In China, as a result of an already balanced diet of plant and animal protein and a dietary culture

that seeks balance, we expect only minor changes in the animal/plant makeup of the diet (MBIE, 2018).

With rapid growth of alternative proteins in the mainstream market, greater competition means we may be challenged to retain our market share. Alternative protein producers such as Impossible foods and Tyson meats, creating plant based meat substitutes have navigated a price point soon to intersect that of our animal protein products. The brands have the ability to tailor these products to consumer preference. For example, adapting the product to suit changing trends, upscaling to produce mass quantities easily and navigating away from differing views of environmental impact from traditional food production.

The rapid rise of alternative substitutes poses a threat to New Zealand exports and future growth in these markets. Alternatives claim to produce a product that is better for the environment and meets the needs of the consumer in a more sustainable way, while not compromising on the taste and texture of the product. For example, the Impossible Foods™ burger is rapidly gaining market share through mainstream adoption from fast food outlet White Castle in the USA. Alternative proteins are likely to remain in the low-price market, suggesting minimal impact on New Zealand products given our shift to the premium end.

We have the position which says we could be the healthiest, cleanest, producers in the world. Why would we compete with alternative proteins when we can do the real thing so well. (N.Baylis, 2018)

In recent years we have seen the emergence of new consumer food trends such as flexitarians and transumers. Flexitarians are primarily vegetarians who have a neutral relationship with meat and as result choose to eat it only on occasion. Their diet choice is closely aligned with their values and beliefs, and is often driven by a wider health consciousness. Transumers make consumption decisions as a result of the environment they live in. Many transumers choose to only consume meat on the weekends when they have time to create a food experience. As a result, when they do consume meat they favour the premium cuts. Their long commute or fast paced lifestyle means they prefer to eat on the go. As a result, the demand for convenience food in smaller packaging, made easy to consume in a transient lifestyle is increasing.

As consumer food trends around the world continue to evolve, it is crucial that we understand what our end consumer wants from their food experience and position ourselves strategically to best meet their demands.

2. Connecting with the end consumer

2.1 The New Zealand Brand

The story is grounded in our values – it's who we are, what we stand for and what we offer the world (NZ Story group, 2018).

The New Zealand brand plays a key role in the success of our products on the world stage. Our brand has two key features. Visual representation of origin of our products and the intangible story we share with our consumers. The story that we share through the branding of our products should represent the experience we want the consumer to receive from it.

The aim of a national brand is to provide visual recognition of the attributes consumers associate with New Zealand. The consumers perception of our brand is formed through personal experiences, the influence of others and the information available to them. Tourism is a major contributor to the New Zealand brand. When a consumer or someone close to them has experienced our country in person, their perceived value of our brand attributes is much stronger as they relate our products to their experience.

The benefits of the New Zealand brand to our food exporting business is only strong if the reputation of our country is considered desirable to the end consumer. Ensuring that we continue to grow our national reputation is critical in retrieving the benefits from our source of origin labelling.

The 2016 Best Countries rankings (U.S news & World LP,2016) include the top 60 ranked countries in the world based on international perception. The countries were rated on nine key sub rankings: Citizenship, Cultural influence, Entrepreneurship, Quality of life, Power, Heritage, Open for business, Movers and Adventure. New Zealand was ranked 11th in the world with the Netherlands and Denmark scoring highest for overall reputation.

Citizenship, which includes human rights, environmental quality, gender equality and trustworthiness was ranked 8th with Sweden being ranked the highest. Quality of life includes social factors such as economic stability, safety, having well developed public health system. Open for business consists measures of bureaucracy, corruption, transparent government practices. New Zealand was ranked 6th in both of these areas.

