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Agri-food Leadership Case Study: Alex Guichard & Monique Kelly and Revology

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Abstract

This report forms part of a wider Unlocking Export Prosperity Research Programme led by the Agribusiness and Economics Research Unit (AERU) at Lincoln University. This case study is the third of six instalments and is focused on Revology and its founders, Alex Guichard and Monique Kelly. Establishing themselves in Wanaka, Revology was founded on a vision of a more sustainable composites and design industry in New Zealand. They have focused on the use of sustainable resources to create high-quality products with long life cycles and a circular design model. The Revology DNA underpins their sustainable model of design, and this has required a departure from established practices in the composites and design industries. Alex Guichard and Monique Kelly have been value-driven, innovative, and entrepreneurial in their approach to revolutionising the market. Their leadership is the focus of this case study, and their leadership aligns with the leadership models described in earlier case studies and an earlier literature review. Innovation and a differentiated strategy are qualities that have helped them realise their vision for a sustainable business in New Zealand agribusiness.

Keywords

Value Chains; Leadership; Innovation; Coordination; Fibre; Composites.

ANZSRC Fields of Research

Entrepreneurship (150304); International Business (150308); Organization and Management Theory (150310).

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Executive Summary

Background

This is the third case study in a series of case studies that examine leadership in New Zealand's primary sector as part of a wider Unlocking Export Prosperity Research Programme. This case study accompanies a literature review that focuses on value-added leadership in the New Zealand agri-food sector drawing on past research and current case studies. These case studies highlight businesses in New Zealand's primary sector that have successfully created value in their products through **physical attributes** such as strength, texture, appearance and flavour, **credence attributes** such as environmental stewardship, social consciousness and ethical practices, and **cultural attributes** such as a connection with the land and a family history in the industry.

This third case focuses on an innovative New Zealand design company, Revology, co-founded by Alex Guichard and Monique Kelly. Alex Guichard has founded and operated successful businesses in his homeland of France, in the field of composites. Monique Kelly has worked in law and consulting and has established Wao, a charitable trust which aims to accelerate New Zealand's transition to a carbon zero future. The quest of Revology is to develop a design and composites industry focused on natural fibres and sustainability. Establishing themselves in Wanaka, the couple have developed an award-winning, internationally recognised chair using natural composites and have other designs being planned in areas such as urban transport. This push for sustainability has been fuelled by Alex's experience in the 'dirty side' of the composites industry, and the couple's passion for design, aesthetics, and durability. Their passion for climate action has been core in the establishment of their business.

The use of flax fibres (*linum ustassium*) to create natural composites has required innovation, risk, and tenacity. It has required a great deal of research and development, paired with a strong design aesthetic. Their first product of interest was a chair with the goal being to produce something that everyone has, everyone needs, can be an iconic design, and can be kept for a very long time without creating waste. Since its creation, the chair has won multiple international awards, including being an NZI Sustainable Business Network Awards 2019 finalist. Plans are in place for this chair to be sold in bulk through offshore retailers.

Purpose, Values, and Differentiated Strategy

The success of Revology can be largely attributed to the core purpose of Alex and Monique of transforming the composites and design industry to one which is environmentally friendly and sustainable, with products that last generations. Revology is located at the intersection between technology, creativity, and sustainability (Revology, 2016a) and responds to the evolving market needs posed by threats of climate change. They are inspired by the capabilities of natural resources to replace current practices which are extremely harmful to the environment.

Alex and Monique are also dedicated to not only transforming the composite and design industry, but to revitalising the New Zealand harakeke industry in the future. This would allow them to use harakeke as a natural fibre in the production of their designs, and could also introduce native plantings to farms as a way to enrich the soil and sequester carbon. This aligns with their environmental vision and could

help revitalise a disestablished market in New Zealand. This would also open opportunities to work with iwi and farmers, and open up new avenues of natural composites and design.

Revology is guided by deeply held values. Seven values make up the 'DNA' of Revology. These values are nature, slow design, materials, innovation, beauty, heritage, and legacy. These are the values that contribute to the physical, credence, and cultural attributes inherent in Revology's designs. The value of nature has inspired Revology to move to 'circular design'. This means Revology work throughout the lifespan of a product by ensuring that their designs can be repaired and reused, and that their designs have the longest possible lifespans, with broken or worn out parts being taken back by Revology and used for other purposes, such as inserts.

A strategy of differentiation has been core to creating the Revology DNA. While going into the traditional composites industry as it currently stands would be a viable and easily profitable avenue for Alex and Monique, their strategy has been to respond to future demands and to emerging sustainable markets. Alex and Monique recognise the status quo needs to change and businesses unwilling to lead that change will not fare well. This is in line with the changing consumer demands around environmental stewardship. They recognise that, as a whole, New Zealand is far from this change as continuous growth is still a focus of many primary sector leaders. With environmental pressures increasing, practices such as intensive farming will become an impossibility and consumers will not want to contribute to businesses that do not align with their personal ethics.

Innovation, Coordination, and Marketing Success

Revology has engaged in both product and process innovation. They have revolutionised what a chair can be made of and how it can be made with regards to materials and manufacturing. Alex and Monique have positioned themselves as leaders in driving an innovative industry change that is better suited to future markets.

Much of the work that has led Revology to this success has been in continuous research and experimentation. Their focus has leveraged natural fibres in time- and resource-consuming ventures to create strong new designs. Other materials such as bio-resins have also pushed boundaries in terms of what types of materials can be used in such designs.

In this regard, Alex and Monique have had a transformative vision. They have communicated inspiration for a natural market and have been ambitious in their approach. They have displayed authenticity in their work, ensuring that everything they do aligns with their core purpose and deeply held values. Transformational and authentic leadership has enabled them to push such boundaries.

Collaboration and building partnerships are also important to the couple. They do not believe that a vision such as transforming an industry can be done through competition, but rather, that it requires strong bonds. This includes partnering with research entities and iwi, and collaborating with other designers. Combining the power of different experts allows for both radical and incremental innovation (Soosay, Hyland and Ferrer, 2008), and Revology have committed to this collaborative vision.

Marketing allows for businesses to communicate their unique value propositions to consumers. Alex and Monique have a strong focus on creating products that align with their vision and values and solidifying a brand that is unique to them. They hope that consumers will understand the story and

values of Revology and appreciate it. They have also encompassed more of the value chain by marketing and selling their design themselves, and much of this is done through appealing to conscious consumers. They recognise that conscious consumers are a rising trend and their entrepreneurial approach positions them favourably in a rapidly changing market.

Small Business Change in New Zealand

Revology has been ambitious in its conception, tapping into an environmentally conscious market in an industry that has traditionally been extremely poor for the environment. Alex and Monique have a vision for a more sustainable future and have placed themselves at the front of leading change within New Zealand, not only through their design and manufacturing, but through their charitable trust work.

