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Value-Based Leadership in New Zealand Agri-foods Exporting Enterprises: Literature Review

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Abstract

On 12 September 2017, the Ministry of Business, Innovation and Employment announced that a research programme entitled Unlocking Export Prosperity from the Agri-food Values of Aotearoa New Zealand had been selected for funding from the Endeavour Fund. The programme has been launched with four reviews written for a general audience on relevant existing knowledge, including this report on (4) distinctive features of values-based leadership in New Zealand agri-food exporting enterprises. It focuses on: leadership and innovation; leadership and coordination; and leadership and marketing. Overall, the literature suggests two very important points for adding value to New Zealand agri-food exports: 1) Leadership does not directly add value to agri-food products; and 2) Relationships between leadership and value-adding processes is complex.

Keywords

Value Chains; Leadership; Innovation; Coordination; Marketing.

ANZSRC Fields of Research

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

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Chapter 1

Introduction

This literature review summarises much of the organisational research dedicated to leadership and value-adding strategies applicable to agricultural value chains. This will inform how New Zealand agri-food organisations can create price premiums in overseas markets. Specifically, this review summarises the value chain and value-adding processes that ensure that products move through the chain in a coordinated fashion to meet foreign consumer demands. It then assesses the leadership styles that are both theorised and empirically tested to influence these processes. The three specific value-adding processes discussed are innovation, coordination, and marketing strategies. Innovation and coordination work in tandem to add value to agri-food products so that they may be differentiated from similar products and alleviated of their ‘commodity’ status, while marketing strategies such as branding, market orientation, and entrepreneurial marketing aim to increase value salience and communicate the brand to consumers. These three processes are thus purposeful activities which endow agri-food outputs with additional value as perceived by target foreign consumers.

Leadership is suggested in this review to not only be related to these processes, but to be a critical antecedent which requires careful consideration in exporting enterprises. This does not, however, mean that leadership directly influences value premiums in agri-food products. Leaders play critical roles in enhancing innovation (Hammond *et al*, 2011) and coordination (Akhtar and Khan, 2015). Leadership is also essential to marketing team success (Kasper, 2002). Vertical agri-food value chain relationships are characterised by contractual agreements (Poulton, Dorward and Kydd, 2010), and leaders may use their contractual arrangements with producers to guarantee product quality and use incentives to keep reliable agri-food producers within their network (Fischer and Hartmann, 2010). Leaders have a large impact on organisational culture, which affects the ways of operating (Kasper, 2002). Leaders can also impact the organisational climate and organisational learning, which affect how employees work (Norrgrén and Schaller, 1999). While leaders do not directly create value in agri-food exports, their influence over followers is an essential hurdle to understanding and meeting consumer needs and generating value premiums.

Leadership cannot be conceptualised in a single way applicable to all contexts and organisations as the scope of leadership theories and frameworks is too broad. It is also important to not solely focus on the leader, but also the followers, peers, supervisors, work contexts, and cultures surrounding them (Avolio, Walumbwa and Weber, 2009). These influences are not necessarily unidirectional, and leadership has been considered in many organisational and research contexts examining direct, indirect, and bi-directional relationships, as well as the mediators, moderators, contexts, cultures, and individual factors that affect these relationships, resulting in a plethora of different findings specific to the situation at hand. Cammock (2003) defines leadership as a dance, in which “leaders and followers jointly respond to the rhythm and call of a particular social context, within which leaders draw from deep wells of collective experience and energy, to engage followers around transforming visions of change and lead them in the collective creation of compelling futures” (p. 17). Leadership is thus a function of the led as well as the leader, and the complexity of context within which they operate (Avolio, 2007).

Recent years have seen a flourishing body of research into leadership, generating a plethora of leadership theories which provide new avenues of research possibilities as well as exponentially increased complexity and diversity in theory (Dinh *et al*, 2014). In a large-scale review of leadership research, Dinh *et al.* (2014) conducted a search of ten top-tier academic journals in leadership research between the years 2000 to 2012 and found 752 articles. These articles covered well-established leadership theories including transformational and transactional leadership, as well as emerging theories which are still finding their footing in the leadership literature. Dinh *et al.* (2014) categorise these theories and styles of leadership into 23 categories. Despite this reduction, this is still a large scope of leadership research to navigate.

The abundance of research on leadership has resulted in the development of various leadership styles. These styles are characterised by different definitions and attributes of leadership, and while many of them are operationally similar, researchers continue to examine current styles and develop new ones. This review considers several leadership styles, including well-established styles such as transformational leadership, and new/emerging styles such as ambidextrous leadership.

Research in leadership is further complicated by the complex relationships between leadership styles, the combinations they can form, and the exchanges between leaders and followers. For example, ambidextrous leadership considers aspects of both transformational and transactional leadership and the adaptiveness of leaders to switch between behaviours given the requirements of an innovative task (Rosing *et al*, 2011). Leader-Member Exchange (LMX) theory focuses more on a relationship between leaders and their followers built on mutual trust and respect (Gerstner and Day, 1997). Leadership research can indicate what leadership styles and attributes are favourable in the value-adding processes carried out through innovation, coordination, and marketing, however practitioners need to consider this complex interconnectedness. Consideration should be given to how leadership styles can work in tandem, how leaders can (and need to) adjust leadership behaviours based on the needs of their followers and the tasks at hand, how leaders will encompass various attributes from different leadership styles, and how research on leadership is constantly shifting and recalibrating.

This review summarises literature on various leadership styles and attributes and their relationship to value-adding processes. Some new and emerging leadership styles are also considered, as well as some relationships between leadership styles. Mechanisms through which leadership styles enhance value-adding processes is also considered.

The assessment of leadership qualities and styles that encourage value-adding in agri-food value chains can inform implementation protocols for industry leaders attracted to the shared vision of delivering high valued products in major global markets. Development of such protocols may have long term benefits for New Zealand agricultural businesses to excel in a global market, however the link between leadership and value premiums in agri-food exports is not fully substantiated by the academic literature. This literature review aims to connect literature in agriculture, value chains, value-adding strategies, and leadership styles to inform what aspects of leadership should be considered in selection and training to maximise the possibility of New Zealand agri-food exports generating a value premium in overseas markets.

Chapter 2

Agri-food Exporting Enterprises

2.1 Agricultural exports from a value chain perspective

New Zealand's primary industry, agriculture, performs on a global stage and faces the same challenges as other international agricultural industries. Global agricultural markets reflect a growing complexity and scope in consumer demands (Cucagna, 2014; Goldsmith, Salvador, Knipe and Kendall, 2002; Humphrey and Memedovic, 2006). Numerous critical events relating to food safety and food quality have created turbulence in global agricultural systems (Goldsmith *et al*, 2002). Events such as foot-and-mouth disease, bovine spongiform encephalopathy, genetic engineering, animal welfare concerns, and their associated concerns, signal the rising expectations for organisations to deliver social attributes and the need for agricultural organisations to assure trust and food safety (Sporleder and Goldsmith, 2001). In particular, the scope and complexity of food standards, particularly those relating to food safety, represent increased challenges for agricultural organisations to meet changing market requirements (Humphrey and Memedovic, 2006).

Consumer values are being incorporated into supply chain management systems to ensure products meet consumer needs and wants. Supply chain management is a contemporary concept that benefits organisations operationally and strategically in theory by creating an integrated relationship with suppliers, customers, and other stakeholders (Al-Mudimigh *et al*, 2004). However, management of supply chains has been criticised for being supply driven, focused heavily on the meeting of supply demands (*idem*), and not incorporating end-customer values in the process (Taylor, 2005). In contrast, value chain management manages the chains that products go through in terms of consumer values beyond that of just product and market quality (Al-Mudimigh *et al.*, 2004). Products are pulled through value chains by consumer needs and wants rather than being pushed by suppliers' inventories (Macharia, Collins and Sun, 2013).

Values are the "guiding principles that motivate action to achieve desirable goals" (Kosteljik, 2017, p. 11). They define what aspects of a product is important to an individual that may not be important to others, and these values motivate consumers to act by purchasing the product or paying a premium (Kosteljik, 2017). It is the end consumer who is the target of the value chain, and it is they who have the exclusive right to define what constitutes value, thus value is always defined with reference to the end consumer (Macharia *et al*, 2013; Saunders *et al*, 2016; Sausman *et al*, 2015).

Understanding how value is detected, created, and fostered requires an understanding of global value chains. The value-added chain is "the process by which technology is combined with material and labour inputs, and then processed inputs are assembled, marketed, and distributed" (Kogut, 1985, p. 15). It outlines the processes through which a product must go to become something bought by a consumer, with value being added to the product at each step. In the agri-food industry, the value-chain moves through four broad sectors which add value to a product that is eventually sold to a consumer (Humphrey and Memedovic, 2006). Inputs include chemical and seed companies, production is the agricultural production of a product, processing is the fresh-food processing and manufacturing/processing of agri-food products, and delivery to consumers occurs through retail and catering (Humphrey and Memedovic,

2006). This value chain is a vertical structure where delivery to customer is down-chain, and supply of agricultural products to farmers is up-chain. Different parts of this chain add different amounts of incremental value to a product (Cucagna, 2014).

How agri-food value chains are organised is a function of global marketplace demands. Humphrey and Memedovic (2006) identify three challenges facing agri-food value chains. Firstly, the increasing importance and evolution of agri-food 'standards' is changing global agricultural trade. The increased complexity and stringency added through consumer need changes and developments in food risks/scares, as well as the shift from product to process standards and the increase in private standards makes achieving standards increasingly difficult. Secondly, agricultural suppliers must satisfy requirements of demanding global buyers including large-volume supply, speed and reliability of delivery, customisation of products, and guarantees about product safety. Finally, with commodities going down in price, strategies for increasing product value at points in the value chain are required, and identity and distinctiveness of products must be established at the point of origin and maintained throughout the chain. These challenges highlight areas where agri-food value chains need to focus attention to maintain value in the eyes of consumers so that premiums may be paid.

2.2 The complexity of agri-food standards

In addition to values held by customers, agri-food businesses also need to respond to the changing global standards environment. Standards "prescribe requirements for product characteristics, production processes and/or conformity assessment and are used to address information problems, market failure externalities, or societal concerns" (Ferro *et al*, 2015, p. 68). In the agricultural sector, standards aim to ensure food safety and animal/plant health and extend to other quality and technical attributes of agri-food products (*idem*). These standards are the result of a proliferation and evolution of regulatory requirements in response to food safety and quality concerns from consumers and scientific discoveries regarding food risks (Henson and Reardon, 2005), thus agri-food products need to not only satisfy consumer values, but must meet the public and private standards that develop as a result.

The structuring and organisation of agri-food value chains is affected by trends in agribusiness standards (Humphrey and Memedovic, 2006). These standards include increasing stringency of standards, the shift from product standards to process standards, increasing scope of standards, and the rising importance of collective private standards. The increased stringency of standards can be attributed largely to foods with associated risks and food quality concerns of consumers (Henson and Reardon, 2005) as well as publicised food scares such as bovine spongiform encephalopathy and Foot-and-mouth Disease call for regulatory measures (Sporleder and Goldsmith, 2001) which generate political pressure for increased control (Henson and Caswell, 1999).

Standards have also shifted from product standards toward process standards (Humphrey and Memedovic, 2006). Process standards call for changes to be made at multiple points in the production process as the value is seen to lie not in the product, but in the processes it goes through (Humphrey and Memedovic, 2006), which requires coordination across production stages to achieve value at minimal cost (Henson and Reardon, 2005). Traceability is important for product operators to be able to track errors (Humphrey and Memedovic, 2006). Additionally, a traceability system acts as a tool for monitoring and optimising production, obtaining industrial statistics, making better decisions, and profiling desirable product attributes (Storøy, Thakur and Olsen, 2013). This implies that meeting value demands of

consumers and generating value premiums relies not only on product values, but the value garnered by how a product is produced at multiple stages in the value chain.

Agri-food standards have witnessed an increase in the scope of standards to be addressed. This is designed to meet the growing standards held by consumers as well as differentiate products to add value in the eyes of the consumer (Humphrey and Memedovic, 2006).

The rising importance of private standards has shaped the organisation of global agri-food value chains (Humphrey and Memedovic, 2006). A multitude of private food safety and quality standards are present in agri-food systems and, while they are not legally binding, they can be de facto mandatory for agri-food suppliers (Henson and Reardon, 2005). These private standards act as a means of competitive positioning in markets and allow private companies to differentiate their products and indicate superior quality features (Henson and Reardon, 2005; Humphrey and Memedovic, 2006). Consequently, private standards become drivers of agri-food systems (Henson and Hooker, 2001) and, in a global market, formulation of private standards is crucial for competitiveness of organisations and survival of suppliers (Reardon and Farina, 2001). Agri-food companies must work at all levels of the value chain to meet global public and private standards; however, the development of private standards allows opportunity for organisations to differentiate their product in the market and add value.

2.3 Values and standards in global agri-food value chains

The increased prevalence of private agri-food standards, partly precipitated by increased consumer needs surrounding agri-food safety and quality, have triggered changes throughout the agri-food industry that lead to greater opportunities for product differentiation (Cucagna, 2014; Humphrey and Memedovic, 2006). Agri-food companies have an opportunity to make their product a point-of-interest in global markets by utilising the value chain to add value to products and meet various public and private standards. Traditionally, the agricultural industry has been commodity-oriented, emphasising efficiency, high-volume, consistency in quality and economies of scale (Grunert *et al*, 2005). As international food market competition moves toward level of product value and differentiation from competitors, the competencies in production and marketing become equally important in creating agri-food products with value in the eyes of consumers (*idem*).