Table 1 – *Best Countries overall rankings*

Source: *US news & World LP, Best Countries report 2016*

Overall Rankings

Overall Rank	Country	Entrepreneurship	Adventure	Citizenship	Cultural Influence	Heritage	Movers	Open for Business	Power	Quality of Life
1	Germany	1	45	7	10	16	27	17	4	7
2	Canada	5	15	2	11	29	34	3	11	1
3	United Kingdom	4	33	6	5	12	46	18	5	9
4	United States	3	27	11	3	22	22	23	1	14
5	Sweden	6	18	1	9	36	30	2	18	2
6	Australia	10	6	5	8	25	20	9	13	4
7	Japan	2	32	14	6	7	5	22	7	11
8	France	11	12	12	1	4	40	24	6	13
9	Netherlands	7	16	4	12	23	45	7	19	5
10	Denmark	8	29	3	13	39	44	4	24	3
11	New Zealand	16	5	8	15	34	16	6	34	6

The New Zealand Story group seek to build trust with the end consumer through creating awareness of our products in international markets. The FernMark is an international symbol of New Zealand origin which is included on the branding of approved licenced products. Displaying the FernMark is a formal recognition of the authenticity of the products origin. Each product also includes a licence number which is traceable through the website www.newzealand.com. This verifies the products connection to New Zealand to show it was made, grown and designed here. The website also shares multiple videos of the New Zealand story to give the consumer a greater understanding of the values that our products are produced with.

The FernMark gives us the opportunity to represent New Zealand on the world stage and bring consumers on a journey to our shores through our New Zealand story (*FernMark, 2018*). The FernMark logo is used by over 100 New Zealand brands including Comvita, Pamu and ANZCO foods.

A number of sector groups in the industry are also involved in boosting the reputation of New Zealand products by communicating our story specific to their sector. The NZ Red Meat Story created in 2018 by Beef and Lamb New Zealand seeks to communicate the provenance of our products to the premium consumer. The way we communicate the New Zealand story to our consumers allows them to make a connection with our products, forming trust in our brands. Trust in the New Zealand brand is imperative to the success of our products in the world market.

New Zealand, has a strong story to tell, but we must strive to constantly improve it. The New Zealand value proposition is a strong one - ethically produced, grass fed meat, milk and fibre

farmed in a natural sustainable environment. How well we communicate this to our consumers will dictate our success.

2.2 The role of producer brands in consumer choice

There is a difference between a brand and a logo. The brand is the way it makes you feel, the connection to the product, the history, and how it aligns with your values (J.Jones, 2018).

Brand is an effective way of creating a deep connection with the consumer. The way we package our products and the language and imagery we use becomes our brand personality. The way that a brand behaves creates the expectation of the experience that they will have consuming the product. Successful brands build trust with the end consumer and influence buying behaviour.

Creating narratives that are compelling to the end consumer is crucial in making a true connection. Consumers want to purchase from brands that share their core values. It is important that in all touchpoints with the consumer, the experience they have is consistent with your brand values.

New Zealand largest state-owned farm Pamu (formerly Landcorp) have developed a supplier brand strategy to market their beef, lamb, venison, wool, and dairy products. Their brands values are consistent and are designed to take the consumer on a journey of the production of their products.

“We are Kaitiakitanga – guardians – of nature. The care and respect of nature’s lands, animals and people come first in everything we do. As creators of the finest natural food since 1886, we are transforming the way food is produced, naturally, with passion, curiosity and innovative fresh thinking” (Pamu, 2018).

For many years New Zealand producers have leveraged off the Clean, Green, New Zealand reputation to provide credibility in selling our products to the world. While the New Zealand brand seeks to connect at the macro level, we have the opportunity to further strengthen that bond at the micro level by demonstrating specific attributes such as breed, feed composition and place. This allows us to give the consumer a richer connection with the product by providing the finer details.

In the rising digital age we must now build depth within our brand strategy to overcome the waves of challenges we will face. Access to information about products, how they are produced and where they come from has become easier. Social media platforms have provided channels for people to voice their opinions in a way that is often misperceived as fact. The need to have a clearly defined brand strategy, representative of the values of your brand and those of your target consumers is imperative. ‘Now, in the hyper-connected and ever evolving world, transparency is the new power’ (B.Hersberg, 2015).

The way we brand our products allows us to be specific with the story that we are telling the end consumer. For example, the New Zealand story may talk about New Zealand grass fed beef. While the producers brand story promotes prime Angus beef farmed on 450 hectares of lush pastures at the foothills of the Southern Alps mountain range by fourth generation farmers. The more specific we can be about the conditions at the source, the greater the consumer can connect with the product.