Much of the success of Revology can be attributed to the strong leadership of Alex Guichard and Monique Kelly who have anticipated and reacted to disruption. Through using natural flax fibres to create composite materials that can be used in the manufacturing process, they have differentiated themselves from other manufacturers and developed a unique Revology DNA. The New Zealand primary industry faces various threats in terms of evolving markets and increased environmental pressure. Creating unique value propositions and appealing to more conscious ways of consuming may position New Zealand agribusinesses better to face upcoming pressures.

Chapter 1

Introduction

This case study is the third instalment in a series of case studies designed to accompany research and a review of literature that focuses on New Zealand leaders in New Zealand's primary sector. Primarily, this research examines how leaders add value to their products/outputs and garner a price premium in off-shore markets. The value-added elements in question are the physical, credence, and cultural attributes of agri-food products which are "Made in New Zealand".

The literature review found that leadership plays a fundamental role in value-adding efforts in agri-food value chains. The global agriculture market reflects consumer demands which are increasing in complexity and scope, and this is creating an increased demand for differentiated strategies that add value to commodities (Cucagna and Goldsmith, 2018). In the face of an evolving market, leaders need to be adaptive and receptive to guide companies and differentiate their outputs to survive and thrive.

This theme of disruption and value-adding has been ongoing throughout these case studies, as successful agri-food enterprises have been proactive and leaders have shared common traits that have guided their value-adding journeys. The literature review conducted as part of this research process focused on three key processes as being important for value-adding in agri-food value chains. These were innovation, coordination, and marketing strategies. All have associated leadership qualities which facilitate their success.

Innovation and coordination work in tandem to add value and differentiate products and processes at various points in the value chain, and marketing strategies increase value salience by communicating value to consumers. The combined efforts of these processes mean that commodities move through the value chain with value being added to them, lifting them from a commodity status and meeting the evolving needs of consumers. These processes are purposeful and work to not only help these companies as private entities but the agri-food industry in New Zealand in general.

Leadership is a critical antecedent of value-adding processes due to its influence on the processes of innovation (Hammond *et al*, 2011), coordination (Akhtar and Khan, 2015) and marketing strategies (Kasper, 2002). The previous case studies of John Brackenridge of New Zealand Merino and Mike and Sharon Barton of Taupo Beef and Lamb have shown that successful leadership in the New Zealand agricultural sector is also dependent on a strong sense of purpose, a clear differentiated strategy, and deeply held values.

This case study supports the findings of the literature review that leadership is crucial for New Zealand agri-food value-adding strategies. The case studies allow for the findings of the literature review to be explored in the context of functioning New Zealand businesses and for comparison of leaders in the New Zealand agricultural sector to determine what successful value-adding leadership may look like.

This case study examines the New Zealand innovative design company, Revology, which was co-founded by Alex Guichard and Monique Kelly. Alex Guichard has worked extensively in the field of composites and has founded and operated successful businesses in his homeland, France. Monique Kelly has worked in law and consulting and has co-founded Wao, a charitable trust set up to accelerate New Zealand's transition to a carbon zero future. Revology combines innovative design with sustainability by turning natural fibres into composite parts, notably for use in an award-winning chair, with other designs in the works in areas such as urban transport. Their unique experience, and their passion and drive for a more sustainable New Zealand, position Alex and Monique well as candidates to explore the impact that leadership has in an entrepreneurial business built on sustainable agriculture.

This study is strongly focused on the disruption that climate change presents and the power of innovation and entrepreneurship to build a strong market position. Revology is still young in its conception but is well positioned to lead positive change. Where appropriate, quotes from both Alex Guichard and Monique Kelly are used to illustrate the key points in this paper.

Chapter 2 Revology

2.1 A Brief History of Revology

In 2000, Alex founded and was the CEO of Roctool, a leading company for heating and cooling systems for plastic injection and composite materials processing. This role honed Alex's passion for design and engineering. Roctool holds over 80 patents and has licensing agreements with major companies in consumer electronics, automotive, and aerospace. It has received numerous awards in innovation and technology under Alex's leadership. "We come from the composite industry, more carbon fibre and fibreglass. I had a little company for years in France, and a few years ago in our R&D department we worked on natural fibres to [potentially] replace carbon fibre and fibreglass."

Monique was a French language and law graduate. She met Alex in Lyon, France. In 2014, he sold Roctool to move with Monique to Wanaka. An important deciding factor for Wanaka was that it was not a city thus would provide an easier lifestyle (Cook, 2016). It is the town where Monique's parents reside, and in 2014 was establishing the Wanaka Chamber of Commerce, making it a good area to launch a sustainable business.

Revology was launched after they arrived in Wanaka in 2014. The quest was to develop a composites industry focused on natural fibres and sustainability. Alex referred to the carbon fibre and fibreglass as the "dirty side" of the industry (Henderson, 2019) due to fossil fuel use and environmental impacts. Revology would work in composites and design but in a much more sustainable way, aiming to revolutionise the market.

One of the earliest designs Alex made using natural fibres was a smartphone case. It was a simple design, but by the time it was designed, finished, and usable, the new generation of smartphone technology had hit the markets. Alex identified a problem with the market and the nature of how things are consumed and discarded, particularly with the consumption of things which are not needed (Revology, 2016a). "I was like a lot of people, changing my phone or other tech gadgets for a new model, new generations, I did not need." (Revology, 2016a, Timestamp 1:06). Alex's journey with composite materials and his growing concerns for throwaway consumer culture fuelled his passion for starting Revology.

Alex realised his next company would do something different and would shift a market through inspiring people to be conscious about their consumption and recycling habits. In this way, Revology would be Alex's vehicle for wider system change. "To create objects at the intersection of technology, creativity, and sustainability, developing real innovation that will stand the test of time. I will be super proud when I will be an old man to donate timeless objects to my children or grandchildren. This is how we should recycle objects." (Revology, 2016a, Timestamp 1:58).

Monique, as co-founder and legal director, played an instrumental role in the development of Revology and its vision and values. Monique explained the inception of Revology has required her to act more creatively and experience new roles that she has not previously experienced. “When you’re a small start-up like we are, you have to be able to bounce between different roles and put on a number of different hats. This is where I went from being a legal advisor, and I got to explore my creativity in this project and also got to put on those different hats I had never put on before, and I suddenly found passions I had not explored before” (Revology, 2016b, Timestamp 1:15).

Creating a sustainable product using flax fibres (*linum usstassium*) to create natural composites needed research, development, and a strong design. An object which was timeless, sleek, and something that all people need, was a chair. “There are plenty of applications, but at Revology we said we’d focus on objects that make sense. Something you are going to use every day that we can produce relatively large numbers of and something that everybody has. We started with a chair, it’s the iconic object.”

Since the research, development, and design leading to the chair, the prototypes have received multiple accolades. In 2016 it won a gold medal at the Melbourne Design Awards, the inaugural Ignite Wanaka innovation award, and the JEC Asia Innovation Award in Design in Singapore (Cook, 2016). It was unveiled in Paris in March 2016 at the JEC Composites trade show (Price, 2016). In 2017 and 2019 the chair was shown at the Venice Design Biannual and was one of just 50 companies to be present at Foire de Paris, Europe’s largest international retail fair (Stuff, 2017). Revology also has awards in Innovative Sustainable Design (Paris 2018), has won a Gold Melbourne Design Award, and was an NZI Sustainable Business Network Awards 2019 finalist. The chair went into production in 2017.