Different actors in the value chain add value to a product before it reaches a consumer. The way that various value chain members perform together to generate intelligence on end-user needs and subsequently guide value-creating activities serves the chain's competitiveness (Grunert *et al*, 2005). Value added means to "economically add value to a product by changing its current place, time, and form characteristics to characteristics more preferred in the marketplace" (Coltrain, Barton and Boland, 2000, p. 5). For example, an agricultural product such as wheat may have value added by processing it into a product (such as flour) desired by customers (such as bread bakers) (Coltrain *et al*, 2000). Actors in agri-food value chains need to enact value-adding strategies to ensure products move through value chains incrementally adding value in order for a product to successfully compete in a global market.

Past organisations may not have had a strong focus on creating value as such companies could be profitable without value-adding strategies (Cucagna, 2014). Now, being able to give target customers a product that is perceived to have more value than that of competitors gives competitive advantage in global markets (Doyle, 2009), thus value creation is a survival necessity for any company (Kotler and Keller,

2009). Research needs to continually re-evaluate how value is created in order to remain viable in a competitive global agricultural market.

Generally, adding value to products in value chains is achieved through two processes: innovation and coordination (Coltrain *et al*, 2000). These strategies attempt to add value to agricultural products throughout the value chain until the final step, the consumer's decision to purchase the product. Marketing strategies communicate value to the customers and create shareholder value (Doyle, 2009) so marketing must be optimised for customers to perceive a need to pay a premium for the value they receive. The following chapters will elaborate on the mechanisms through which innovation, coordination, and marketing contribute to creating value premiums in New Zealand agricultural exports. Leadership is the focus of this review, therefore leadership will be reviewed in terms of how it can support these value-adding activities and the importance of leadership as a basis for value creation in New Zealand agricultural exports.

Chapter 3

Leadership and Innovation

3.1 Creating value with innovation

As a product moves through a value chain, each firm is presented with an opportunity for differentiation (Humphrey and Memedovic, 2006), that is, the opportunity to make the product distinguishable from that of competitors. An 'innovation' event such as the introduction of a new product or process is a result of knowledge sourcing and translating activities performed by a firm which start a value-adding process (Roper, Du and Love, 2008). Innovation focuses on the improvement of existing processes, procedures, products and services, or the creation of new ones (Coltrain *et al*, 2000). For example, research into alternative crops that may replace traditional crops is an innovation activity that may add value if producers are able to economically profit by growing those alternative crops, as opposed to continuing to use traditional crops.

Innovation is recognised as a value-adding tool in a value chain setting. Competitive pressures and opportunities for differentiation are drivers for organisations to undertake innovation despite its associated uncertainty and potential risk (Roper *et al*, 2008). Rapid innovation is becoming increasingly important in competitive markets where products have continuously shortening life cycles (Hilletoft, 2012). Differentiation-focused supply chain design should be aligned with new product design and marketing to gain competitive advantage, and organisations should focus on new product designs being closely aligned with supply demands to have competitive advantage (Hilletoft, 2012).

The process of innovation may differ, depending on the type of innovation being carried out. Capitanio, Coppola and Pascucci (2009) found that innovation adoption follows different patterns dependent on whether innovation changes the product or the process. Product and process innovations are influenced differently by firm and market conditions and contribute to organisational competitiveness and growth in different ways (Damanpour, 2010). Product innovations are those in which new elements in products or services are introduced, whereas process innovations are the introduction of elements in the tasks, decisions, information systems, product/service operations, and advances in company technology (Knight, 1967). Product innovations change products, while process innovations change the operations that create those products. These forms of innovations are complementary and intimately related (Martinez-Ros, 1999), although often employed for different purposes. Product innovations aim to make products meet consumer demands and are oriented toward differentiation, while process innovations are strategies to reduce operational costs and reduce delivery lead-time (Damanpour, 2010; Martinez-Ros, 1999; Schilling, 2010).

While past studies have largely looked at product innovation as a result of competition, a review of research in innovation types and market competition conducted by Damanpour (2010) indicated that product and process innovation types should be synchronously pursued for attaining competitive market advantage. This is because innovative performance is a function of innovation types working together, not the solo contribution of each independently, and the potential of one type cannot be fully realised without the other being an integral part of the innovation development or adoption process (Damanpour, 2010).

With regards to innovation in the agri-food sector, product and process innovation working in tandem is important to firm success. As previously established, Humphrey and Memedovic (2006) indicate that the agri-food industry faces challenges surrounding increased stringency/scope of public/private standards, meeting the evolving demands of global buyers, and differentiating products by adding value through global value chains. Innovation is an established driver of value-adding in agri-food products (Coltrain *et al*, 2000). In order for innovation to add value and meet the demands of a competitive global market, both product and process innovations are essential to be used in tandem (Damanpour, 2010). To generate product and process innovations, organisations would benefit from facilitating both product and process innovations synergistically without allocating too much resources to one type at the expense of the other (Damanpour, 2010).

Companies with exporting relationships may require innovation more than their non-exporting counterparts to have a competitive advantage, and managerial ability/quality play a role in the probability of company innovation (Martinez-Ros, 1999). Leadership in agri-food global value chains should examine the leadership attributes/styles that facilitate and create a climate in which both product and process innovation can occur so that organisations may create value in agri-food products in every step of the value chain, thereby ensuring a value premium is created in exported products.

3.2 Leading innovation

If innovation is a mechanism through which value is added to agri-food products at multiple levels in the value chain, organisations seeking to increase innovation in agri-food products to gain a global competitive advantage should identify predictors of innovation. How an employee experiences leadership and the practices and policies that encourage or restrain their innovative pursuits all affect an employee's innovative outputs (Khalili, 2016). A meta-analysis of 80 articles in the field of innovation and creativity analysed the relationships between individual factors, job factors, and contextual factors and the innovation process (ideation phase and implementation phase) (Hammond *et al*, 2011). Leadership was identified as a contextual factor that predicts innovation. Leadership styles such as transformational and charismatic leadership, and aspects of leadership such as supervisor support and LMX have positive relationships with employee creativity and innovation (Hammond *et al*, 2011) and warrant further investigation. Other antecedents of innovation including motivation, self-efficacy, autonomy, climate for creativity/innovation and positive climate, may have leadership components, and how these antecedents can be realised through leadership should be assessed.

Leading innovation will thus examine the leadership styles related to innovation, interplay between leadership styles, LMX, as well as reviewing some mediators and moderators of the relationships between leadership and innovation. It should be noted that the literature does not support a single construct predicting innovative and creative behaviours in isolation as these behaviours are a function of antecedents, personality, cognitive factors, intrinsic motivation, social influences, and contextual influences (Woodman and Schoenfeldt, 1990). Innovation has antecedents that contribute to innovation through interactions with one another (Hammond *et al*, 2011). It should be expected that antecedents of innovation be highly correlated with one another.

3.3 Transformational leadership and innovation

A transformational leader is one who inspires subordinates to do more and raises the performance expectations (Bass, 1985). Transformational leadership, as described by Bass (1999), refers to “the leader moving the follower beyond immediate self-interests through idealised influence (charisma), inspiration, intellectual stimulation, or individual consideration. It elevates the follower’s level of maturity and ideals as well as concerns for achievement, self-actualisation, and the well-being of others, the organisation, and society” (p. 11).

The full-range leadership theory developed by Avolio and Bass (1991) outlines nine single-order factors: five transformational leadership factors, three transactional leadership factors, and one non-transactional laissez-faire leadership factor. Transformational leaders are “proactive, raise follower awareness for transcendent collective interests, and help followers achieve extraordinary goals” (Antonakis, Avolio and Sivasubramaniam, 2003, p. 264). Table 1 outlines the five features of transformational leadership in the full-range leadership theory developed by (Avolio and Bass, 1991), as it is summarised by (Antonakis *et al*, 2003).

Table 3.1: The five first-order factors that describe a transformational leader in the full-range leadership theory

First-order factor	Description
Idealised influence (attributed)	Socialised charisma of the leader. Whether they are perceived as being confident and powerful, and whether they are viewed as focusing on higher-order ideals and ethics.
Idealised influence (behaviour)	The charismatic actions that are centred on values, beliefs, and a sense of mission.
Inspirational motivation	The ways leaders energise followers by viewing the future with optimism, stressing ambitious goals, projecting an idealised vision, and communication achievable visions.
Intellectual stimulation	The satisfying of follower sense of logic and analysis by challenging followers to think and act creatively to solve problems.
Individualised consideration	The contributions to follower satisfaction by advising, supporting, and paying attention to individual needs. Allowing followers to develop and self-actualise.

Source: Antonakis *et al*. (2003).

Innovation and creativity are two closely related concepts in organisational performance. Creativity involves the creation of ideas while innovation is the implementation of ideas which may influence

organisational performance (Mumford, 2000). Creativity and innovation can be seen as equating to the two steps of the organisation innovation process: initiation and application (Axtell *et al*, 2000). Creativity is an individual level concept while innovation is at the organisational level (Oldham and Cummings, 1996). Creativity has been studied alongside innovation in organisations to test whether creativity is a mechanism through which innovation occurs. For example, Gumusluoglu and Ilsev (2009) found transformational leadership qualities positively predicted creativity and organisational innovation directly, however creativity did not mediate the relationship between transformational leadership and organisational innovation. While creativity may be necessary for innovative occupational achievement, the effective translation of creative ideas into innovative actions requires a variety of individual and situational attributes. While necessary, creativity alone is not sufficient for innovation to occur (Mumford and Gustafson, 1988).

Transformational leadership affects innovation and creativity both directly and indirectly. Directly, transformational leadership is considered an antecedent or a moderator to innovation whereas indirectly, transformational leadership affects employee innovation through various mediators and moderators (Hu, Gu and Chen, 2013). Firstly, direct relationships between transformational leadership and employee innovation will be considered, including other mediator/moderator relationships, to explain how and why transformational leadership fosters innovation. The indirect influence of transformational leadership will then be considered.

The direct effects of transformational leadership on innovation

Positive relationships between transformational leadership and outcomes of innovation and creativity are frequently observed in the literature. While much research has hypothesised and found positive outcomes for transformational leadership and employee creativity, many have also found insignificant results (Wang and Rode, 2010). Still, transformational leadership is considered an antecedent of employee creativity and innovation for the following reasons:

- The charisma of these leaders encourages followers to admire and respect them and be loyal to them;
- Transformational leaders model behaviour and enhance follower ability to develop ideas and question established operating rules;
- Transformational leaders intellectually stimulate followers by setting an expectation for creativity and act as creative role models; and
- Transformational leaders show consideration, empathy, and support for followers, empowering them to face fear and challenge the status quo (Gong, Huang and Farh, 2009; Hu *et al*, 2013).

Transformational leadership may also act as a moderator between innovation antecedents and employee innovation. Inspirational motivation, one of the dimensions of transformational leadership highlighted in the full-range leadership theory, moderates the relationship between team identification and creative effort of employees (Hirst, Dick and Knippenberg, 2009). When leaders engage in higher levels of inspirational motivation, the relationship between team identification and employee creative efforts is more positive than with lower levels of inspirational motivation (*idem*). Inspirational motivation conveys messages of group value and encouragement to approach group challenges, it espouses collective aims

and aligns group members with prioritised goals, and expels group member fear of error, thereby facilitating a willingness to try new approaches and behave creatively (Hu *et al*, 2013).

The indirect effects of transformational leadership on innovation

Indirect effects of transformational leadership through various mediators and moderators fall into four levels: individual, group, organisation, and external environment (Hu *et al*, 2013). Individual level factors include psychological empowerment, intrinsic motivation, creative self-efficacy, conservation, organisation-based self-esteem, and self-presentation propensity. Group level factors include collective efficacy, knowledge sharing, and support for innovation and climate for excellence. Organisation level factors include organisational climate and organisational learning. Finally, external or organisation factors include uncertainty, competition, and external support for innovation. Each of these factors are described in more detail below.

Psychological Empowerment: Psychological empowerment is a task motivation manifested in four dimensions: meaning, self-efficacy, self-determination, and impact (Hu *et al*, 2013). In particular, self-determination is a source of creativity (Deci, Connell and Ryan, 1989) and transformational leadership is a facilitator of psychological empowerment (Gumusluoglu and Ilsev, 2009). Through individualised consideration, a transformational leadership factor, transformational leaders build follower self-confidence and invest in personal development; strategies which empower employees (Conger, 1999). The psychological empowerment of employees should encourage creative approaches to work, and psychological empowerment can be considered a mediator between transformational leadership and follower creativity (Gumusluoglu and Ilsev, 2009).

Psychological empowerment acts as a moderator between transformational leadership and innovative behaviour. Psychologically empowered employees perceive themselves to be competent and able to take initiative and act independently to positively influence their work (Hu *et al*, 2013). While transformational leaders may increase employee willingness to behave innovatively, the followers must also believe that they are capable of innovation, thus transformational leadership inspires followers with high empowerment to take the initiative in being innovative in response to challenges (Pieterse *et al*, 2010). Encouraging innovation through leadership requires transformational leaders to exert influence by empowering employees and using this psychological empowerment to encourage employees to address challenges with innovative approaches.

Intrinsic Motivation: The intrinsic motivation perspective is prominent in creativity literature (Gumusluoglu and Ilsev, 2009), suggesting that people are creative because they are intrinsically motivated (Tierney, Farmer and Graen, 1999). Intrinsic motivation is a motivational state whereby tasks are performed by employees for their own sake, rather than being motivated by external outcomes or rewards related to that task (Deci and Ryan, 1985). Intellectual stimulation and individual consideration provided by a transformational leader increase the extent to which followers are interested in tasks themselves without external worries and concerns (Shin and Zhou, 2003). Being intrinsically motivated to perform a job task means employees are more likely to focus on it and experiment with it, and as a result will behave more creativity in this task (Gumusluoglu and Ilsev, 2009).