The new consumer is demanding behaviour lead branding. Demonstrating key behaviours such as good animal welfare practices, contribution to environmental restoration and care for people is vital to the success of a brand. The key characteristics that make up how we behave behind the farm gate will become the provenance story for the end product. We must ensure that our on-farm practices are aligned with story we are telling, without exception.

2.3 Social Licence to operate

Social licence to operate is achieved when the values of the consumer are aligned with those in which that product was produced.

A social licence is built on the reputation of all contributors to a products lifecycle. This could be impacted by any party along the supply chain and is based on the social perception of the way they operate. Although it is not a tangible licence, it is derived from the approval of the consumer and has a direct influence on their willingness to pay a premium for a product.

It is imperative that we ensure that the way in which we are producing our products is aligned with the expectations of the end consumer. Incorporating these values in our story is a key factor in building social acceptance of our products. If we do not tell our story the way we want it to be told, assumptions will be made or someone else will do it for us.

Contributing evidence of our processes to the brand story will allow us to prove that we are operating above the line of expectation. To do this successfully we must be measuring performance from behind the farm gate. 'Consumers tend to look for the exception to what they expect, not the rule. We are at risk of being discredited by one bad example because we don't have the data there to say otherwise' (N.Beeby, 2018).

In recent years New Zealand agriculture has been driven by maximising production. There is no doubting that this has had an impact on our operational and environmental standards. Little has been done to recognise the importance of our social licence or to mitigate the risk of its declining state. Social licence has a direct correlation to our reputation in the market which is critical when chasing the premium price point.

As New Zealand food and fibre producers, our social licence is in a constant state of movement. As we make changes to our production practices the trust and approval in our products moves accordingly. Increased awareness of animal welfare practices and

improvements to waterways are examples of actions that have a positive impact on our social licence. Likewise, when negative stories are in the media, the reputation of the way we produce our products is impacted. To maintain our social licence, we must ensure we have rigorous production standards and we do not tolerate under performance.

B Corporation certification is a tool that producers, manufacturers and businesses can use to authenticate their social licence to operate through a third-party auditor. Certified B corporations meet the highest standards of verified social and environmental performance, transparency, and accountability (Bcorp, 2018). Although, no major New Zealand food brands are currently certified, a number are in the process of working towards their certification. The certification is internationally recognised and verifies the highest level of social responsibility.

Undoubtedly the key drivers for the end consumer will change and shape over time. Understanding what is important to them and ensuring that our production standards are aligned with these is imperative in retaining our social licence. It is important that we constantly review and improve our production standards to grow the level of trust that the consumer has in our products.

Retaining and improving our social licence to operate is imperative to the success of our provenance strategy.

2.4 The role of technology in Supply Chain transparency

With the discerning consumer demanding more information about their products, transparency of supply chain will allow us to provide evidence of the lifecycle of the product. This verifies the information that we are telling through our brand story and builds trust with the end consumer. 'The use of technology to tighten value chains, minimise risk and ensure data visibility to customers and consumers is vital' (KPMG, 2018).

Our products are produced in a way that is environmentally sustainable, respectful of animal welfare and socially productive. But how do we prove it? With the increasing need to collect data from all touchpoints along the supply chain and present it to the end consumer we need to ensure we have operational platforms to hold the information.

Blockchain provides a single source of truth for data gathered from all touchpoints along the supply chain. This ledger of records is designed to capture full traceability and provide the end consumer with transparency of the lifecycle of the end product. The authenticated information entered into the block is decentralised, meaning that the risk of tampering with the records is nearly impossible. This ensures that the consumer can trust that the record is accurate.

Blockchain provides a data warehouse that sits above the entire supply chain. Its success relies on the digital recording of information being available from all touch points. Currently,

digital recording for traceability of our products from processor onwards is already in place. This is mainly as a result of food safety regulations. Lack of recording of information from behind the farm gate is limiting the success of this technology for our products.