2.2 Leading through Climate Disruption

As stated earlier, the inception of Revology is strongly linked to the environment. Revology exists in a market which faces increased disruption in terms of climate change and environmental action. In the interview with Alex, with regards to sustainability and climate change, he said he “wasn’t very interested ten years ago”. This, however, has changed with some influence from Monique who is a strong climate advocate, and a growing urgency for companies to change to meet future demands.

The composite industry, in particular the manufacture of carbon fibre and fibreglass, can be detrimental to the environment. “For many parts, they use carbon fibre for things that don’t need carbon fibre. It’s an incredible, beautiful material, but it’s also a very dirty material. If you see a manufacturer making carbon fibre it’s very complicated. Carbon fibre production is highly energy intensive to produce.” Alex also pointed out that the manufacture of fibreglass can be unhealthy for exposed workers, “If you know about the fibreglass industry, it’s disgusting... It’s not only shocking for the environment, it’s shocking for workers.”

A review of natural fibres vs glass fibre reinforced composites in environmental impact by Joshi *et al.* (2004) concluded that natural fibres are superior to glass fibre composites due to: 1) having lower environmental impacts in production; 2) having higher fibre content for equivalent performance reducing more polluting base polymer content; 3) being more fuel-efficient due to light-weight properties; and 4) recovering energy and carbon credits through end of life incineration. Being cheaper, lighter, and environmentally superior to glass fibre composites make the natural fibre composite industry a favourable step in combatting climate adversity.

Carbon fibre, while touted as a ‘wonder material’ for a clean economy, may do more harm than good over time due to almost a third of carbon fibre sheets being discarded, often to landfill (Harris, 2017). According to Green Alliance, a charity and independent think tank based in the United Kingdom, carbon fibre is a ‘novel material’ (materials new to the industrial system) which could create waste problems in the future unless waste management infrastructure is in place which is environmentally and economically sustainable (Hazell, 2017).

Alex and Monique recognised that environmental issues cannot be ignored by businesses and successful leaders. Changes due to climate change, and the associated changes to consumer demands signal disruption to composite materials industries and designers. “When you have any business you have to think about the future and what’s the next step. For agriculture or aerospace, we are in very challenging times. You have to think, ‘what’s the next step?’”. For Alex and Monique, this next step means recognising disruption and being proactive, rather than reactive, to change.

With increasing pressure to be more environmentally friendly, leadership such as that displayed by Alex and Monique with the vision of changing industry is essential.

Chapter 3

The Importance of Leadership

The focus of this study is to consolidate the information in the literature review and assess how New Zealand organisations in the agricultural sector, such as Revology, can add value to outputs and garner a price premium in off-shore markets through emphasising the physical, credence and cultural attributes of agricultural products that are “Made in New Zealand”. Revology has only recently gone into production and more time is needed before significant sales in New Zealand and overseas are made. The vision, however, is clear, and the ambition of Alex and Monique is solid.

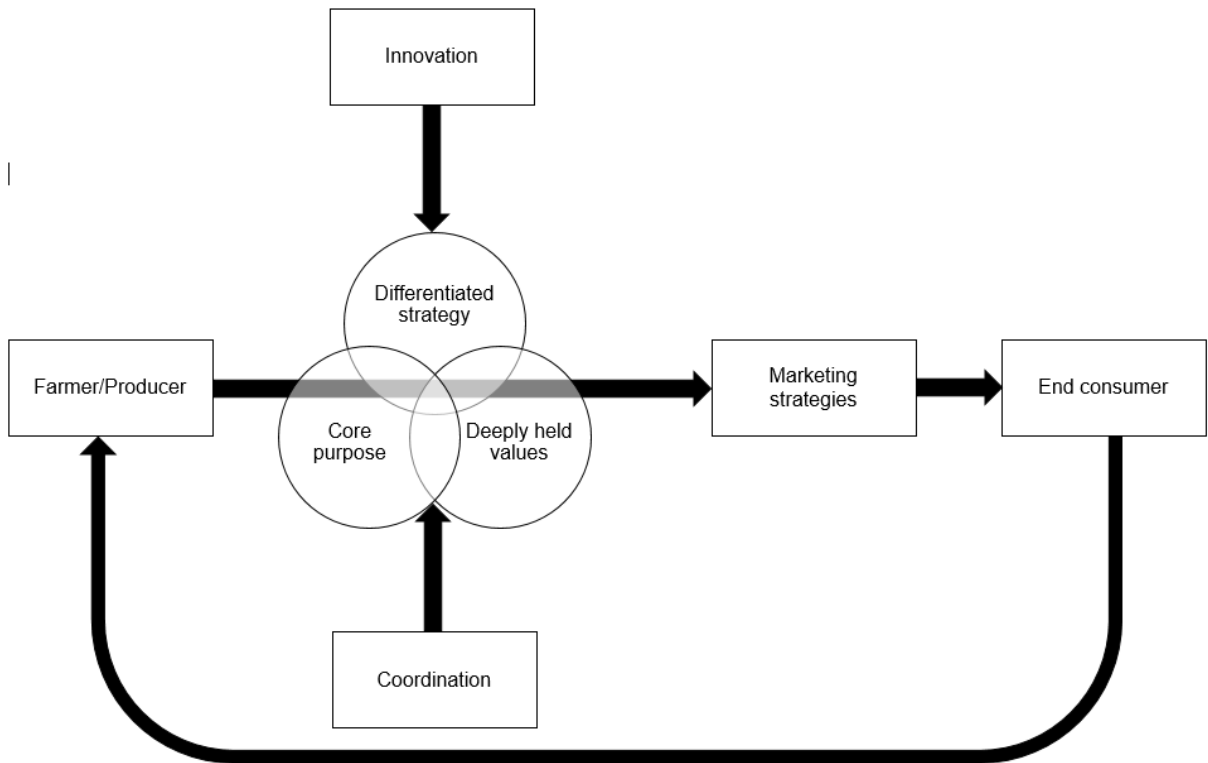
Strong leadership is essential for such value-adding strategies to be successfully implemented and Revology is a good exemplar of strong value-adding leadership. The remainder of this paper will examine the leadership qualities of Alex and Monique that have underpinned the success of Revology, and which might contribute to a roadmap of how New Zealand businesses can use natural materials to create high-value products.

A Model of Value-Adding Leadership

As with previous case studies of John Brackenridge and Mike and Sharon Barton, a model of value-adding leadership was applied to this case study. This was informed from the literature review which identified innovation, coordination, and marketing strategies as essential to adding value to land-based products in New Zealand. The model depicts the process through which products move and have value added, with a particular focus on some of the qualities of leadership that have enabled value to be added and for that value to be communicated to consumers and garner a price premium.