The support offered by the leader is a determinant of intrinsic motivation and work creativity (Oldham and Cummings, 1996). The inspirational motivation and challenging vision provided by the

transformational leader is a mechanism that enhances the excitement and meaning that employees have toward their work tasks: their intrinsic motivation, and their likelihood to approach intrinsically motivating tasks with creative behaviours (Gumusluoglu and Ilsev, 2009). In empirical research conducted by Gumusluoglu and Ilsev (2009), intrinsic motivation was not found to mediate the relationship between transformational leadership and follower creativity suggesting that more research into the mechanisms by which intrinsic motivation may influence creativity is needed.

Creative Self-Efficacy: Self-efficacy stems from observational learning/vicarious experiences, enactive mastery experiences, verbal persuasion, and physiological/affective states (Bandura, 1977). These four sources of self-efficacy can be supported by transformational leadership in relation to creativity (Hu *et al*, 2013). Transformational leaders model creativity as they are proactive in thinking and generating new ideas (Bass, 1985). Through observational learning followers may gain confidence in acting creatively (Hu *et al*, 2013). Transformational leaders can persuade creativity in followers through charisma and by intellectually stimulating them (*idem*). Individualised consideration allows transformational leaders to support and encourage followers, and coach them toward self-development and more successful enactive mastery experiences (*idem*). Transformational leaders show the empathy, appreciation, consideration, and support which allows for employee creative initiative, and under these circumstances, employees are likely to be in a comfortable physiological state. Creative self-efficacy is therefore a mediator between transformational leadership and employee creativity (Gong *et al*, 2009).

Conservation: Conservation is an individual value which favours propriety and harmony in interpersonal and person-to-group relations and includes three dimensions: tradition, conformity, and security (Schwartz, 1992). Tradition is the commitment to, and respect for, customs and norms that a traditional culture prescribes. Conformity is the restraint of actions, inclinations, and impulses that violate social expectations or norms. Security is the safety, harmony, and stability of society, relationships, and self. Those high in conservation avoid disturbance of established or traditional social order and hierarchy acting according to norms and conforming to expectations (Schwartz, 1992). Conservation as an employee value has been found to moderate the relationship between transformational leadership and creativity. Shin and Zhou (2003) found that when conservation is high, the relationship between transformational leadership and creativity is more positive than when conservation is low. An individual's value of conservation may align well with transformational leader efforts to encourage employees to be creative and innovative in their approach to tasks.

Organisation-Based Self-Esteem: Organisation-based self-esteem is an employee's self-perceived value as an organisation member (Pierce, Gardner, Cummings and Dunham, 1989). Organisational members with low organisation-based self-esteem may perceive their efforts to introduce new ideas as not valuable, therefore these employees particularly benefit from transformational leaders communicating optimism and raising confidence (Rank *et al*, 2009). The relationship between transformational leadership and follower innovation is stronger when organisation-based self-esteem is at lower levels, indicating a higher need for transformational leader 'intervention' (*idem*).

Self-Presentation Propensity: Self-presentation propensity is a core component of self-monitoring which reflects one's propensity for regulating the presented self-image to better fit with the social climate (Day *et al*, 2002). Leaders who allow followers to be involved with an organisation in a manner consistent with their personal beliefs will be most effective for employees with low self-presentation propensity. i.e. those who are less concerned with situational appropriateness (Hu *et al*, 2013). Employees with low self-

presentation propensity perform best with transformational leaders who provide individual consideration and intellectual stimulation (*idem*). Self-presentation propensity can be considered a moderator of the positive relationship between transformational leadership and innovation, as transformational leadership will be more strongly related to innovation for those low in self-presentation propensity (Rank *et al*, 2009).

Collective Efficacy: The group-level factor of collective efficacy describes the viewpoints a group has about the ability of the group as a whole (Bandura, 1982). High group efficacy occurs in groups which expect themselves to be able to perform tasks and this expectation motivates them to produce ideas and approaches which lead to group creativity (Hu *et al*, 2013). When group members are aligned in their actions, collective efficacy is generated, and the group have positive beliefs about their coordination capabilities (Zhang, Tsui and Wang, 2011), so collective efficacy mediates the relationship between transformational leadership and creativity.

Knowledge Sharing: Knowledge sharing is the exchange of task-relevant ideas, information, and suggestions among group members (Bartol *et al*, 2009). Knowledge sharing is another group activity that can mediate the relationship between transformational leadership and group creativity (Zhang *et al*, 2011). Transformational leaders assist group members to form new perspectives, explore alternative solutions to problems, and support members in expressing their opinions. Liu and Phillips (2011) found that team knowledge-sharing intentions mediate the relationship between transformational leadership and team innovativeness. By encouraging the exchange of knowledge, transformational leaders assist group members to collaborate on innovative initiatives.

Support for Innovation and Climate for Excellence: At the group-level, support for innovation refers to “cooperation among team members and their mutual assistance in the development and application of novel ideas” (Eisenbeiss, van Knippenberg and Boerner, 2008, p. 1438). Climate for excellence constitutes the shared group norms about “excellence of quality of task performance” (West, 1990, p. 313) and is evidenced by team member “commitment to high quality standards, critical appraisals, monitoring, and clear performance criteria within the team” (Eisenbeiss *et al*, 2008). Support for innovation acts as a mediator between transformational leadership and team innovation. In contrast, climate for excellence acts as a moderator in that support for innovation enhances team innovation only when climate for excellence is high (*idem*). Transformational leadership encourages team innovation through supporting innovation under the condition of a high level of climate for excellence (*idem*).

Organisational Climate: Perceptions of support for innovation (a psychological climate for innovation) has been proposed by Scott and Bruce (1994) as a mechanism through which leadership can predict innovative behaviour, however this may be through leader-member exchange rather than transformational leadership attributes. Employees’ perceptions of organisational practices, procedures, policies, and ways of interaction which promote or stifle the behavioural aspects of innovation is reflected by an innovative business environment (Schneider, 2000). Khalili (2016) found that employee perceptions of a supportive climate for innovation moderated relationships between transformational leadership and the outcomes of employee creativity and employee innovation. Employee innovation is a result of the climate which encourages and values innovation (Ren and Zhang, 2015). This is because creative, innovative employees respond positively to climates and work norms they perceive to encourage and foster creative and innovative pursuits.

Organisational Learning: Leadership style, an individual feature, and organisational learning, a collective process, work in tandem to determine firm innovation. Organisational learning is a collective capability

involving knowledge acquisition, knowledge sharing, and knowledge utilisation (Aragón-Correa, García-Morales and Córdón-Pozo, 2007). Organisational learning acts as a mediator between transformational leadership and organisational innovation (idem). The transformational leadership aspects of intellectual stimulation, inspirational motivation, and individual consideration encourage organisational learning (Hu *et al*, 2013), which has been heralded as one of the most important means of developing 'learning organisations' (Aragón-Correa *et al*, 2007).

Organisational Structure: Centralised and formalised organisational structures act as moderators between transformational leadership and employee innovation. Centralisation is the degree to which top management delegates decision-making authority to organisational members and the dictation of what decisions are able to be made by employees (Jung, Wu and Chow, 2008). In a highly centralised organisation employees below management have limited autonomy which obstructs collaborative efforts, even when top managers are supportive of innovation (idem), and coordination/collaboration have been determined by the literature to be essential to innovative efforts (Amanor-Boadu, 2003). Having little autonomy results in followers being less creative due to feelings of having little control over their own work (Damanpour, 1991). Centralised organisational structures are moderators to the relationship between transformational leadership and innovation in that innovation is weaker when the organisation is highly centralised (Jung *et al*, 2008).

Formalisation refers to the extent an organisation regulates employees' work-related activities using rules and procedures (idem). This structure limits and discourages deviations from existing practices, impeding employees' creativity and weakening the processes necessary for innovation (Hu *et al*, 2013). Formalisation also acts as a moderator between transformational leadership and innovation as innovation is weak when the organisation is highly formalised (Jung *et al*, 2008).

Organisation External Factors: Factors external to the organisation also affect the relationship between transformational leadership and employee innovation. These include uncertainty, competition, and external support for innovation. In times of uncertainty in the environment or shifts in consumer demands, innovation becomes a necessity for organisational success and employees perceive a crisis or emergency (Jung *et al*, 2008). Uncertainty may act as a moderator between transformational leadership and innovation in that the relationship will be more positive when uncertainty is high (Hu *et al*, 2013; Jung *et al*, 2008). In a similar vein, competition moderates the relationship between transformational leadership and innovation as competitive environments will indicate a need for employee innovation, and in combination with transformational leadership, will result in employees behaving more innovatively (Hu *et al*, 2013; Jung *et al*, 2008). External to the organisation, informational exchanges can facilitate innovation (Woodman, Sawyer and Griffin, 1993), resource availability and slack resources account for increases in innovation (Cohen and Levinthal, 1990; Woodman *et al*, 1993), and maintenance of social networks by the organisation foster organisational innovation (Hu *et al*, 2013). External support can be considered a moderator of the relationship between transformational leadership and innovation as a stronger positive relationship will exist when level of external support for innovation is high (Gumusluoglu and Ilsev, 2009). Uncertainty, competition, and support may have a more positive affect on organisational innovation through knowledge exchange, resource availability, and social networks.

Conclusion

The research outlined above all supports transformational leadership affecting employee innovation which may have outcomes for agri-food value-adding. Transformational leaders in the agri-food industry undoubtedly have a positive influence over the innovative outputs of their followers: employees in the agri-food industry. Across different value chain organisations, transformational leaders may exert their influence over followers both directly and indirectly. Directly, the attributes of the transformational leader (including idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration) motivate and encourage employees to approach problems innovatively. Indirectly, transformational leadership affects innovation with various mediators and moderators affecting the relationship.

3.4 Transactional leadership and innovation

Transactional leadership has found both positive and negative relationships with innovation and creativity, thus transactional leadership may have some positive prospects for adding value to agri-food exports under certain conditions. Both positive and negative findings will be briefly discussed.

Table 3.2: The three first-order factors that describe a transactional leader in the full-range leadership theory

First-order factor	Description
Contingent reward leadership	The leader behaviours focused on clarification of role and task requirements. Provision of material and psychological rewards contingent on fulfilment of contractual obligations.
Management-by-exception active	Corrective transactions. The active vigilance of a leader whose goal is to ensure standards are met.
Management-by-exception passive	Passive corrective transactions involve intervention after noncompliance has occurred, or mistakes have already happened.

Source: Antonakis *et al.* (2003).

In the full range leadership theory, the factors describing transactional leadership are: contingent rewards, management-by-exception passive, and management-by-exception active (Avolio and Bass, 1991). Contingent rewards is a mutual agreement on what should be done and the promise/reward for a satisfying outcome, management-by-exception is when the transactional leader is focused on deviations from agreed-upon standards, mistakes, or egregious errors, and may be passive or active (*idem*). Table 2 above shows the factors and descriptions as they appear in Antonakis *et al.* (2003). Transactional leaders discuss what is required and specify conditions and rewards followers receive if requirements are fulfilled (Sanda and Nana Ama Dodua, 2017). In its basic form, transactional leadership can be considered as the exchange of reward for work which enhances promotion of compliance using threat of punishment (Bass

and Bass, 2009). This means transactional leadership reinforces desirable behaviours with reward and eliminates undesirable behaviours with punishment.

Positive relationships between transactional leadership and innovation

Sanda and Nana Ama Dodua (2017) hypothesised that transactional leaderships style would be significantly and positively related to employee creativity. Regression analyses found that transactional leadership accounted for increases in employee creativity, and this positive relationship is moderated by climate for innovation and work-related flow. In the context of this research, climate for innovation is the practices and norms of the organisation that support innovation, and work-related flow is when an employee is totally immersed in their work, feeling happy during work, and being motivated by the work itself. This is suggestive that qualities of the transactional leader may be facilitative to employee creativity under the conditions that there is a climate for innovation and work-related flow.

In an assessment of CEO transactional and transformational leadership styles and organisational innovation, Prasad and Junni (2016) found that CEO transactional leadership was positively related to organisational innovation, where organisational innovation is innovation in organisational operations, not in employee outputs. Organisational innovation is not focal to the current research as adding value to agri-food products requires employees to innovate those products and processes that will be perceived by the consumer, rather than more distal innovations to organisational operations. This finding does however suggest that transactional leadership enhances the innovation of the organisation as a whole, which may be useful for agri-food organisations differentiating their organisational operations from other organisations to match consumer values.

The sparse findings on transactional leadership positively influencing employee innovative behaviours suggest that caution should be taken around using transactional leadership as a positive predictor of innovation to be used in research or selection and training tools. Negative relationships between transactional leadership and innovation are discussed below; however it should be noted that degrees of transactional behaviour may be helpful to innovative pursuits, as discussed in ambidextrous leadership.

Negative relationships between transactional leadership and innovation

The negative influence of transactional leadership has on innovative outcomes is more substantiated. For example, Si and Wei (2012) and Pieterse *et al.* (2010) found that transactional leadership was negatively related to employee creative performance and innovation. This relationship was moderated by empowerment climate. The results of Si and Wei (2012) indicated that when empowerment climate was high, transactional leadership had no relationship with subordinate creative performance, however when empowerment climate was low, this relationship was substantially more negative. The result of Pieterse *et al.* (2010) however found the relationship between transactional leadership and innovative behaviour was negative when empowerment climate was high. Both results suggest transactional leadership may negatively influence employee creativity/innovation, and this negative relationship may be exacerbated depending on high or low empowerment climate, however this moderating relationship needs further exploration to determine the nature of this relationship.

The reason for the negative relationship between transactional leadership and innovation may be due to the transactional leader's proficiency in predictable, rather than unpredictable circumstances, when a

detailed and directive plan is the most effective strategy (Si and Wei, 2012). Freedom is restricted under the direction of a transactional leader and self-determination and creative performance may be dampened as a result (idem). This implies that transactional leadership is not favourable in unpredictable business, as may be the case in changing global agri-food markets. Innovation may then be dampened by transactional leadership and agri-food organisations may not be able to differentiate products to meet evolving consumer demands.