A further challenge comes in the ability to authenticate the information regarding the production, handling, storage and transportation of the product. While Blockchain technology may provide the platform for full supply chain transparency, trust in the information entered into the Blockchain is imperative.

Farm management software is becoming a key tool for digital recording behind the farm gate. It allows farmers to record land and livestock interactions and acts as proof of placement. FarmIQ software was funded by the New Zealand government as part of the Primary Growth Partnership fund with the purpose of creating a digital platform for farm recording. Users of FarmIQ have grown 70% a year for the last three to four years and is expecting to have 5000 users by the end of this year and 10,000 users by 2019 (Farmers Weekly, 2018). 'Allowing a consumer of our product to look into information from a farm that grew the product will provide the next level of food trust and authenticity with our brand' (G.Howie, 2018).

Use of EID tags for recording and managing individual animal performance provides data that can be contributed to the value chain. Recording animal health treatments, weighing records and stock movements provide evidence of the condition of products throughout their lifecycle and can follow that product through to the end consumer. EID records can be linked to farm management software to ensure the information is kept on one platform.

Dunedin based company Oritain are leading the way in Supply Chain traceability by providing New Zealand export brands with tamper proof evidence of origin. It provides scientific traceability of products, designed to reduce food fraud and encourage trust in their products. This is achieved through creating a fingerprint which is used to measure products in the market against the original product. Oritains logo, is used on packaging to build trust with consumers that the product they are purchasing is the real thing and they can have confidence in the brand. New Zealand companies already using this technology include Silverfern Farms, Alliance Group, Synlait, Lewis Road Creamery and Mr Apple. Food fraud costs the global food industry approximately \$30-40billion a year (J.Spink, 2014).

Two main barriers exist to the adoption of digital recording on farm. Digital literacy of New Zealand farmers and limitations of connectivity. Digital literacy is having the skills you need to live, learn, and work in a society where communication and access to information is increasing through digital technologies like internet platforms, social media, and mobile devices (UWS, 2018). Ongoing training is required in order to lift the engagement of our farmers in digital environments. The remoteness of many New Zealand farms means that connectivity availability is low. Offline capabilities and advancements in technology will eventually reduce or remove this barrier.

Technology has an important role to play in the future value proposition of our products. In order to contribute information about the lifecycle of our products, we must encourage rapid uptake of digital recording from all members of the supply chain.

2.5 What this means for New Zealand Farmers

The premium consumer is seeking confirmation that the products that they purchase were produced in a way that is aligned with their own values. They are demanding a greater level of information about how the products were produced and are seeking evidence to prove it. While this information is required from all contributors along the supply chain, evidence of the way we produce our products from behind the farm gate is lacking.

In order to extract the value from this model New Zealand farmers need to adopt these business practices. Enforcing minimum production standards for the industry is critical. The New Zealand Farm Assurance program is an example of a framework used to create minimum standards of production. If a farmer does not meet the minimum standards their product will no longer be deemed fit for market and the processor may refuse to take it. The programme comes with assurances in terms of integrity, origin, traceability, bio-security, environmental sustainability and animal health and welfare. All essential ingredients when it comes to maximising product returns and meeting the expectations of our diverse International consumer audience (RMPP, 2018).

Producers may also be able to capitalise on processor incentive schemes. These schemes are designed to reward desirable behaviour in the production of our products. Synlait's Lead with Pride™ programme encourage best practice on farm through financially rewarding those suppliers who strive to constantly lift the bar on best practice on farm.

Digital recording is now imperative for supply chain traceability. We need to equip New Zealand farmers with the tools to record, authenticate and contribute the information to the value chain to satisfy the knowledge driven consumer. For those farmers who have a lower level of digital literacy, this means gaining the skills to confidently use these tools. Data we record becomes the evidence of how we produce our products so ensuring we have complete record keeping is vital. Although there are a number of platforms in the market for on farm recording, they operate in isolation. We must use a platform that allows us to collate all information in one place. To achieve this collaboration across the industry is required.