The model is unchanged from case studies of John Brackenridge and Mike and Sharon Barton. This report will focus primarily on the core purpose, deeply held values, and differentiated strategy and how these have fed into the innovative success of Revology. The model is shown in Figure 1 overleaf and forms the structure of the remainder of this case study.

Figure 1: Model of Value-Added Leadership



Chapter 4

Leadership and Revology

4.1 Core Purpose

The mission statement of Revology is “Born from the earth, designed for the future.” This describes the core purpose of Revology to find the intersection between technology, creativity, and sustainability (Revology, 2016a). As discussed in terms of the disruption facing the composites industry, the effects of climate change and the environment are a key component in the core purpose that drives Revology. The quotes below from Monique and Alex respectively, exemplify their personal passion and sense of purpose in transitioning to an industry which uses natural fibres.

“The climate is going to change and New Zealand is going to change less than [other places] in the world. We have potential to have a steady production of plants and have quality with those plants... There are possibilities we need to explore.”

“For that, it requires time. To get people to work together. We’re convinced it’s possible and we have the materials to do it, the know how to do it and [the] finance, and if we put that together there’s a high chance we succeed.”

Alex and Monique also have a strong sense of purpose in terms of their vision to not only transform their place in the composite and design industry, but to revitalise the New Zealand harakeke industry in the future. “In New Zealand we stopped production of harakeke fibre in the year 85. Since then we don’t produce more harakeke. We still have the plant, but we don’t extract any more of the fibre. There’s a real process to restart the industry. It will take time... we’re going to see if there’s an option to help revive this kiwi harakeke industry. I love it.”

Their vision is for the revitalisation of the harakeke fibre industry, not only for the production of natural fibre alternatives to more environmentally damaging materials such as carbon fibre and fibreglass, but also as a way to introduce native plantings to farms as a way to enrich the soil and sequester carbon. Planting harakeke may feed the soil and does not require additional water irrigation as it is sufficiently irrigated by rainwater. It may also help farmers diversify their income while becoming more environmentally friendly.

“For us, it’s looking at it from a fibre perspective. How can we use all parts of our farm, whether it’s a trip down the creek or cropland, to diversify your income? What it can then do is, the vision in 10-20 years, is having a really solid natural fibre industry. What are the steps to get there, we’ve got that vision that we want to be leaders in the world, so we can actually put that into the design studio and see what products are going to be good to export, we need to look at.”

“You can look at all these fibres and look at their footprint. Whether it’s harakeke, hemp, or linen, they have really little water impact, linen and hemp don’t need to be irrigated, if they’re planted in the right place, they get water from rainfall which irrigates. The retting process you can do without chemicals because you pull it out of the ground, it lies on the floor, and the cellulose is retted off with rain. That feeds nitrates into the soil, so you’re feeding the soil.”

The energy and passion Alex and Monique have for their venture signals that Revology is their calling. The concept ‘calling’, refers to leaders living for their work, and working in something that fulfils their lives (Seco and Lopes, 2013). Calling is a subjective psychological experience whereby a feeling of personal success is achieved when a person perceives work as their purpose in life (Hall and Chandler, 2005). Leaders’ calling can have positive outcomes for followers through perceptions of transformative leadership (Park *et al*, 2018). A strong sense of purpose and calling is a driving factor of Revology, and this contributes to their ability to engage people and inspire them toward their vision.

Much of what Revology does is built on a strong core purpose of transforming the composites/design industry to one which is more environmentally friendly and sustainable, with products made from nature which can be passed through generations. Alex also speaks passionately about design, aesthetic, and durability of products.

4.2 Deeply Held Values

Part of Revology’s value adding success is due to the values that drive their work. They refer specifically to seven values which make up the ‘DNA’ of Revology. These are:

1. Nature
2. Slow design
3. Materials
4. Innovation
5. Beauty
6. Heritage
7. Legacy

Organisational values are principles by which individuals and organisations live. Sullivan, Sullivan and Buffton (2001) posit that organisational values can be vehicles for change, and as Revology is focused on transformational change, having values is highly beneficial.

“It’s also being strong with our values. When we had that luxury during the R&D phase we set down seven principles about what our DNA was. Everything that comes into store is very much guided by that criteria. It doesn’t come in if it’s not ticking those boxes.”

Furthermore, some of these values relate to the physical, credence and cultural attributes that this research project is interested in. For example, the value of beauty is a physical attribute, the values nature, slow design, materials, and legacy are credence attributes due to their environmental stewardship components, and heritage is a cultural attribute as it focuses on the materials, practices, and designs of the past which have shaped their work. The values are discussed below, and these values signal how Revology operates and what values their products and designs are endowed with.

Nature

The value of nature and environmental stewardship is one which is central to Revology and is included in their mission statement (“Born from the earth”). Environmental considerations are one of the largest driving factors behind Revology and are a core driving factor for Alex and Monique in their mission. This is a credence value which sets Revology’s products aside from its competitors.

Environmental stewardship was also a central value for John Brackenridge of New Zealand Merino, and Mike and Sharon Barton of Taupo Beef and Lamb. The growing status of environmental stewardship signals a changing market and a need for leadership which acknowledges their environmental footprint and proactively acts within a business model that genuinely cares for the environment, supports the status of a green New Zealand, and is authentic in that approach.

As previously discussed, much of the core purpose of Revology is to utilise natural fibres to be environmentally friendly and sustainable. This is due to the passion of both Alex and Monique, but also the experience of Alex in the composite industry having experienced some of the damaging effects of composite manufacturing on the environment. The home page of Revology’s website (revology.com) states “Sustainable agriculture is at the heart of what we do. To thrive, our plants need a stable climate. That’s why we work hard to reduce our emissions and give back to our community.”

The move from France to New Zealand, selling Roctool and developing Revology, was built on the premise of finding a more sustainable use for Alex’s industry skills and moving away from fossil fuel materials to renewable natural fibres (Henderson, 2019). The interest New Zealand has in sustainability is an opportunity for entrepreneurs such as Alex and Monique to turn locally produced fibres into technical materials fit for everyday use. The use of flax and the potential use of harakeke (*phormium tenax*) is discussed under materials further in this report.

One particular way in which Revology has innovatively transformed the industry is the move to circular design. “Circular design; Designed to evolve and be repaired.” This means extending their work well into the lifespan of the products they create by ensuring that products can be repaired to ensure their long lifespan and making them less likely to be disposed of. The intention is to completely revolutionise how people consume, by ensuring that it is passed through generations and is completely renewable and sustainable, changing the disposable culture that currently exists.

The ethos of Revology is that a high-quality product made from strong materials should last for decades, pass through generations, and be able to be repaired and upgraded to not create waste. The chair is made from organic materials which, when disposed of, will break down much faster than synthetic materials. The circular design means that the chair is not only built with longevity in mind, but broken pieces may re-enter the manufacturing process and be replaced with new pieces at no additional cost, making the lifespan of the chair longer than its competitors, and more environmentally friendly. The quote from Monique (below), describes how the circular design of products feeds into their vision of a more sustainable market.