Another reason for transactional leadership negatively influencing innovation is its focus on in-role performance and less on stimulation of novel activities (especially when innovation is not explicitly part of the job description) (Pieterse *et al*, 2010). This means that transactional leaders may not be characterised as being particularly welcoming to innovative activities, especially those that fall outside of an employee's job description or that interfere with one's regular duties or achievement of work standards. This could be somewhat mitigated if one's job description explicitly details the supply of innovation outputs; however, this could also result in threat appraisals due to risk of failure (see below).

As previously established, intrinsic motivation is a well-documented driver of creativity (Tierney *et al*, 1999). Transactional leadership however uses contingent rewards to encourage behaviour (Si and Wei, 2012). Rewards should be used carefully when facilitating employee creative pursuits as the relationship between perceived rewards for creativity and creativity-related intrinsic motivation are dependent on appraisals of challenge and threat (Li *et al*, 2017). A challenge appraisal is an appraisal that the situation has potential to promote personal gain or growth and triggers positive emotions and activates problem-solving styles of reactions to situations (idem). A threat appraisal however is an appraisal of a situation having potential to damage personal competence and self-respect and elicits negative emotions and passive/emotional styles of reaction such as withdrawal from situations (idem). Li *et al*. (2017) found that the relationship between perceived reward for creativity and creativity-related intrinsic motivation was positive when challenge appraisal was high, and negative when challenge appraisal was low. The relationship was positive when threat appraisal was low and negative when threat appraisal was high, suggesting a need for employees to have high challenge appraisal and low threat appraisal for rewards aimed to intrinsically motivate an employee to be creative. Creativity-related intrinsic motivation was positively related to creative performance.

As transactional leaders use the transaction of rewards for meeting expectations, in this case, rewards for behaving creatively and innovatively, this research helps explain why transactional leaders may fail to intrinsically motivate employees to act creatively and have high creative performance. Transactional leaders manage-by-exception, which means that errors and deviations from standards are monitored and dealt with. This may translate to employees having a threat appraisal about behaving creatively, as creative behaviours may result in failure and then punishment, and this could damage personal competence and drive employees away from attempting creative activities. Li *et al*. (2017) suggest that leaders should promote challenge appraisals and suppress threat appraisals so that employee rewards can be used as a managerial tool to promote creativity-related intrinsic motivation rather than discourage it.

Conclusion

These findings suggest that transactional leadership is likely not ideal for encouraging innovation in employees. While some studies have found positive relationships between transactional leadership and

innovation/creativity, research into the rewards and techniques of transactional leadership suggest that it may discourage employee creative performance, especially when transactional leaders manage-by-exception and inadvertently increase employees' threat appraisals about innovative tasks. In the context of the agri-food sector, transactional leadership may discourage agri-food differentiation when there is uncertainty and employees must perform novel tasks to achieve differentiation, as this may result in punishment and appraisals of threat relating to behaving innovatively, thereby reducing intrinsic motivation to do so.

3.5 Servant leadership and innovation

Servant leadership is similar in its broad definition to transformational leadership, however is qualitatively and empirically different (Yoshida *et al*, 2014). Servant leadership is “a holistic approach to leadership that encompasses the rational, emotional, moral, and spiritual dimensions of leader-follower relationships such that followers enhance and grow their capabilities, as well as develop a greater sense of their own worth as a result” (idem, p. 1395). Originally proposed by Greenleaf (1977), a servant leader is one who wants to serve and aspires to lead, taking a moral high ground.

Servant leadership was incorporated into research in employee creativity and innovation by Neubert *et al*. (2008). The mechanism through which servant leadership affects employee creativity and innovation is the servant leader's communication of what is right or important in work contexts through their behaviour, such as modelling nurturance, aspirations, and gains (idem). Having a promotion focus means to be motivated to maximise positive emotions, such as seeking pleasure to minimise the discrepancy between an actual and desired state (Higgins, Shah and Friedman, 1997; Meyer, Becker and Vandenberghe, 2004). Having a promotion focus directs behaviours toward promoting positive outcomes including advancement (Higgins *et al*, 1997), thus it is through promotion focus that servant leaders enhance creative behaviours in employees (Neubert *et al*, 2008).

Servant Leadership at the Individual Level

Leader identification encompasses relational identification, how follower identity is partially explained by their relationship with their leader, the positive emotions this elicits, and the psychologically safe climate it generates (Yoshida *et al.*, 2014). By having a positive relationship, employees share common creative goals with leaders, feel positive which improves their creative abilities, and feel safe expressing creativity and innovation and sharing novel ideas. Leader identification is a mediator of the relationship between servant leadership and employee creativity (Yoshida *et al*, 2014); its components are detailed below.

Relational identification: Servant leadership can improve employee creativity through relational identification. While servant leader goals may not necessarily be creativity-centred, the connection between identity and leader-follower relationship motivates employees to embark on creative endeavours (Yoshida *et al*, 2014). Relational identification is “the extent to which one defines oneself in terms of a given role-relationship” (Sluss and Ashforth, 2007, p. 11). The relational identity is a function of the followers' role-based identities (such as create reports and attend reviews), followers' person-based identities (such being honest and agreeable), leader's role-based identities (such as assign tasks and give feedback) and leader's person-based identities (such as being considerate and fair) (Sluss and Ashforth, 2007). Relational identification fosters empathy, liking and cooperation to achieve common

goals (including creative pursuits) (Yoshida *et al*, 2014). Subsequently, when a follower knows what it means to be the follower of the servant leader, they are driven to cooperate on innovative pursuits.

Positive Emotions: As servant leaders work on follower development, they inspire positive emotions in followers which can have positive outcomes in follower behaviours and resources (Yoshida *et al*, 2014). Positive emotions from this relationship, such as joy, interest, and contentment, can broaden one's thought-action repertoire which in turn affects the building of physical, intellectual, and social resources (Fredrickson, 1998). The probability of creativity may be increased by positive emotions enlarging the scope of attention and cognition which improves problem solving abilities (Fredrickson, 1998). In support of this, positive emotions (positive affect) has been demonstrated to be positively and linearly related to creativity in organisations (Amabile *et al*, 2005). Therefore, by eliciting positive emotions in followers, servant leaderships can improve follower creativity.

Psychological Safety: Servant leadership may also encourage a strong sense of psychological safety at work through leader identification (Yoshida *et al*, 2014). In a psychologically safe environment employees feel they are safe to take risks and offer novel ideas (Edmondson, 1999). Leaders who act as integral parts of the team (servant leaders) may better foster a psychologically safe team (Yoshida *et al*, 2014), and such a team is more likely to succeed in innovative pursuits and improve organisation performance (Baer and Frese, 2003). By being part of the team and having followers perceive an equal relationship with their leader, employees may feel safer to behave innovatively without risk.

Much like transformational leadership, servant leadership is indirectly related to employee creativity and innovation through support for innovation. By having a work context supportive of innovation, employees are aware that it is acceptable to take risks and approach challenges and tasks creatively (Yoshida *et al*, 2014). A climate of innovation promotes the importance of behaving creatively and innovatively, so support for innovation is a mechanism which enhances the association between leader identification and creativity at the individual level (*idem*).

Servant leadership at the team level

Servant leadership may also contribute positively to team innovation through the process of prototypicality. Prototypicality refers to the relative characteristics of an individual in a certain context, rather than of that individual in isolation (Haslam *et al*, 2005). Leader group prototypicality is important for group members to identify with the leader and the group and results in prototypical members being more salient and their actions being more noticed (Lipponen *et al*, 2005). A prototypical leader giving fair treatment is more likely to be noticed than a non-prototypical leader giving the same treatment, and fair treatment by the prototypical leader conveys to members whether they can consider themselves to be valued by the group as a whole (*idem*).

Servant leaders can be considered prototypical as they pursue teams' best interests (Yoshida *et al*, 2014) and their developmental actions toward the group should be more salient to group members. Leaders who perceive themselves as group prototypical tend to be more team-oriented and do not require external accountability (an expectation that one must be able to justify one's actions to others) (Giessner *et al*, 2013). Servant leaders have teams' best interests at the centre of their leadership and may consider themselves prototypes of the team's attitudes, values, norms, beliefs, and goals which align team member behaviours toward this attractive prototype and toward common goals, whether they be creative or

otherwise. Perceived leader prototypicality thus fosters innovative outcomes of teams (Yoshida *et al*, 2014).

Conclusion

The above studies have established that servant leadership benefits creativity and innovation in organisations at both the individual and team level. At the individual level, servant leaders enhance employee creativity and innovation through modelling desired behaviour, relational identification, eliciting positive emotions, and creating a psychologically safe climate, and this may be moderated by levels of support for innovation. At the team level, servant leadership encourages team innovation through the process of prototypicality. Consequently, servant leadership attributes are important to supporting innovative organisational outcomes.

3.6 Authentic leadership and innovation

Authentic leadership is the principle of leaders being their ‘authentic self’. An authentic leader is one who knows, accepts, and remains true to themselves (Avolio *et al*, 2004). Authentic leadership is highly context-dependent (Cooper *et al*, 2005), meaning that authentic leadership needs to be defined in terms of the context it operates (Endrissat *et al*, 2007). Having authenticity to be oneself as a leader requires self-awareness, finding one’s voice and knowing one’s values, which can be achieved through self-regulation, behavioural integrity, as well as the organisational context (e.g. reward systems) (*idem*). According to Avolio *et al*. (2004, p. 806), authentic leaders “act in accordance with deep personal values and convictions, to build credibility and win the respect and trust of followers by encouraging diverse viewpoints and building networks of collaborative relationships with followers, and thereby lead in a manner that followers recognise as authentic”. The authenticity of the leader cascades through to followers and may become the basis of an organisation’s culture (*idem*).

Gardner *et al*. (2005) provide a conceptual framework for authentic leadership and follower development. This framework theorises that authentic leadership is characterised by self-awareness and self-regulation. Self-awareness is awareness of one’s values, identity, emotions, and motives/goals. Self-regulation is internalised, balanced processing, relational transparency, and authentic behaviour. Through positive behaviour modelling, authentic leaders enhance authentic followership which is also characterised by self-awareness and self-regulation. This results in follower outcomes including trust, engagement, and workplace well-being, as well as more sustainable and authentic follower performance.

Authentic leadership has positive outcomes for employee innovation and creativity. Avolio *et al*. (2004) propose that authentic leadership affects follower attitudes and behaviours through personal and social identification, hope, trust, positive emotions, and optimism. Specifically, authentic leadership elicits positive emotions which are linked to creativity. Through positive identification between the leader, followers, and organisation, authentic leaders can create positive emotions and a sense of identification with the purposes of the leader and organisation (*idem*). Similar to servant leadership, the eliciting of positive emotions may increase the probability that creative behaviours will be enacted (Fredrickson, 1998). Positive emotions have been demonstrated to increase innovative outputs (Amabile *et al*, 2005). Therefore, through eliciting positive emotions in followers, servant leaders increase the probability employees will behave creatively and increase innovative outputs.

Another study focusing on the emotions elicited from authentic leaders was conducted by Ana Suzete Dias *et al.* (2017) who looked at the mediating role of affective well-being (a component of happiness) between authentic leadership and employee creativity. Affective well-being is comprised of five components in the work context: anxiety-comfort, depression-pleasure, bored-enthusiastic, tiredness-vigour, and angry-placid (Daniels, 2000). The results of Ana Suzete Dias *et al.* (2017) support the notion that employees with authentic leaders are happier, and happy employees are more creative. Furthermore, this relationship is stronger when coupled with satisfaction with management, which acted as a moderator. These results support the theory that authentic leadership produces employee creative and innovative outcomes through eliciting positive emotions in employees.

Černe, Jaklič and Škerlavaj (2013) examined authentic leadership in terms of leader self-ascribed authentic leadership and perceived (by the followers) authentic leadership and creative/innovative outcomes at the individual and team level. The authentic leadership dimensions of self-awareness, self-regulation, and positive modelling proposed in the conceptual framework for authentic leader and follower development proposed by Gardner *et al.* (2005) were used to assess leaders' self-ascribed authentic leadership and perceived authentic leadership. Černe *et al.* (2013) found that team leaders' self-ascribed authentic leadership was negatively related to support for innovation, team innovativeness, and employee creativity. Perceived team leaders' authentic leadership was however directly positively related to team innovation and employee creativity, and positively related to employee creativity through the mediator of perceived support for innovation. This suggests that authentic leadership is important for creativity and innovation provided this leadership is perceived by the employees, not self-ascribed. Authentic leadership should therefore be assessed by followers.

A recent study by Xu *et al.* (2017) examined how authentic leadership positively influences individual creativity through the mechanisms of psychological safety climate, LMX, and individual thriving. Firstly, authentic leadership affected employee creativity at the individual level through positively influencing LMX and thriving at work. Further, the study postulates that by sharing information, expressing thoughts, and building transparent decision mechanisms, authentic leaders increase trust, loyalty, and identification in followers, characteristics typical of LMX, and this relationship in turn helps employees thrive at work. The positive relationship from LMX increases vitality which acts as a motivational precedent to individual creativity. Authentic leaders improve the creativity of employees through developing positive dyad relationships with followers and helping them thrive at work.

The second pathway between authentic leadership and creativity presented by Xu *et al.* (2017) was via psychological safety and vitality. Authentic leadership increases perceptions of psychological safety, indicating that the team is a safe environment to engage in interpersonal risk taking and express different perspectives (Edmondson, 1999). Authentic leaders foster psychologically safe climates through acknowledging their weaknesses and limitations and being less likely to be defensive about alternative solutions to problems (Xu *et al.*, 2017). A psychologically safe work climate promotes individuals' feelings of vitality at work, which in turn increases involvement in creative work (Kark and Carmeli, 2009). Through making the work a safe environment to challenge the status quo and express ideas and opinions openly, authentic leaders increase the individual thriving of employees, and this vitality at work translates into creative involvement.