New Zealand farmers must become the story tellers for our industry. In recent years pressure on the production systems of our industry has increased dramatically. We need to take ownership of our reputation and use digital tools to tell the real stories. Many New Zealand farmers have started doing this through social media platforms such as Facebook and Instagram. We need to ensure we are taking great care in considering what information we share online to best promote our production systems. The world is watching.

With New Zealand now seeking to target the premium consumer, the opportunity to increase the profitability of our businesses is real. The story we tell, the evidence we provide, and the reputation of our production practices dictates the consumers' willingness to pay for our products. We need to work together to get all New Zealand farmers on board to lift the bar of our production standards.

Conclusions

We will never feed the world, but we can feed those who have a strong opinion about their food and who are willing to pay for what they want. (N.Baylis, 2018)

With a booming global population and changes to traditional export markets New Zealand seeks to move to the premium market. The premium consumer demands greater understanding of where their products come from and what has gone into them through their lifecycle. As a result, it is imperative that New Zealand has a strong provenance strategy to help navigate the knowledge driven consumer.

Premium consumers want to buy a product that is aligned with their personal values from a brand that they trust. To successfully form a connection with the end consumer we must use three key features; branding, supply chain transparency and social licence to operate.

Telling our story through our brand personality builds confidence and trust in our products with the end consumer. Leveraging off the New Zealand brand will allow the origin of our products to become visible in international markets, while supplier brands allow us to give our products personality and further define the values of their production.

As premium consumers seek to feel good about the products they purchase, their willingness to pay for a product that is aligned with their own values increases. New Zealand's provenance strategy is designed to build trust between producer and consumer by providing transparency of all touch points along the supply chain. In order to provide full transparency of supply chain we must encourage full adoption of digital recording on farm. This will allow verified data to be entered into the value chain and satisfy the demands of the knowledge driven consumer.

'When we prove the story of our products to the consumer we need continue to communicate with them in order to overcome the barriers they have to using our products' (A.Horsbrugh, 2018).

By implementing provenance strategy, we have the ability to create unique eating experiences derived from the approach and place that our products were produced. Creating a connection between the consumer and the producer of the product will strengthen our value proposition.

Recommendations

Our provenance strategy for New Zealand exports includes three key features. Brand, supply chain transparency and social licence to operate. Through this study we have gained a deeper understanding of the importance of telling our story through our brand and proving it with data. Consumers are now living in a knowledge driven world where the desire to know more about the products they consume and the availability of this information is widely accessible.

Premium consumers are seeking products that align with their personal values – sustainably and ethically farmed, visibility of origin and confidence in food safety. As a result, they are demanding information about their products more than ever before.

New Zealand is now at a crossroads – we must make changes to our business practices, implement traceability tools and band together to tell our story. The solution lies in implementing multiple approaches in order to successfully connect with the consumer.

- **Move to a consumer centric model** where the demands and preferences of the consumer become the focal point of our production. This means clearly understanding the demands of the consumer and changing the way we produce our products to match. We must start seeing ourselves as food producers who are producing a product to meet the demand of the end consumer.
- **Implementing minimum production standards** is critical in redefining the way we farm. It is important for these standards to be consistent for all food producers regardless of sector, structure or scale. One framework will allow us to ensure we are lifting the operating standards of all New Zealand producers and mitigating the risk of damage to the national brand. Certified platforms such as the New Zealand Farm Assurance programme (or similar) can be used to enforce and measure the progress. Non-compliance will see a producer's product no longer deemed fit for export. The target is simple: 100% of New Zealand food producers achieving NZ Food production certification standards.

We must continually seek to lift the bar on best practice on farm. I encourage all processors to implement incentive schemes to reward those who display a high level of stewardship to improving our farming practices.

- **Implementation of digital recording** for all interactions with a product along the supply chain. Approved digital software platforms are used to record all farm inputs to ensure full traceability of products behind the farm gate. Information can then be contributed to blockchain or other authenticated traceability tools by the processor. I recommend that government resources are allocated to lifting the digital literacy of New Zealand farmers in order to successfully implement this strategy.

The premium consumer wants to buy a product which is aligned with their values and from a brand that they trust. We must implement structure into our production system to ensure that we are meeting the demand of these consumers, and being rewarded financially for our efforts.

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