“The business model is that if something is broken, for example, if something breaks on the chair, the buyers send us back the broken part and we replace it. We then recover the materials and can use them for other uses. Currently, if we waste any materials in the production phase, we re-use it for the inserts in the chair. It doesn’t sit on the same aesthetic level as the original parts

but is mechanically sound. It's trying to think about the business and product stewardship. It's about taking responsibility for when you put something into the market, to have the means to bring it back in and recover and reuse the materials."

Alex also discussed the possibility of a product evolving and changing. For example, design #2, the bike, may have the potential to be electric or mechanical, with the same idea of a circular design to ensure that it remains functional for a very long time. "We want someone to buy the bike and keep it for the 20, 30, or 40 years. So we're working on a bike we can transform from a pushbike to an e-bike, and when the engine is dead, you can change to a pushbike."

With this, Alex and Monique would like to see a shift in how consumers use, keep, repair, and replace items, rather than continue to buy and throw away less sustainably. "There is no reason for a bike to have a 2-year lifespan. A chair, there is no reason to throw away a chair after 2 or 3 years, if it's a beautiful design, beautiful material, we take care of it, it's something you're going to keep for a lifetime."

The circular design described by Alex and Monique includes several circular design strategies, such as those included in a review by Moreno *et al.* (2016). The circular design has included designing for circular supplies through ensuring that natural/degradable resources were used, designing for resource conservation, designing for long-life use of products, designing for multiple cycles, and designing for systems change. The materials and design aesthetics that contribute to the 'timelessness' of the designs are detailed later in this report.

Slow design

The value of slow design refers to the slow, deliberate nature of the design process, ensuring that the designs are perfect and reflect the mission and values of Revology before being sold to consumers. "One thing is slow design, so things that are mindfully done. That's what we really try to do with our products. Thinking about how this is going to perform in 100 years and how this is going to happen."

This feeds into the concept of circular design above. Slow design ensures that products are made considering longevity, footprint, repairability, etc. In an interview with Idealog, Alex said "At Paris Design Week the watch words were 'slow design'. For Revology this is conscious design, from the seed to our end products and beyond, for Revology slow design represents well-being and respect for individuals, society and the natural environment. We are designing for the next generation, lessening the negative impact on the planet. This is what we aspire to do." (Idealog, 2016).

Materials

The materials used by Revology in the design and creation of products is hugely important. Revology's website specifies some of the materials and the reason they are included in the sustainable design of products (<https://revology.com/materials/>).

The processing of flax into fibres has been the same for centuries and it is woven and moulded into shapes with a lot of strength.

They discuss the environmental properties of flax as it grows with rainfall and doesn't require irrigation. What's left in the ground after harvest gives nitrogen back to the soil and fibres sequester CO₂, thus it has potential as an environmentally friendly alternative to synthetic materials.

In the interview, Monique discussed the blend of linen (made from flax fibres) and wool that has been used in their designs. The chair design was a product that demanded strong materials and thus was a natural first design for Revology. "We chose linen because we work with a cooperative in France, we can get a regular supply that we know is quality, and when you're thinking as we were that this is a volumes game, that we needed to have that regular supply of it... We said let's look at objects we can do with non-carbon fibre, and a chair is a very good example. A chair you need to be light, strong, flexible, and comfortable. Carbon fibre doesn't fit the box. Same for an urban bike, natural composite fibres are a good fit as they will provide more comfort to the user than carbon fibre, which is quite stiff ... We wanted to find an alternative material to carbon fibre, natural fibre makes more sense. We wanted to offer a sustainable alternative to the market."

Using natural fibres as composite material is gaining traction due to the availability and accessibility of plant fibres and increasing interest in sustainable technology (Ramesh, Palanikumar and Reddy, 2017). Flax fibres in particular, are a popular composite material due to cost-effectiveness and excellent mechanical properties comparable to those of fibreglass (Yan, Chou and Jayaraman, 2014). The strength of flax is an important property when it comes to design potential. Flax fibres are extremely strong and impact resistant. Flax fibres outperform fibreglass composites in fatigue tests and have an impressive strength/weight ratio with density better than carbon fibre. A common issue with natural fibres however, is variability due to fibre type, environmental conditions, and processing methods (Ramesh *et al*, 2017).

"Flax composites have the potential to be the next generation materials for structural application for infrastructure, automotive industry and consumer applications. Future work on flax composites should be focused on understanding the environmental assessment, durability, further improving the mechanical properties and moisture resistance. Additionally, novel manufacturing processes and surface modification methods should be further developed" (Yan *et al*, 2014, p. 315).

Alex and Monique intend to move from using primarily linen blends imported from France to using harakeke sourced in New Zealand. Harakeke is in abundance in New Zealand however it has not been manufactured into fibres for many years.

There is very little literature on the management and cultivation of harakeke by Māori prior to the 1930s which is likely due to misconceptions of non-Māori observers (McAllum, 2005). Prior to colonisation, harakeke was extensively used for everyday items such as clothing, nets, and baskets, and upon European contact, it was manufactured and used more commercially, however, this market collapsed in the 20th century (Wehi and Clarkson, 2007).

The milling industry ran from the 1860s to the 1980s, but low production, poor quality, marketing problems, structure of the industry, and rising interest in synthetic fibres lead to its collapse (Cruthers, Carr & Laing, 2009).

Alex and Monique would like to re-establish this industry as a focus on sustainable material is growing and the physical properties of flax fibres make them a good alternative to less sustainable materials. This could be an opportunity to go back to the way we used to do things, using the land for materials, and moving away from synthetic fibres which can be environmentally damaging (Henderson, 2019).

“But first things first, a feasibility study around extracting harakeke, we know the traditional uses, can we bring that back and revive it and is there a market for it through changing consumer behaviour, but then saying how can we use it with new innovative markets? What are the processing needed to be able to do that? If we use it for a composite, as a replacement for carbon fibre and glass products, that widens the number of applications we can use it for.”

Other used materials include bio-based resin made from plant-based isosorbide (plant glucose transformed into droplets) and various metals. Brass is made from scrap copper and zinc and is forever recyclable. Its weight is ideal for the design of the chair and it also gives a retro aesthetic. Aluminium is used for early bike designs due to its weight and strength and ability to connect the base together. Aluminium is highly recyclable with much of this material staying in circulation.

Innovation

Innovation here is discussed as a value of Revology; part of its ‘DNA’. Innovation has been discussed as a key component of the value-adding process in the various components of this ongoing research project. Innovation is not only an outcome of their work and experience but is an integral component of the organisational culture that drives everything they do as innovation is woven into the company’s DNA.

The components of innovative practice and innovative success will be discussed further in this report

Beauty

The aesthetic design components are extremely important to Revology, “Super light, beautiful, natural, this is the idea behind Revology.” This company value is passed down to the physical attributes of their products which may contribute to the price premium Revology receive.