Another climatic aspect of the team the authentic leader may have influence over is a team atmosphere of trust. Authentic leadership has been shown to increase perceptions of a team atmosphere of trust as

well as psychological safety, both of which improve employee knowledge sharing and creativity (Meng, Cheng and Guo, 2016). Authentic leadership is conducive to building team atmospheres of trust and inclusiveness in which ethics are valued (Gardner *et al*, 2005). The atmosphere of trust in a team context strengthens cooperation and knowledge-sharing behaviours which allows knowledge to be integrated within the team and be conducive using innovative processes to overcome problems (Meng *et al*, 2016). Such a climate is necessary for innovation to result in success (Baer and Frese, 2003). An authentic leader's influence on the climate of team is highly important for innovative behaviours and innovation success.

Conclusion

Authentic leadership has been shown to be related to individual and team innovation through eliciting positive emotions, fostering affective wellbeing and a supportive climate for innovation, creating a positive leader-follower relationship, creating a psychologically safe team climate, and increasing individual thriving and vitality. Authentic leadership may encourage followers to innovate and add value to agri-food products which will be exported.

3.7 Ambidextrous leadership and innovation

The above relationships show numerous leadership styles encourage or inhibit employee creativity and innovation, and do so through various mechanisms, mediators, and moderators. Rosing *et al*. (2011) recognise that current research is largely neglecting the complexity of innovation processes and the inconsistent nature of the relationship between leadership and innovation. They propose a new direction for research in the field of leadership and innovation and the introduction of the leadership style of ambidextrous leadership. This section will focus on the requirements of innovation, the style of ambidextrous leadership which supports this description of innovation, and finally, research that currently supports ambidextrous leadership and innovation.

The complexity of the innovative Process

Much of the research above assesses creativity, and creativity is often viewed as a proxy of innovation, however innovation is more than just creativity. Innovation has two processes: idea generation (creativity) and idea implementation (Amabile, 1988). Both processes involve different activities which are linked to different outcomes and have different requirements (Amabile, 1988; Rosing *et al*, 2011). Creativity is closely linked to explorative activities, which includes variation, risk taking, experimentation, play, flexibility, and discovery (March, 1991). The second process of innovation is implementation, which is linked to exploitative activities such as refinement, choice, production, efficiency, selection, implementation, and execution (idem). Exploration and exploitation are forms of organisational learning (idem). Both creativity and idea implementation require levels of both exploration and exploitation, even if creativity is more closely linked with exploration and implementation is more closely linked with exploitation (Rosing *et al*, 2011).

Innovation also has a nonlinear relationship between these processes (Bledow *et al*, 2009), and this nonlinearity is not captured in current research on leadership in innovation. Rather than viewing innovation as a linear, sequential process, innovation can be characterised as containing orderly periodic stages, random sequences, and chaotic patterns (Cheng and Van de Ven, 1996). Events in the innovation process do not happen in neat succession, but rather in often unpredictable sequences, suggesting that

the requirements for exploration and exploitation alternate consistently throughout the process (Rosing *et al*, 2011). Flexibly switching between processes is challenging as they are described as disparate, mutually exclusive processes (March, 1991). Research now however indicates these processes are mutually dependent (Bledow *et al*, 2009). This suggests that leadership at these stages needs to adapt to the changing needs.

As exploration and exploitation are fundamental to innovation, Rosing *et al*. (2011) argue that ambidexterity is central to innovation. Being able to meet the requirements of each process is insufficient because being able to flexibly switch between them means teams can adjust according to the unpredictable and chaotic patterns that emerge throughout the process. Therefore an integrative form of ambidexterity is required in the innovation process to be able to adapt to the needs for exploration and exploitation to achieve innovative outcomes (*idem*).

Ambidextrous leadership

Traditional leadership styles such as transformational and transactional leadership may both foster and hinder innovation due to their broad scope and dimensionality (Rosing *et al*, 2011). In a meta-analytic review, Rosing *et al*. (2011) examined different leadership styles to compare the relationships between leadership and innovative outcomes, not for the purpose of consolidating research and finding an average level of influence, but to highlight the disparity in the research. Several positive and negative relationships were found, suggesting the research does not unanimously point in the same direction. For example, transformational leaders may use inspirational motivation to communicate an inspiring vision which includes fostering of experimentation, but may also inhibit innovation if the followers are absorbed in the vision and are unable to think outside of it (*idem*).

The answer to finding a leadership style that is able to adapt to the changing needs of exploration and exploitation and foster those activities in employees may lie in ambidextrous leadership. Ambidextrous leadership consists of three elements: opening leader behaviours to foster exploration, closing leader behaviours to foster exploitation, and the temporal flexibility to switch between both as the situation requires. Table 3 displays the opening and closing leader behaviours which an ambidextrous leader carries out.

Exploration mostly involves increased variance (March, 1991), so leadership should foster the increase of variance in follower behaviour. Rosing *et al*. (2011) call this leadership behaviour “opening” as it breaks up routines and allows thinking to deviate into other directions. Opening leader behaviour is “a set of leader behaviours that includes encouraging doing things differently and experimenting, giving room for independent thinking and acting, and supporting attempts to challenge established approaches” (*idem*, p. 967). Opening leader behaviours are thus positively related to explorative activities.

Table 3.3: Examples for opening and closing leader behaviours

Opening Leader Behaviours	Closing Leader Behaviours
Allowing different ways of accomplishing a task	Monitoring and controlling goal attainment
Encouraging experimentation with different ideas	Establishing routines
Motivating to take risks	Taking corrective action
Giving possibilities for independent thinking and acting	Controlling adherence to rules
Giving room for own ideas	Paying attention to uniform task accomplishment
Allowing errors	Sanctioning errors
Encouraging error learning	Sticking to plans

Source: Rosing *et al.* (2011).

Conversely, exploitation involves reduced variance (March, 1991) so that leadership fosters a reduction of variance in follower behaviour. Closing leader behaviour is a set of leader behaviours that “includes taking corrective action, setting specific guidelines, and monitoring goals achievement” (Rosing *et al.*, 2011, p. 967). Closing leader behaviours help employees in the implementation process of innovation.

Neither opening nor closing behaviours are sufficient as both are required in the innovation process, and it is difficult to predict when opening or closing leadership behaviours are needed (Bledow *et al.*, 2009). Temporal flexibility is an attribute required in leaders in order for them to adapt these opening and closing behaviours to the requirements of the innovation tasks (Rosing *et al.*, 2011). With temporal flexibility, ambidextrous leaders must be able to switch between opening and closing behaviours as the situation requires as the team must switch between idea generation and idea implementation processes to successfully innovate (*idem*). Ambidextrous leaders may be more or less involved with the process, initiating explorative or exploitative behaviours then stepping back, or actively be involved in the innovation processes by monitoring and actively encouraging explorative and exploitative behaviours, as the situation demands (*idem*).

For a leader to be considered ambidextrous, they need to be able to possess both open and closing behaviours in their behavioural repertoire. Hooijberg (1996) refers to a concept of behavioural complexity in leadership, which includes the dimensions of repertoire and differentiation. The behavioural repertoire is the range of behaviours that a leader is capable of performing, while differentiation is the degree of variation between behaviours according to situation requirements (*idem*). Ambidextrous leadership is characterised by behavioural complexity as these leaders must possess a repertoire of both opening and closing behaviours as well as the flexibility to switch between them as required.

Ambidextrous leaders also must have integrative thinking as exploration and exploitation are mutually dependent. Integrative thinking is the ability to integrate opposing ideas into one superior idea (Martin,

2007). Ambidextrous leaders need to hold ideas of exploration and exploitation simultaneously as well as opening and closing leader behaviours in order to form an innovation strategy (Rosing *et al*, 2011).

Emotional intelligence is another route to ambidextrous leadership. Emotional intelligence is “the ability to effectively reason about emotions and use emotions to aid cognitive processes and decision making. It reflects the ability to understand and manage emotions and their interrelations with cognition both in the self and others to enhance effective functioning” (J. Zhou and George, 2003, p. 552). Emotional intelligence is a leader characteristic allowing leaders to understand and channel follower emotions connected to creativity and innovation (*idem*). For ambidextrous leadership, emotional intelligence gives leaders the sensitivity to recognise what behaviours are required in a given situation and adjust leadership behaviour to the requirements of the task (Rosing *et al*, 2011). Emotional intelligence is therefore required for leader flexibility to switch between opening and closing behaviours and support exploration and exploitation in the innovation process.

Additionally, the ability to forecast and plan may be able to help anticipate the next step in the innovation process despite the complexity and nonlinear nature of the innovation process (Rosing *et al*, 2011). Environmental scanning, being informed of current team activities, and having high alertness assists in anticipation and, consequently, what opening or closing behaviours will be necessary for the leader (*idem*).

Based on the complex nature of the innovation process, the nonlinear relationship between idea creation and implementation, the mutual dependency of explorative and exploitative behaviours, and the ambidexterity needed in leaders to display opening and closing behaviours accordingly, the following recommendations from Rosing *et al*. (2011) are what outline an ambidextrous leader for innovation:

- A broad behavioural repertoire that includes both opening and closing leader behaviours.
- The temporal flexibility to switch between these behaviours.
- The ability to differentiate behaviours and use opening and closing leader behaviours given the requirements of the innovation tasks.
- Integrative thinking that allows leaders to integrate ideas about exploration and exploitation, as well as opening and closing leader behaviours.
- Emotional intelligence to read follower emotions and adjust leadership behaviours according to what is needed to achieve innovation tasks.
- The ability to plan and forecast and understand what leader behaviours best facilitate innovation tasks currently happening or about to happen.

As stated earlier, other leadership styles such as transformational leadership may enhance or inhibit innovation. This is because styles such as these encompass leadership behaviours which can be considered opening or closing and relevant at different times during the innovation process depending on whether employees need to generate ideas or implement them (Rosing *et al*, 2011). Rosing *et al*. (2011) consider how transformational and transactional leadership behaviours can be considered opening or closing. Transformational leadership opening leader behaviours include: a vision that motivates exploratory behaviour, stimulation of thoughts in new directions, and communication of the values of openness and tolerance. Closing leader behaviours in transformational leadership include a vision that motivates confirmatory behaviour, stimulation of small improvements and enhancement of efficiency, and communication of the values of conscientiousness and rules adherence. Similarly, transactional leadership has opening leader behaviours of: rewarding experimentation, focussing on errors to learn from errors, setting and monitoring exploration goals. Closing leader behaviours include: rewarding efficiency,

focussing on errors to avoid error, and setting and monitoring exploitation goals. This helps explain why transformational and transactional leadership can be facilitative of innovation in some situations but not others; they do not adjust behaviour for the different stages of innovation and the complex ways in which these occur.

Evidence supporting ambidextrous leadership and innovation

Zacher and Rosing (2015) conducted a study examining ambidextrous leadership with team innovation as the outcome, and this was the first empirical test of ambidexterity theory of leadership for innovation. This required examining both the creation of ideas (creativity) and the implementation of these ideas in a team context. The results from this study supported the ambidexterity theory of leadership for innovation as both opening and closing leadership behaviours were required to increase team innovation, and one alone was not sufficient.

Opening leadership behaviour as rated by employees positively predicted team innovation, however closing leadership behaviour did not have a significant main effect. Team innovation was highest when both opening and closing leadership behaviours were perceived to be high, and lowest when one was high without the other or both were low. This study also supports the notion that previous research that has focused on the influence of single and broad antecedents is insufficient as innovation processes require different leadership behaviours depending on the follower behaviours required to fulfil innovation tasks (Zacher and Rosing, 2015).

The first empirical test of ambidextrous leadership affecting innovative behaviours at the individual level was conducted by Zacher, Robinson and Rosing (2016). This involved examining how leader opening behaviour increases employee exploration behaviour, how leader closing behaviour increases employee exploitation behaviour, and how these interact to result in improved employee self-reported innovative performance. These hypotheses were supported suggesting that leader opening and closing behaviours enhance employee explorative and exploitative behaviours, and that these behaviours in tandem result in improved individual innovative performance.

A similar result was found by Alghamdi (2018). They hypothesised that there would be a positive relationship between leader opening behaviours and employee exploration behaviour, and a positive relationship between leader closing behaviour and employee exploitation behaviour. Similar to Zacher and Rosing (2015), Alghamdi (2018) also predicted that there would be an interaction between leaders' opening and closing behaviours in predicting employee innovative performance, and that performance would be highest when both opening and closing leadership behaviours were high. These hypotheses were supported, suggesting ambidextrous leadership accounts for differences in employee explorative and exploitative behaviours, and that opening and closing leadership behaviours interact to improve innovative performance.

Conclusion

Having been developed and explored for less than a decade, the ambidexterity theory of leadership for innovation is still young and requires further analysis to further consolidate findings and relate ambidextrous leadership to value-adding activities in agri-food value chains. The above findings do however give a promising direction for research in innovation leadership, and potential for the addition

of ambidextrous leadership to a catalogue of necessary leadership characteristics. Ambidextrous leadership is important to innovation because it theorises that ambidextrous leaders adjust their levels of opening and closing behaviours to facilitate employee explorative and exploitative behaviours as the innovation process requires. Being ambidextrous means leadership behaviours are adaptively synched with innovation requirements.

3.8 Leader-Member Exchange (LMX) and Innovation

LMX is not a leadership style per se, but a function of the dyad between leaders and followers. LMX focuses on the relationship between supervisors and subordinates built on mutual trust and respect (Gerstner and Day, 1997). A positive LMX means leaders solicit loyalty and support through the provision of greater support, autonomy, and increasing follower influence in decision-making (Basu and Green, 1997). The trust and respect built in a positive leader-member relationship positively relates to creativity and innovation as followers are inclined to trust their supervisor and risk trying something new more than those in a low quality relationship (Rosing *et al*, 2011). The positive relationship between followers and their leaders is important for supporting innovative pursuits which add value to products in value chains.

The means through which LMX exerts its effects on employees has roots in social exchange theory. Social exchange theory suggests that there is an obligation of people to reciprocate high-quality relationships (Blau, 1964). A leader forming a positive relationship with an employee is therefore likely to be reciprocated. If leaders have a vision for creativity and innovation, an employee may be motivated to achieve that vision through creative and innovative behaviours which support their reciprocal relationship.

Another mechanism through which leaders supporting positive LMX results in employee innovation is through greater autonomy. Autonomy, a feature of job design, allows employees to determine the pace, sequence, and methods when accomplishing tasks without supervisor interference (Volmer, Spurk and Niessen, 2012). Autonomy can increase job performance through increased motivation, capitalisation of information asymmetries, and/or better alignment with task and organisational structures (Langfred and Moyer, 2004). In the case of creativity, autonomy means an employee has responsibility for the work done and the methods for completing that work, and the privileges associated within high-LMX relationships include respect, trust, and recognition, which can be translated into creative work involvement (Volmer *et al.*, 2012). Thus, when job autonomy is high, the relationship between LMX (low vs. high) and creative work involvement is markedly positive compared to when job autonomy is low (Volmer *et al*, 2012).

A recent study by Khalili (2018) assessed employees' personal initiative as a moderator in the relationship between LMX and the outcomes of employee creativity and employee innovation. Personal initiative is "work behaviour characterised by its self-starting nature, its proactive approach, and by being persistent in overcoming difficulties that arise in the pursuit of a goal" (Frese and Fay, 2001, p. 134). Having personal initiative helps overcome feelings of doubt, disappointment and anxiety surrounding working outside of ordinary methods and implementing new, fresh ideas, and is positively associated with creative and innovative pursuits (Khalili, 2018). In assessing this hypothesised relationship, Khalili (2018) found that high employee personal initiative made the relationship between LMX and employee creativity more positive than low personal initiative. While the positivity (slope) of the relationship between LMX and employee innovation was not drastically different, high employee personal initiative had a higher baseline and resulted in consistently higher levels of employee innovation. All hypotheses were supported in the

study, indicating that LMX positively relates to employee creativity and innovation, and that employee personal initiative moderates these relationships.

In a meta-analysis of the relationships between LMX and innovation, Rosing *et al.* (2011) found a weighted mean correlation of .22 between the constructs, and LMX consistently related to innovation. The theory of LMX, and the practical assertion that leaders need to build positive relationships with subordinates, means leadership in innovative value-adding processes requires high levels of LMX. Being able to build LMX is an important attribute of leaders that needs to be selected or trained (Khalili, 2018) and should be considered in leaders in agri-food export enterprises as this assists the innovation process which adds value to agri-food products being exported.

Antecedents of LMX

Research supporting the positive influence LMX has on organisational outcomes, including employee creativity and innovation, suggests that LMX is an important aspect of leadership that needs to be assessed. Developing LMX however is not a simple task; it requires time, effort, and an understanding of the interrelatedness of various dimensions, antecedents, and consequences (van Breukelen, Schyns and Le Blanc, 2006). In a meta-analytic review of the antecedents of LMX, Dulebohn *et al.* (2012) assess leader characteristics including: contingent reward behaviours, transformational leadership, expectations of followers, extraversion, and agreeableness as antecedents of LMX.

Leader contingent reward behaviour includes provision of feedback, rewards, and recognising employee accomplishments (Dulebohn *et al.*, 2012). Clarifying the links between employee behaviours and corresponding rewards forms clear perceptions of task requirements and can improve employees' effort-performance expectancies (Waldman, Bass and Yammarino, 1990). Trust, respect, and mutual obligation are features of high-quality LMX relationships (Graen and Uhl-Bien, 1995) which cannot be present without leaders recognising and rewarding performance and clarifying expectations (Dulebohn *et al.*, 2012). The provision of feedback, clarification, recognition, and praise creates a sense of obligation to the leader which improves the quality of followers' relationships with them (Wayne *et al.*, 2002). Thus, contingent reward behaviours including communicating and clarifying expectations to followers, providing honest feedback, recognising employee's work, and praising work that meets expectations, are important to developing positive LMX.

Transformational leadership has been established as an antecedent of LMX (Dulebohn *et al.*, 2012; Shiva and Suar, 2010). This relationship may be attributed to transformational leaders acting as mentors, developing the potentialities of followers and creating a meaningful exchange (Shiva and Suar, 2010). Transformational leaders also ensure treatment of followers is fair without any followers receiving positive exchanges exclusively, therefore more followers can experience positive LMX (Shiva and Suar, 2010). Inspirational motivation, a first-order factor of transformational leadership (Avolio and Bass, 1991) and being inspired can elicit a positive response that encourages employees to exert effort toward forming positive relationships (Dulebohn *et al.*, 2012).

Leader expectations in this context refer to expectations of follower success. Leaders who evaluate employees as more likely to succeed are more likely to form positive exchange relationships with them (Dulebohn *et al.*, 2012). By perceiving employees as being likely to succeed, leaders may give these employees more responsibility and provide more support (*idem*). Leaders may build more positive LMX

relationships with employees if they have expectations that those employees will be successful, however it should be noted that this may be something leaders do not have much control over.

Finally, leader personality influences the development of LMX, specifically, extraversion and agreeableness. Extraversion has been positively related to leader emergence, perceptions of leader effectiveness, and leader behaviours that precipitate relational quality including sociability and individualised consideration (Bono and Judge, 2004). Through predisposing leaders to form relationships, extraversion is an antecedent to LMX (Dulebohn *et al*, 2012). Agreeableness is another personality component centred on sociability, and leaders perceived as agreeable are likely to be viewed as being approachable by subordinates (*idem*). Leaders high in agreeableness are likely to show more individualised consideration, reward employees appropriately, and be available when needed (Bono and Judge, 2004). Leader agreeableness positively influences employees' affect toward the leader and subsequent positive LMX (Sears and Hackett, 2011).

Conclusion

LMX consistently has positive relationships with employee innovation through the mechanisms of social exchange theory (and reciprocity of positive relationships) and autonomy with personal initiative being a moderator between LMX and employee innovation. LMX is a dyadic relationship so cannot be measured for the purpose of selection as leaders require time to establish relationships with followers, whether they be positive or negative. However, several antecedents of LMX have been identified in the literature, including contingent reward behaviours, transformational leadership, expectations of followers, and personality factors. Building positive relationships with employees is an important role of leaders to promote innovation, and fostering LMX and examining its antecedents shows promise for leading innovation to add value to agri-food products.



Chapter 4

Leadership and Coordination

4.1 Creating value with coordination

Horizontal and vertical coordination are important factors for creating value in value chains. Coordination refers to the arrangements of organisations along the value chain that produce and market farm products (Coltrain *et al*, 2000). Horizontal coordination is the pooling and consolidation among individuals/companies at the same point in the value chain, for example producers combining their livestock in order to deliver a truckload (*idem*). Horizontal coordination seeks to foster beneficial collaborations between individuals/organisations to address shared constraints and exploit opportunities (Kilelu, Klerkx and Leeuwis, 2017).

Vertical coordination occurs between organisations at different levels in the value chain (e.g. between farmers and processors) to better align the value-adding activities between them, and requires communication and knowledge sharing between different levels of agri-food value chains (Bijman, Muradian and Cechin, 2011). Vertical coordination can be characterised by contractual relationships between value chain levels (Poulton *et al*, 2010). Both forms of coordination are important to adding value to agri-food products along a global value chain.

The evolving nature of the agri-food industry such as the increasing demand for food and agricultural products with characteristics including food quality, place of origin, environmental/ethical/social standards, and food waste reduction means coordination within agri-food value chains is increasingly important (Severini and Sorrentino, 2017). In particular, three interconnecting dimensions in the domain of coordination have been identified by Severini and Sorrentino (2017): the growing roles of vertical integration between farmers and downstream sectors (such as processors, distributors, and retailers), the possibility for farmers to increase horizontal integration, and the role of agricultural policies that affect these phenomena.

Vertical coordination/integration

Vertical integration is necessary to link product characteristics and production processes to consumer demands and preferences, and to meet market standards (Royer, 1995). As a single organisation is unlikely to possess the diverse plethora of skills necessary for processing, marketing, and business management, as well as remain efficient, a coordinated effort is required across the chain to vertically integrate these functions (Coltrain *et al*, 2000). As such, fulfilment of consumer demands and creation of product values congruent with those held by consumers necessitates coordination and communication between levels in the agri-food value chain (*idem*).

Value-added initiatives employing coordination focus on vertical and horizontal relationships among producers, processors, handlers, distributors, and retailers, and for value to have been added, the antecedent of the coordination must be able to generate positive net benefit from the coordination effort (Amanor-Boadu, 2003). If a consumer demand or market standard requires a certain characteristic, vertical integration ensures this characteristic will be carried through the value chain to result in higher

value. In the context of agri-food values, the value-adding ability of vertical integration is the value chain's ability to carry these values through the entire value chain so that it may be perceived by the consumer, and a premium can be paid as a result.

In a study by Carillo, Caracciolo and Cembalo (2017), vertical integration in the agri-food supply chain was analysed to assess improvements to farmers' economic performance using a sample of Italian durum wheat farmers. Economic performance measures indicated that a "coordination premium" exists for farmers with vertical integration. Farm competitiveness and profitability can be enhanced by vertical integration (Carillo *et al*, 2017; Severini and Sorrentino, 2017).

Horizontal coordination/integration

Horizontal coordination assists in organisations meeting the demands of buyers, including supply demands, by collaborating with organisations at the same point in the value chain to meet the demands of buyers (Coltrain *et al*, 2000). Velázquez and Buffaria (2017) examined horizontal integration in terms of farmers' bargaining power with respect to downstream buyers. By pooling agricultural outputs through horizontal integration, farmers may "strengthen their bargaining power via-à-vis potential buyers and input suppliers, reduce risks associated with farming activities, gain market access to particular marketing channels and benefit from economies of scale" (Velázquez and Buffaria, 2017, p. 2). Horizontal coordination allows organisations at the same level of the value chain to exploit opportunities and address shared constraints (Kilelu *et al*, 2017). Horizontal coordination is thus important in the agri-food value chain to coordinate activities so that organisations may collaboratively work toward meeting buyers' needs.

4.2 Leading coordination

With vertical and horizontal coordination being essential for organisations to add value to agri-food products, organisations should examine the leadership styles and attributes that may enhance this coordination. Leadership has been shown to significantly improve supply chain performance (Mehta, Dubinsky and Anderson, 2003). More specific research indicates that leadership has significant linkages with coordination effectiveness in global export contexts (Akhtar, Kaur and Punjaisri, 2017; Akhtar and Khan, 2015).

Leadership may exert influence over coordination through relational exchanges. Relational exchanges such as strategic partnerships and network building give organisations a competitive advantage (Webster, 1992). Organisations within a marketing channel or value/product chain must cooperate to deliver a product to a consumer. Between these organisations, transactions are repeated, building long-term relationships, buyer-seller partnerships, strategic alliances (including joint ventures), network organisations, and eventually, vertical integration, in that order (Webster, 1992). Intensive relational exchange is characterised by the long-term interactions between organisations in the form of repeated transactions (Fontenot and Wilson, 1997; Webster, 1992). Strategic alliances and long-term collaborative efforts are value-adding relationships which require organisations to make substantial investments in the formation and maintenance of these relationships (Fontenot and Wilson, 1997). Leadership inside these chains is fundamental to fostering these relationships and ensuring success (Mehta *et al*, 2003).

While research in leadership that facilitates and enhances vertical and horizontal coordination in value chains is limited, leadership patterns are emerging that warrant further investigation and application to the New Zealand agri-foods sector. Specifically, the leadership styles of participative leadership, directive leadership, strategic leadership, and collaborative leadership are hypothesised to improve horizontal and vertical coordination in global value chains.

4.3 Participative and directive leadership and coordination

Participative leadership

Participative leadership is defined as joint decision-making or shared influence in decision-making between a superior and their employees (Koopman and Wierdsma, 1998). This leadership style is analogous to participative management, however in the context of marketing channels or value chains a participative leader solicits and considers the suggestions of chain partners and involves them in decisions made that affect other members (Mehta *et al.*, 2003). Because of this, participative leadership is hypothesised to positively influence coordination in value chains as leaders in organisations along the chain encourage the decision-making and collaborative relationships with other organisations.

Research supporting participative leadership positively influencing coordination and organisation performance has been conducted in an agri-food export setting. Akhtar and Khan (2015) and Akhtar *et al.* (2017) used structural equation modelling to assess the relationship between participative leadership and coordination, as well as the outcomes of organisation financial success. Participative leadership was significantly positively related to coordination effectiveness, where coordination effectiveness includes: service quality, product quality, trust, satisfaction, and financial performance. In these analyses, coordination effectiveness was broken into operational performance and social performance, where operational performance includes service and product quality, and social performance is trust in and satisfaction with supply chain partners. The operational performance and social performance were both significantly and positively related to financial performance which encompasses profitability, sales, and market growth.

Directive leadership

Directive leadership can largely be considered as opposite to participative leadership. Directive leadership is established through formalisation, the institutionalisation of explicit rules and operating procedures to govern chain activities (Mehta *et al.*, 2003). Directive leadership involves less autonomy and decision latitude than participative leadership, however may still exert positive effects on coordination. When value chain partners engage in ambiguous or unstructured tasks, following explicit guidelines provided by a directive leader with expertise in the domain may make those partners more successful in attaining performance objectives (*idem*). Adherence to codified rules and regulations should equip value chain partners with knowledge on what to do and how (*idem*).