One reason behind beauty as a central value to Revology is the experience that consumers can have with products, according to Alex. Alex aspires to create products which are visually appealing and pleasant to the touch to evoke a pleasurable experience. “We’re also looking at beauty. No matter how sustainable it is, when it’s beautiful, it appeals to the eye. That’s something. As humans we have an aesthetic eye. We need to think about catering to that. That’s about pleasure as much as anything. You like the touch of the materials, so there was a lot of work done on how it feels and the tactile experience.”

Monique expanded on this saying that humans have an innate tendency to seek out certain features such as proportion and curvature. “When you understand that proportion and aesthetic for the human eye, it’s really important. We like things to be in proportion. Understanding that, even with the shape of the chair, nothing is linear. Everything is a movement like in nature, you have nothing in nature that is 100% square.”

Human attraction to curved contours and lines is a common observation in the field of aesthetics and this may be due to an evolutionary background to how we process curved stimuli (Gómez-Puerto, Munar and Nadal, 2016). The flair Revology has for aesthetic design helps their products to be perceived as visually pleasing, thus the value of beauty plays an important role in the design of products.

Heritage

In the context of Revology, heritage means using what has worked well in history in today's contexts and paying homage to things that have been great in the past. By understanding what was great in the past, Revology can make something different. Different in terms of design, materials, and durability etc., but with components such as aesthetics that pay tribute to classic designs.

One way this is achieved is through returning to natural fibres, a tried and true way of making sturdy materials and practical everyday objects. This is discussed earlier in terms of the harakeke industry in New Zealand and the interest of Alex and Monique in re-establishing that industry for commercial purposes.

Another homage to heritage is through the design of their products. Words like 'vintage' and 'retro' are used by Alex to describe some of the objects he has designed and envisions.

"Beauty is very personal, I may like something you don't like and vice versa. That's why we decided to go for classic design. We went for a vintage bistro chair because we like this design. It's the same for the bike, we want an old-style vintage bike because we like vintage. Beauty is a huge part... For us it's timeless. Timeless is wise. People quite like it."

This value of heritage signals a cultural attribute as products made by Revology reflect what has worked well in the past regarding design, and what indigenous people have succeeded in doing through using natural fibres.

Legacy

The final value that makes up the DNA of Revology is legacy, which is the footprint Revology leaves behind. As has been discussed throughout this report, environmental stewardship plays a large part in the actions of Alex and Monique, the materials used, the processes used, and the products created. Revology intends for the items they create to be made from the earth, pass through generations, and then return to earth. This is exemplified in the quote below taken from their "This is why" series on YouTube.

"Objects that are born from the earth, destined to be passed from cradle to cradle, or earth to earth, leaving our children and our grandchildren with a legacy that they will be proud of. Revology, designing for the next generation, and the one after that." (Revology, 2016c, Timestamp 0:24).

These seven values of Alex and Monique constitute the 'DNA' of Revology, and these are what they bestow to their products to differentiate them and garner a price premium.

4.3 Differentiated Strategy

Having a strategy of differentiation is important in fostering innovation and differentiating a company from competitors. Zook and Allen (2001) state that differentiation is the core of growth and profit for organisations and involves evolving core business and approaching it with renewed energy and vigour. They listed three strategies for management teams to successfully differentiate:

- 1) Define the business boundaries and core business;
- 2) Identify the sources of differentiation that will continue to create market power and influence with customers, competitors, and industry profit pool; and
- 3) Comb through the core and assess whether it is operating at or near its full economic potential.

Differentiation at Revology

Alex and Monique have been deliberate in their actions in quickly establishing Revology as a successful, innovative company that can create products aligned with evolving consumer needs and increasingly urgent environmental needs. For Alex and Monique, adopting a differentiated strategy doesn't mean survival, as they could make other products with carbon fibre and fibreglass and Alex has a track record of running successful companies using other materials. The point of Revology was to create a company and revolutionise this industry, differentiating themselves and their products from the status quo.

Being innovative, living and breathing the Revology DNA is the core business of Revology. The status quo is unsustainable to Revology because it does not align with their personal values and is not sustainable for the New Zealand environment. Furthermore, with growing environmental pressure and evolving consumer demands, Alex and Monique recognise that the status quo needs to change, otherwise businesses may not fare well.

Through differentiation, Alex and Monique have created a unique product which stands apart from competitors. With a focus on the value chain, Revology purchases linen from a cooperative in France with congruent values (more on this in the coordination section of this report), uses an innovative manufacturing process to turn linen into tubes, and uses these as the main components of their chair which is strong, stylish, and highly functional. The intention in the future is that flax fibre will be grown and harvested in New Zealand, allowing businesses to be more local and for the environmental benefits to be experienced more in New Zealand.

Throughout the design process, every detail of the chair, its physical properties, aesthetic properties, materials used, etc, they have considered how value is added and how it may stand out as the best chair on the market. Through emphasising the values of the company, as expressed in the chair, Revology has created a unique product which garners a price premium and has the potential to do so on a global scale.

The need for a bigger conversation

Much like the conversation with John Brackenridge, Alex and Monique recognise the need for the New Zealand agricultural industry as a whole to engage in differentiation in the face of disruption. This conversation needs to focus on the impact of the agricultural industry and the potential for New

Zealand to step up as global leaders in a rapidly evolving market. This change needs to be transformative and systemic, coupled with support for primary sector businesses to flourish and grow. They recognise that disruption is not a failure sentence, but an opportunity for those willing and able to step up and lead the change.

The quote below from John Brackenridge exemplifies the urgency and breadth of this wider conversation.

“I really feel there’s such an important conversation that has to happen in this country. There needs to be a national debate around transformation and change. The essence of what we’re talking about has to come front and centre. We’re looking [not only] at shifting the [whole] economy but how much are we putting into human-centred design and into understanding people and value chains and connections and importantly, the narrative. Imagine if we can overlay [the narrative] with our leadership in carbon, water quality and social responsibility so consumers over the world say... ‘Here’s a country doing it and here are their products, we’ll vote with our wallets’. But if our products are just commodities, consumers don’t get to vote. We talk about being purpose-led, but we’re really missing the boat majorly in terms of how we then wire that to connect with conscious consumers”.

Alex and Monique do not work in farming thus cannot speak to the work and experience of farmers directly; however, they have insights on the disruptions that New Zealand faces and the importance of agricultural businesses to change the ways they traditionally do things.

Alex has a perspective of farming in France and draws comparisons between their typical ways of operating and those in New Zealand. Alex discussed that in France, farms focus more on small volumes and high quality while he perceives New Zealand farms to have a stronger focus on intensive farming. “I come from another country. When I came here, I was shocked with our agriculture system versus the French system. The French system doesn’t work very well for a number of reasons. I think it’s too small, and here in New Zealand, we are probably too big. The French are doing pretty well on the sustainable side of agriculture; we are trying to put a lot to be more sustainable.”

Monique pointed out that a focus on continuous growth is unsustainable but is how success is largely measured in New Zealand. She believes this is to the detriment of New Zealand as it doesn’t consider the future and the limitations of the land to produce the growth sought. This means changing how we conduct agriculture and shifting how we consume.

“Post-WWII we needed growth and growth became a yardstick for success. Unfortunately, as the person who invented GDP has said, it’s never going to be a yardstick for wellbeing. If we want to look at sustainability we need to look at growth...”

We need to react to growth or retraction. Exponential growth scares me exponentially. Because, as a systems thinker, that means there’s going to be a collapse at some point. We can’t keep going on thinking ‘scale, scale, scale’, we need to start thinking [about] ‘how can we have an industry that’s not just there in ten or twenty years’, because if you look at land use and intensive farming, how many more productive seasons have they got out of that?”

Alex and Monique perceive that environmental pressures will make intensive farming an impossibility for many farmers, and these pressures are already being experienced by farmers such as Mike and Sharon of Taupo Beef and Lamb. This conversation around intensive farming and the quality of the soil and land relates closely to conversations with Mike and Sharon, the second case study in this series. Taupo Beef and Lamb needed to operate under a nitrogen cap, which essentially meant a cap on livestock as too many cows would result in too much nitrogen entering Lake Taupo, affecting the quality of the water. Mike and Sharon Barton needed to add value and differentiate their meat products to ensure that what they produced was of high-quality and able to garner a price premium while acting in accordance with nitrogen restrictions.

In terms of produce, Monique discusses the importance of soil. That is, the best soil for growing the produce is a huge consideration in France, but less so in New Zealand. “Understanding what’s in your soil and using that as your marketing tool... Champagne for example comes from a particular piece of land because of its soil. The soil gives the wine the qualities that make it exceptional. The same in Burgundy.” “They’re very good at understanding what makes the best product and you can taste it in the products that are made. Cheeses are the same. The stamp of what farm it comes from, whether it’s spring or summer etc. The prices for that product are much superior to a standard cheese made in a big factory.”

4.4 Innovation

As discussed earlier, innovation is one of the values constituting the Revology ‘DNA’. Innovation is at the heart of everything they do as this fulfils their aspiration to revolutionise a market. Innovation is a key driver of value-adding in the agricultural sector (Coltrain, Barton and Boland, 2000). An ‘innovation event’ is the introduction of a new product or process which starts a value-adding process (Roper, Du and Love, 2008). In the context of Revology, this is primarily the use of natural fibres to replace less sustainable composites such as carbon fibre and fibreglass. It involves an overhaul of the design process, risk-taking, and the creation of a new market.

Innovation has associated uncertainty and risk (Roper *et al*, 2008). Revology engages in both product and process innovation. This is because they innovate new products (designs, such as the chair, made from organic materials) and innovate a process (using induction heating systems) to create those products. These processes contribute to competitiveness and growth (Damanpour, 2010). The story of innovation at Revology means more than surviving in a competitive environment, however. It involves the creation of a new market within which they want businesses to join and flourish together. The vision of Revology is to create a more sustainable market and generate demand for products and technologies that benefit the environment.

Materials experimentation

Research and experimentation have been a focus of Alex and Monique in how to best utilise natural fibres as composite materials. This has been a time- and resource-consuming venture with many risks. The money made from Alex’s earlier businesses has enabled them to spend this time finding the solution which has involved extensive experimentation to uncover the optimal way that natural fibres can create a strong, elegant, mouldable component of chairs.

“We started to look about what type of natural fibres we could use, we tried hemp, we tried flax, we tried wool, we tried different fibres. One of the challenges was to transform properly the natural fibre into a real composite part, it’s quite challenging. We tried flax fibre for various reasons, more than the other ones... One of the challenges was flax fibre burns at 160 degrees, we have to transform it at 200 degrees Celsius depending on the resin you’re going to use with it. We had a huge technical challenge and we found a way to do it using induction heating systems instead of conventional heating systems to accelerate the heating time to not burn the fibre.”

They also experimented with other materials including bio-resins which are a more environmentally sustainable alternative to inorganic materials. “We decided to not use a polycarbonate plastic, but here we are using bio-based resin, agricultural crop, beetroot and corn, and we buy that in Japan. We have been pushing boundaries on what type of resin we can use, what types of materials.”

Leading innovation

The literature review discussed in detail the types/styles of leadership that foster innovation. Revology is a small team, and the leadership of Alex and Monique has been instrumental in motivating their team toward innovation as well as communicating an inspirational message of change to the world.

Transformational leadership is a style of leadership that describes leaders who raise performance expectations and inspire followers to do more (Bass 1985). The attributes of a transformational leader are idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration (Antonakis, Avolio and Sivasubramaniam, 2003). Particularly salient in the messages and actions of Alex and Monique is the inspirational motivation. They have a vision for a more sustainable market which is able to accommodate environmental demands and evolving consumer demands and they are ambitious in their approach to achieve their mission.

Authentic leadership is another style of leadership that describes the messages and actions of Alex and Monique. Authentic leaders lead through being their authentic selves and knowing, accepting, and remaining true to themselves (Avolio *et al*, 2004). Authentic leaders lead following their deeply held values and this is a driver of organisational culture. The sense of purpose, values of Alex and Monique, and the DNA of Revology have been discussed in this report, and these are what Alex and Monique abide by in everything they do.

Authenticity adds weight to the messages of Revology and aligns people to their mission. Being transformative and authentic has been key to their success as innovators and entrepreneurs.

4.5 Coordination

Collaboration toward a shared goal

As discussed in the accompanying literature review (Mayes, Wall and Cammock, 2019), coordination is arrangements of organisations along the value chain that produce and market profits (Coltrain *et al*, 2000). This can be both horizontal (at the same point) and vertical (at different points).

Revology has worked with other organisations to help with the creation of their finished product. This has included collaborating with designers and engineers to realise their vision. “We have been working together with the design of the chair, along with other designers and engineering agencies to make sure all of the pieces of the puzzle come together. When you look at the chair, 32 parts, every single part is different.”

Monique said that collaboration and building partnerships is important for seeing their vision through. Rather than competition, they value collaboration toward a shared vision. This includes partnering with research entities and iwi. Monique highlighted the importance of working with others in this excerpt from the interview.

“There are people working on this, in different ways ... how can we leverage it to everyone’s knowledge while respecting what they bring to the table, but how we can do this with farmers, iwi... Making sure we’re partnering with iwi because they have incredible scientific indigenous knowledge around harakeke that is invaluable around this project and harakeke is part of their traditional taonga.”

Combining the power of different expert teams across organisations allows for both radical and incremental innovation (Soosay, Hyland and Ferrer, 2008). With a mission to revolutionise a market, Revology has recognised the importance of working alongside others and the power that this can have.

Leading coordination

The literature review discusses the importance of collaborative leadership in fostering collaborative relationships across value chains. Collaborative leadership has partnership as the focal point and leaders manage their relationships, not just deals (Kanter, 1994). Alex and Monique have a focus on building functional relationships rather than competitiveness. Their collaborative leadership helps them build functional relationships with other organisations and groups that can work with them on their mission.