Using the same structural equation model as what was employed above for participative leadership, Akhtar and Khan (2015) and Akhtar *et al.* (2017) assessed the link between directive leadership and coordination effectiveness with financial performance as the overall outcome. Akhtar and Khan (2015) did not find a significant relationship between directive leadership and coordination effectiveness, whereas Akhtar *et al.* (2017) found a significant positive relationship, although weaker than that of

participative leadership. These results were obtained using the same structural equation models, suggesting directive leadership does not consistently improve coordination effectiveness. This may also be a case of other covariates (such as mediators and moderators) not considered and the interaction between the variables.

The interaction between participative and directive leadership styles

Akhtar and Khan (2015) examined the interaction effect of participative and directive leadership on coordination effectiveness. The relationship between participative leadership was more positive when directive leadership was low compared to when directive leadership was high. The findings suggest that participative leadership not only has a stronger relationship with coordination effectiveness, but this relationship is strengthened by having low levels of directive leadership. It should be acknowledged however that research in this field has not yet gained traction and further research is needed to corroborate findings and provide a consistent argument of how these leadership styles work to improve value chain coordination effectiveness.

4.3 Strategic leadership and coordination

The above research indicates that although the notion of participative and directive leadership styles influencing coordination is somewhat underdeveloped, these styles may be used simultaneously by agri-food organisation leaders to improve coordination with chain partners (Akhtar and Khan, 2015). The link between strategic leadership and coordination is previously unstudied.

Despite being different in nature, both participative and directive leadership styles exert positive influences on agri-food organisation coordination efforts. In addition to this, leaders do not necessarily use one or the other, but use both at modest levels (Akhtar *et al*, 2017). Leaders tend to employ participative leadership styles in public sectors and directive leadership in private sectors, and directive leadership is more suitable when circumstances are sensitive, goals are clear, and leaders are more experienced than followers (*idem*). Like ambidextrous leadership, strategic leadership involves leaders adjusting their leadership behaviours depending on the context and requirements of the tasks/goals to achieve the best possible outcomes. By balancing both participative and directive leadership styles, strategic leaders may be better equipped to enhance value chain coordination by deploying behaviours depending on what is required, what goals are to be achieved, and the level of expertise the leader has compared to those they influence.

The results from Akhtar *et al.* (2017) show that both participative and directive leadership positively predict coordination effectiveness. Strategic leadership was assessed using interaction terms. To achieve this, companies surveyed were categorised into high and low intensity of strategic leadership. The interaction showed the relationship between strategic leadership at high and low levels with financial performance and non-financial performance (which includes benefits such as trust in and satisfaction with chain partners). The result of this interaction showed that better financial and non-financial performances are achieved when organisations apply strategic leadership practices.

Strategic leadership and horizontal/vertical value chain coordination

Existing literature is not specific enough to apply the above research to the vertical and horizontal coordination that is necessary for value-adding in value chains. The research on strategic leadership and coordination effectiveness was conducted in 2017, and no follow-up extending this research has yet been published. However, based on what is known about vertical and horizontal coordination, and how strategic leadership utilises different levels of participative and directive leadership to maximise coordination effectiveness, some conclusions may be drawn that require confirmation in future research.

Vertical coordination is the coordination that occurs up- and down-chain to ensure that value chains add value to products that align with consumer demands and needs (Coltrain *et al*, 2000). Participative leadership involves the decision-making power that leaders in organisations give to followers or value chain partners. Participative leadership in vertical coordination could include how organisations along the value chain consult organisations at different levels for input in products and processes. By giving those organisations some latitude in making decisions, they may ultimately contribute to the product delivered to the consumer. Participative leadership is consequently conducive to value-adding by allowing organisations along the value chain to have influence in how a product moves through a value chain level and what products and processes are being delivered. Directive leadership, however, could be useful in contexts where an organisation has a requirement of another organisation at a different level in the value chain in order for value-adding to be achieved. Clear rules and standards could be enforced to ensure that organisations receive products of the specified quality for value-adding to continue, and these rules and standards would be clearly communicated by a directive leader. Levels of both participative and directive leadership should facilitate vertical coordination.

Strategic leadership ensures that vertical coordination is enhanced using appropriate levels of participative and directive leadership styles. In this scenario, leaders would be able to adjust their style of leadership based on the context, such as what product or process is being coordinated, what value-adding process is occurring, which organisations are being coordinated with, which members are being coordinated with, and what level of expertise the members have compared to the leader. Based on certain conditions, the leaders of organisations could adjust levels of participative and directive leadership to ensure that vertical coordination is maintained and effective.

Horizontal coordination occurs within one level of the value chain constituting coordination within or across organisations serving the same function (Coltrain *et al*, 2000). Horizontal coordination allows organisations at the same level of the value chain to exploit opportunities and address shared constraints (Kilelu *et al*, 2017). Participative leadership could help leaders garner and utilise the input of followers in how to best achieve value-adding requirements. If an organisation has a particular goal or requirement to ensure a consumer is satisfied with a product, participative leadership could foster knowledge sharing and allow followers and other organisations to influence how that is best achieved. This could be helpful to different organisations operating at the same level of the value chain to work toward collaborative goals and consider one another's input to ensure that all remain viable businesses. Directive leadership, however, could include the rules and regulations that ensure members within an organisation, or members from other organisations at the same level of the value chain, operate according to a standard. This could help mitigate against risks shared by organisations at the same level of the chain or ensure that competition is not to the detriment of a partner organisation.

Strategic leadership in horizontal coordination would allow leaders at the same level of the value chain to adjust levels of participative and directive leadership to ensure coordination across this level is enhanced. By being able to simultaneously consider the inputs of followers and other organisation leaders, providing opportunities for them to make decisions and have influence over value-adding processes, but also maintaining institutionalisation and rules, leaders may reap the most benefits from this form of coordination.

Conclusion

Both participative and directive leadership styles show value in facilitating vertical and horizontal coordination in agri-food organisations, and strategic leadership shows promise in balancing the levels of these behaviours to ensure leadership behaviours match coordination needs. The challenge with strategic leadership currently lies in the fact that it has not yet been widely adopted in mainstream leadership research, meaning the assumptions that strategic leadership enables both vertical and horizontal coordination has not yet been tested.

4.4 Collaborative leadership and coordination

Vertical and horizontal coordination in the agri-food value chain requires leaders to communicate with, and foster relationships with, organisations that can ensure products move through the chain with the qualities that consumers demand and value. Collaborative leadership is a style of leadership that shows promise for creating a collaborative culture that may facilitate this inter-organisational partnership.

Collaborative leadership has partnership as the focal point and managing the relationship, not just the deal. Some business relationships can be fleeting or can be realised into full mergers (Kanter, 1994). Collaboration is essential in a global economy, as “a well-developed ability to create and sustain fruitful collaborations gives companies a significant competitive leg up” (idem, p. 96). Kanter (1994) calls this “collaborative advantage”, and in value-chain partnerships, the skills and resources of different organisations come together to build value for customers, giving these organisations a competitive advantage. Leadership that fosters this collaboration is thus facilitative to agri-food value-adding success.

Collaboration is a purposeful relationship where involved parties cooperate as a strategy to achieve shared goals (Rubin, 2009). Collaborative leadership requires responsibility for building and ensuring the success of heterogeneous teams to achieve these shared goals (Rubin, 2009). Collaborative leadership also reduces conflict between organisations, facilitates employees’ involvement, fosters commitment to new initiatives, and develops a shared purpose (Archer and Cameron, 2009). This form of leadership deemphasises the roles of leaders and followers to emphasise instead the network in which those leaders and followers are encompassed (Van Wart, 2013). Through building strategic alliances and guiding partner organisations toward common goals, collaborative leadership can facilitate coordination horizontally and vertically.

Four dimensions of collaborative leadership include: activating resource assistance, framing work environment, mobilising stakeholder support, and synthesising collaborative process (Hsieh and Liou, 2018). Activating resource assistance is based on the network leadership principle of activation whereby a set of behaviours are employed to identify and incorporate the people and resources needed to achieve goals (McGuire and Silvia, 2009) which is critical to arrange important resources such as money,

information, and expertise (Hsieh and Liou, 2018). Framing work environment involves agreeing on leadership roles, operating rules, and network values (McGuire and Silvia, 2009). Mobilising stakeholder support can include the publicising of network accomplishments, establishing and maintaining its legitimacy, and using incentives to motivate employees within the network (*idem*). Finally, synthesising collaborative process is the creation and maintenance of trust and productive interactions among network participants (*idem*). This fourth dimension is proposed as a mediator between collaborative leadership and positive organisational outcomes by Hsieh and Liou (2018) because a successful collaborative network synthesises the collaborative environment, but the collaborative leaders integrate the behaviours of activating, framing, and mobilising.

In testing this dimensional interpretation of collaborative leadership, its synthesis of collaborative work environments and positive organisational outcomes, Hsieh and Liou (2018) found several outcomes. The path analysis assessed framing work environment, activating resource assistance, and mobilising stakeholder support predicting organisational performance via synthesising collaborative process. Activating resource assistance and framing work environment significantly predicted synthesising collaborative process and perceived organisational performance. Mobilising stakeholder support however did not predict synthesising collaborative process or perceived organisational performance. Synthesising collaborative process significantly predicted organisational performance. Organisational performance was assessed based on respondents' perceptions of the organisation meeting needs, attaining goals, meeting service quality, giving sense of accomplishment, minimal costs, timely service, and accuracy of work.

While this research suggests that dimensions of collaborative leadership support a collaborative process which has positive outcomes for perceived organisational performance, it does not explicitly determine how collaborative leadership affects horizontal and vertical coordination. It does however outline a leadership style that emphasises how organisations work together in a network, and how that network can be created and lead to organisational success. Coordinated efforts can be characterised by contractual agreements (Poulton et al., 2010) however research in collaborative leadership suggests that forming alliances and partnerships with other organisations, both horizontally and vertically in the value chain, requires leadership competencies of activating resource assistance, framing work environments, and synthesising a collaborative process.

Conclusion

Collaborative leadership is important for organisations forming networks and those networks working toward a shared purpose of adding value to agri-food exports. Collaborative leadership involves activating resource assistance, framing work environment, and mobilising stakeholder support, which may positively predict synthesising collaborative process. This collaborative process is the creation and maintenance of positive network relationships which has been shown to be positive related to organisational success. Forming partnerships and alliances is essential for agri-food organisations to successfully coordinate activities both horizontally and vertically, and collaborative leadership outlines a leadership style that builds these organisational relationships.

4.5 Interplay between innovation and coordination

While both innovation and coordination are established drivers of value-adding in global agri-food value chains, it is the synergy between the two that drive success in generating value. Vertical coordination involves different levels of the value chain working collectively to meet consumer demands; the innovations developed at different stages in the value chain rely on vertical coordination in order for them to be carried through. Working up-chain, consumer demands must be established through communication links with up-chain organisations, meaning innovation is communicated and sustained through coordinated efforts.

Amanor-Boadu (2003) highlights the interdependency of innovation and coordination systems in value-added initiatives. Six dimensions of innovation and coordination that lead to value are time, location, product/service, process or methods, incentives, and information. These are shown in Table 4 as they appear in that paper. These innovations and their accompanying coordination activities add value to agri-food products, and when perceived by consumers, a value premium is paid.

Table 4.1: Typology of opportunities in value-added initiatives

Value-Added Opportunity Slate		
Dimension	Innovation	Coordination
Time	Speed	Just-in-Time Deliver
Location	Convenience	Efficiency
Product/Service	Form	Logistics
Process/Methods	Technology	Strategic Alliances
Information	Safety, Ethics	Information Systems
Incentives	Motivators	Transparency

Source: Amanor-Boadu (2003).

Earlier stages of the agri-food chain are poorly positioned for profit-making and value-adding. In an analysis of economic value added metrics of 44 agri-food companies, agricultural producers, the most commoditised sector, contributes the least value to a product, whereas processing and retailing contribute significantly higher levels of economic value, suggesting that value is added more down-chain (Cucagna, 2014). Agri-food production is typically characterised by low margins, high price dependence, and a lack of product differentiation, suggesting a need for value added activities such as innovation to capture more consumer money, and vertical coordination to work more efficiently due to the increased connectedness with customers and consumers (*idem*). By innovating production outputs (e.g. livestock) to resemble what consumers desire rather than offering commodities, organisations in the early stages of the value chain are able to obtain a larger share of the value-adding process (Coltrain *et al*, 2000). This, coupled with vertical coordination to better meet the needs of the consumer, results in value-adding activities beginning early in the value chain, and moving down the value chain with value continually added (Cucagna, 2014).

Organisations operating within agri-food value chains cannot innovate without coordinating activities, and horizontal and vertical coordination should identify areas for innovation and assist innovation efforts to move through the value chain. Leadership in agri-food value chain organisations should be focused around the attributes and qualities of leaders that facilitate both coordination in its different forms (collaborating with other organisations/leaders, communication up- and down-chain) and innovation through cultivating an innovative work climate under which employee innovation is encouraged and facilitated. This should ensure agri-food products are able to meet evolving values and standards in the global market. The leadership styles discussed above highlight areas where leaders in New Zealand agri-food organisations need to excel in order for value to be created. By balancing the levels of these leadership behaviours, agri-food value chains can benefit from value being successfully innovated and carried through the chain to be delivered to consumers.

Chapter 5

Leadership and Marketing

5.1 Marketing strategy, market orientation and entrepreneurial marketing

Marketing contracts and use of marketing channels are a means through which value is added to agri-food products and communicated to consumers (Coltrain *et al.*, 2000). Traditional agri-food companies have been production-oriented, giving little attention to leveraging cooperative value chain relationships and enhancing value delivered to consumers (Lewis *et al.*, 2014). Shifting agri-food products away from commodities and branding agri-food products disrupts traditional market strategies and utilises the above mechanisms of innovation and coordination in an entrepreneurial marketing approach (*idem*). Branding, market orientation and entrepreneurial marketing are marketing strategies that can be implemented in an agri-food value-adding setting.