Revology has not yet started selling their product in bulk, but through collaborative leadership, Alex and Monique may be able to leverage their relationship-building capacity to build strong overseas networks. This will allow them to sell through offshore retailers while remaining true to their brand.

4.6 Marketing Strategies

Brand and market orientation

Brand orientation is an inside-out approach with brand identity as the key concept whereas market orientation means marketing and branding products to respond to consumer demands (Urde, Baumgarth and Merrilees, 2013). These are not mutually exclusive and can have synergy. The literature review discussed these orientations in terms of communicating value to consumers.

Revology primarily focuses on creating a product aligned with their vision and values. This means that they primarily utilise a market orientation, endowing every product with the Revology DNA. They hope that consumers will see and understand the story and values of Revology and appreciate it. Alex highlighted the value of this approach in the interview.

“You can tell 100% of customers to the store come because they like the DNA and the story of the company. If they like the design then they like the design, but they like the story, the materials, they like that it’s well done, and they like that it’s sustainable. I see every day I use something quite sustainable, it makes you feel better.”

Alex said that they market themselves authentically, communicating to consumers their process and values. “I think we highlight it clearly. It adds to the story. We communicate a lot about the materials, the ethics, the DNA, the circular economy and design approach. We know this is our demographics. We use it a lot because we know a high percentage of our clients are coming for this.”

In terms of a market orientation, Revology has had to create something that people require and commonly possess. This is where the design of the chair comes into play as this is something that every household has, something that everyone needs, and something that can be made sustainably. The strength required in the chair makes it perfect for the material made through manufacturing natural fibres. “...it took us a few years to finalise the process. Once we had the process in hand, we said ‘okay we have beautiful materials, we have a process to do it, what type of products can we make with it?’... We started with a chair, it’s the iconic object. Everyone has between 6 to 25 chairs at home.”

Through making a chair, which Alex calls the ‘iconic object’, Revology has created an object that everyone needs. Those who align with the DNA of Revology will be attracted not only to the values of the chair but the practicality and necessity of it as an everyday household item.

Encompassing the value chain

Rather than producing their products to give to retailers, Revology market and sell their designs themselves. By doing this, they encompass more of the value chain. Alex and Monique currently source materials from overseas, but seek to grow and harvest linen and harakeke in New Zealand in the future. They process the fibres themselves, then market and sell these directly to the consumer without going through multiple steps in a value chain and gaining less market share. “We manufacture and we sell directly. It means we wanted to have a product that is affordable for the public – for the final buyer.” They recognise that a lengthy chain results in an item which is more expensive with a high portion of profits going to the retailer, and not to Revology, the innovator.

Revology has a small team and Monique was of the view that each ‘component’ of Revology plays an important role in the value chain. From seed to a final product, Revology has a strong team responsible for research, manufacturing, testing, design, marketing and selling. As Monique said, the role at Revology requires one to wear multiple hats and be flexible. “We split it up into three sections. The green lab, Alex’ realm, that’s where he is. The R&D, materials, and prototypes, that initial design phase. But more the testing and mechanical. That’s taken the bulk of time. Then there’s the design studio. That’s where you take that knowledge gained in the green lab and put it into application... the third one is connecting with communities, that’s the retail space and the idea behind the concept store that it’s mainstreaming sustainability. Getting people to rethink how they consume and what they consume. Right from that green lab, the process behind it, we currently work from the seed right through to the end product.”

Appealing to the conscious consumer

In terms of who Revology is marketing to, they have identified ‘conscious consumers’ as their primary market. These are people who are aware of social and environmental issues and their consumer behaviour reflects this awareness. “For me as a consumer, and for most of our consumers, they’ll go [for] sustainability, they’ll think it’s cool, but it’s more the sustainability story is why they come.”

They also discuss young people who are aware of environmental and sustainable issues and are starting to have a profound effect on markets as they consume more consciously. Alex and Monique have teenaged children and they say that the current teenage generation is particularly environmentally and socially aware.

“It’s what we call conscious consumers. This demographic of ‘conscious consumer’ is really taking off. We have teenagers at home, so we are well-placed to talk about demographics. We can say this new generation is really into sustainability... If you buy something crappy, now kids will ask you what material it’s made of. I think our generation... we didn’t really take care and our parents’ generation definitely not. However this too is shifting and in the concept store, we have a wide mix of generations coming to purchase. Conscious consumption is becoming mainstream.”

The literature review discussed entrepreneurial marketing as a proactive marketing pursuit to disrupt markets and meet consumer demands as they change (Darroch, Miles and Paul, 2005; Miles, Paul and Wilhite, 2003). Alex and Monique have identified a market of young people who will grow in a world where environmental issues will become increasingly common and businesses will need to evolve to meet changing pressures. Their innovative designs and processes will become increasingly important as the market shifts and their entrepreneurship has placed them in an optimal position to face challenges and thrive.

4.7 Entrepreneurship: Concluding Thoughts

The story of Revology is one of a strong core purpose and deeply held values with innovation at the heart. Throughout this report, several references have been made to how Alex and Monique view current markets with their background in composites and insight into agriculture. They identify issues with the status quo, intensive production, and profits over people/planet. The leadership shown by Alex and Monique has had a strong focus on being leaders of a movement toward a more sustainable industry and a new way of consuming and recycling.

Leading this movement has required entrepreneurship. Alex and Monique have shown grit and perseverance, going through long research and development stages to finally create a product that they can sell to consumers and facilitate this conversation around consumption. Revology makes a case for greater entrepreneurship and risk-taking in New Zealand agriculture to differentiate products and move New Zealand toward a new culture of sustainability and a more circular market. Through this, organisations may endow their outputs with the physical, credence, and cultural values that are becoming more salient in evolving markets. Entrepreneurs may help lead New Zealand through disruption and not only survive, but thrive in agriculture.

Chapter 5 Conclusion

Revology has an ambitious vision of changing the way everyday products are designed through using natural fibres and manufacturing methods and processes which are more sustainable. They also want to change the way people consume and recycle through designing products which may last for generations before they are given back to the earth. Through the entrepreneurial and innovative approach they have taken towards design, they have created a product which is currently being sold to consumers with significant value added throughout the process. Alex Guichard and Monique Kelly are good examples of how New Zealand businesses in the agricultural sector can build value around the physical, credence and cultural attributes that this research is exploring.

Much of the success of Revology in realising their vision is due to the leadership that Alex and Monique possess and how they anticipate and react to disruption, particularly regarding environmental sustainability and the growing conscious consumer market. This has required them to create a business and products which are differentiated from what is currently considered the status quo. Revology has been able to innovatively manufacture natural flax fibres to replace materials such as carbon fibres and fibreglass and attract consumers who value sustainable products.

Alex and Monique align with effective leadership in the fields of innovation, coordination, and marketing, according to research included in the literature review. They also have a strong core purpose, deeply held values, and differentiated strategy which has guided them in this venture.

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