Branding

A brand is defined by (Kosteljik, 2017, p. 27) as “the set of mental associations, held by the consumer, that add to the perceived value of the branded product or service”. Branding is a value-adding process through the concept of brand equity. Brand equity occurs when a consumer is familiar with a brand, holding favourable, strong, and unique associations about the brand in comparison to non-branded versions of products (Keller, 2008). The values which the brand encompasses are the building blocks of the brand image, so the perceived brand is a promise of what values are offered (Kosteljik, 2017).

Through innovation, agri-food products that would otherwise be commodities can be transformed into specialty goods through attributes such as colour, texture, and taste. Through marketing, that food can be branded into a specialty good where a consumer can seek out that product and pay a price premium (Lewis *et al.*, 2014). Each organisation within the value chain can capture incremental value, however the outcome in an entrepreneurial marketing perspective is the branding which represents an opportunity to shape customer needs and increase value to the end consumer and value chain members (Hanf and Kühl, 2005). The brand of the product captures the value added and communicates this to the target market.

Branding is a strategy of innovation in agri-food value chains (Lewis et al., 2014). This is especially true for agri-food companies where outputs have traditionally been viewed as commodities, and commodities must now act like branded companies (Stanton and Herbst, 2005). Modern consumers may not have the time or knowledge to identify what products are high quality or fresh and branding may alleviate confusion (Lewis et al., 2014). Stanton and Herbst (2005, p. 7) state “Consumers want to place their trust in branded companies to give an official endorsement that the product is indeed good and worthy of purchase”.

Market orientation

Market orientation is an outside-in approach to marketing and branding whereby products are designed in response to consumer demands (Urde, Baumgarth and Merrilees, 2013). Market orientation has positive consequences for innovation, customer loyalty, product quality, and organisational performance (Kirca, Jayachandran and Bearden, 2005). Market orientation provides organisations with market sensing and customer linking capabilities (G. S. Day, 1994). The market sensing capability is the processes for gathering, interpreting, and using market information in systematic, thoughtful, and anticipatory ways (Day, 1994). Market oriented companies collect and act on market information about customer needs. Customer linking is a capability that allows organisations to create and manage close customer relationships (idem). The capabilities found in market-oriented organisations allows for positive organisational performance, and positive customer, innovation, and employee consequences (Jaworski and Kohli, 1993, 1996; Kirca *et al*, 2005).

Customer consequences of market orientation include the perceived quality and value of products/services, perceived levels of service, customer loyalty, and customer satisfaction with products/services (Jaworski and Kohli, 1996; Kirca *et al*, 2005). Having a market orientation means customer-perceived quality of products and services is high due to creating and maintaining superior customer value (Brady and Cronin, 2001). By being able to anticipate customer needs and offer products and services which satisfy needs, market-oriented organisations are better positioned to achieve customer satisfaction and loyalty (Slater and Narver, 1994).

Market orientation also benefits innovation. By being driven to continuously and proactively create products and services that meet customer demands and anticipated demands, market-oriented organisations enhance innovation (Atuahene-Gima, 1996; Han, Kim and Srivastava, 1998). Consequently, market orientation benefits innovation by being driven by customer needs.

In a meta-analytic review, Kirca *et al*. (2005) developed a model of the path through which market orientation exerts its positive influence. Market orientation positively influenced innovativeness, which in turn positively influenced customer loyalty and product quality, which positively influenced organisational performance. Thus, market orientation is a marketing philosophy which enhances innovation, resulting in positive customer outcomes, including customer loyalty and perceived product/service quality and better overall organisational performance.

What does market orientation mean for value creation? Market orientation is a major prerequisite to value creation and subsequent competitive advantage (Grunert *et al*, 2005). In a value chain framework, organisations operate to add value to products/services in an additive, cooperative fashion to meet end-consumer needs. By being attuned to the market, having the capabilities of market sensing and customer

linking, value chains may be better equipped to create value which is perceived by consumers. Market orientation also supports innovation, a well-established value-adding mechanism

Market/brand orientation synergy

While market orientation is an outside-in approach with brand image as a fundamental concept, brand orientation is primarily an inside-out approach with brand identity as the key concept (Urde *et al*, 2013). Less concerned with the image the brand will hold in the customers' perceptions, the brand identity constitutes the mission, vision, and values as a hub for organisational culture, behaviour, and strategy (idem). Despite being a conceptual opponent to market orientation, brand orientation also shows promise as an effective marketing philosophy.

Brands that consumers know and perceive as being differentiated from competitors are strong brands which are critical to sustained competitiveness (Wai Jin, Oecass and Sok, 2017). When combined with formalisation (emphasising specific rules and procedures for how work tasks are completed), brand orientation builds high levels of brand awareness and uniqueness (idem).

Market orientation and brand orientation, although taking different approaches to branding products, are not mutually exclusive. Urde *et al*. (2013) examined the brand trajectories of several case study companies. It was revealed that companies need not pick a single orientation for their brand as trajectories change with time and brand orientation is dynamic. Organisations have a tendency to move to middle ground after starting as purely one orientation or the other to create a hybrid of the two. Hybrids are also more likely to emphasise the historical orientation, that is, a brand-oriented organisation will incorporate market orientation but not above and beyond the brand orientation already established, and vice versa. The hybridisation of market and brand orientations means that organisations are able to generate products which are designed for customers with their needs being focal to the value-adding processes, while maintaining brand uniqueness and a strong brand image which is easily identified.

Entrepreneurial marketing and brand creation

Entrepreneurial marketing is a strategy through which agri-food products can be branded with innovation and coordination to deliver messages about product value to consumers who are willing to pay a premium. Entrepreneurial marketing disrupts existing markets through product/market innovations which more effectively meet consumer needs and may garner profits on new innovations before the innovation is diffused throughout the market (known as a Schumpeterian, or entrepreneurial rent) (Darroch, Miles and Paul, 2005; Miles, Paul and Wilhite, 2003). Entrepreneurial marketing uses the tools and techniques characterised in traditional marketing and revitalises them by creating innovative offerings, such as branding new innovative products (Morrish, Miles and Deacon, 2010).

Entrepreneurial marketing also goes beyond the boundary of meeting consumer needs. While value chains which are coordinated are able to meet the needs of consumers in a changing global market (Bijman *et al*, 2011), entrepreneurial marketing transforms the markets themselves by shaping customer needs or creating new needs the organisation can best serve, thus being proactive in seeking opportunities rather than reactive to opportunities that present themselves (Morrish *et al*, 2010). The increasing complexity of agri-food global markets offers opportunities for marketers to take an entrepreneurial approach to create value (Lewis *et al*, 2014). In a global market characterised by

increasing complexity, organisations benefit from being entrepreneurial in their marketing to generate value and gain a competitive advantage.

Global entrepreneurial marketing

While brand creation and entrepreneurial marketing show promise for having consumers pay a price premium for products with value added, the added complexities of marketing in a global market needs to be considered. Successful marketing strategies are important for export competitiveness; however, export marketing strategies need to consider foreign markets (Sudarevic, Radojevic and Lekovic, 2015). One approach to marketing to global markets is a standardised approach under which forces of globalisation lead to unification of foreign markets, making consumer's needs more congruent (Yip and Bink, 2007). This strategy results in a reduction of organisation expenses and management of abroad operations (Arthur Solberg and Durrieu, 2008; Yip and Bink, 2007), however does not consider the inherent differences between foreign consumers and the cultural, political, legal, and economic differences between these countries and markets (Papadopoulos and Heslop, 1993). An adaption strategy emphasises the unique tailoring of products to foreign consumers, however accrues more expenses (Sudarevic *et al*, 2015).

The trade-off between global marketing and the associated organisation costs is referred to as the standardisation/adaptation dilemma in export marketing strategy (Sudarevic *et al*, 2015). While the standardisation and adaptation strategies fundamentally differ in approach, agri-food organisations need not choose one side and relinquish the other. A marketing mix allows the right level of each strategy to be employed depending on the circumstances (Katsikeas, Samiee and Theodosiou, 2006; Morgan, Katsikeas and Vorhies, 2012).

Sudarevic *et al*. (2015) assessed the levels of standardisation/adaptation marketing strategies in Serbian agri-food exporters to suggest what levels of each are required depending on organisation size, export experience and capital ownership. Their review found that large, foreign-owned organisations often selected levels of standardisation for product, distribution, and promotion, but adaptation for price. These large, foreign-owned organisations faced fewer difficulties in strategy implementation from this balance. While the findings of this study cannot be extrapolated far beyond Serbia, the findings suggest marketing success may be able to be achieved from balancing standardised and adaptive marketing strategies, however there is not a single solution that can be applied across companies.

Entrepreneurial marketing and global marketing techniques in tandem can be determining factors of agri-food product value-adding and price premiums. In a global marketplace, small organisations can benefit from entrepreneurial marketing strategies as opposed to traditional marketing due to lower fixed costs allowing for more flexibility (Harrigan, Jones and Sethna, 2013). While Sudarevic *et al*. (2015) suggested that larger organisations may benefit from standardisation of products, smaller organisations can benefit from customisation at levels that large global players are unable/unwilling to provide giving them a niche market and niche customer-loyalty (Harrigan *et al*, 2013). Agri-food companies exporting to foreign markets and adding value to New Zealand branded agri-food companies should be mindful of their size, costs and experience, and determine how much adaptive strategy should be integrated into an entrepreneurial marketing campaign in order to garner a price premium from global consumers.

Entrepreneurial marketing requires strong vertical relationships so vertical coordination is a necessity to adding value through marketing (Lewis et al., 2014). Branding, the outcome of entrepreneurial marketing, requires vertical coordination mechanisms in order for brands to be the ‘trustee’ of agri-food product credence characteristics (Hanf and Kühl, 2005). Also, branding is a strategy of innovation in agri-food value chains ensuring product differentiation and organisation sustainability (Lewis et al., 2014). Thus, innovation, coordination, and global entrepreneurial marketing are interconnected concepts adding value to agri-food products.

5.2 Marketing leadership

The above review on marketing in an agri-food value-adding setting suggests that branding, market/brand orientation, and entrepreneurial marketing should be utilised in global markets. These global markets require an understanding of the unique needs of consumers within those markets as well as global market trends so that the right levels of standardisation and adaptation can be applied. Branding “Made in New Zealand” by agri-food companies also requires a balance between market and brand orientation. To stay loyal to the “Made in New Zealand” brand requires a degree of brand orientation, however the level at which those products cater to the unique needs of global buyers encompasses the market orientation. Thus, the synergies between market and brand orientation, and standardisation and adaptation, as well as entrepreneurial marketing techniques of being proactive to market needs, is what will drive successful “Made in New Zealand” brands for New Zealand agri-food exports. While these marketing philosophies will be organisational characteristics, it is the leadership within agri-food organisations which support marketing strategies and successful marketing outcomes.

5.3 Participative and supportive leadership and market orientation

With market orientation being critically important for increasing innovation and organisational performance (Kirca et al., 2005), an understanding of how to develop it is recommended for marketing success. Much past research on developing market orientation has been devoted to barriers and obstacles of market orientation, and has consistently found management behaviour to be a significant barrier (Harris and Ogbonna, 2001). In an explorative study to examine whether leadership style can be conducive to improving market orientation, Harris and Ogbonna (2001) quantitatively assessed indices of leadership style and market orientation, and found three key leadership styles that exerted significant influence over market orientation. These were participative leadership, supportive leadership and instrumental leadership. Both participative and supportive leadership exerted positive influence over market orientation while instrumental leadership exerted a negative influence, suggesting that leadership is a critical antecedent of market orientation.

Participative leadership

Participative leadership is the style of leadership characterised by joint decision-making and shared influence in decision-making between leaders and their followers (Koopman and Wierdsma, 1998). Without intentionally measuring participative leadership, Harris and Ogbonna (2001) found that leadership items related to market orientation loaded onto a single factor that could be described as participative leadership, since they involved soliciting follower feedback and advice, and giving followers a chance to consult on decisions. While this established a link between participative leadership style and

market orientation, it does not describe a mechanism through which this influence occurs. Other research following these findings has begun to unravel the link between participative leadership and market orientation.

Lee (2008) found that not only did participative leadership relate to improved performance on market orientation variables, but that this might be achieved through the mechanism of organisational structure. Participative leadership styles were negatively related to formalisation, centralisation, and departmentalisation. Lee (2008) concluded that participative leadership leads to better performance on export sales. The results from the structural equation model suggest that participative leadership influences organisational structure, organisational structure influences market orientation and export performance, and market orientation influences export performance directly. Utilising a participative style in leadership and coupling this with decentralisation (which allows export employees to make decisions) facilitates market orientation and export performance.

Organisational group culture is also an important antecedent of market orientation (Zhou *et al*, 2005). Leaders are responsible for creating an organisational culture, consequently leaders are important for developing a culture where participation is encouraged, supported, and has real organisational influence. A participative organisational culture is an antecedent of market orientation in an assessment of random organisations in China (*idem*). Participative leaders who encourage followers to give input and use that input in decision making may foster a participative organisational culture. The participative organisational culture in turn influences market orientation as employees can provide input in how to best meet changing consumer demands.

Supportive leadership

Supportive leadership can be considered a sub-dimension of individualised consideration, one of the key factors of transformational leadership (Rafferty and Griffin, 2006). Supportive leadership focuses on the extent to which leader behaviour toward followers can be perceived as sympathetic, amicable, and considerate of their needs (Rafferty and Griffin, 2006). A supportive leader cares more for the welfare of group members, making work more pleasant, and treating employees as equals (Harris and Ogbonna, 2001). Supportive leadership has been shown to positively influence work job satisfaction, career certainty and affective commitment (Rafferty and Griffin, 2006).

Similar to participative leadership, supportive leadership was found to encompass a factor that positively influences market orientation (Harris and Ogbonna, 2001). A supportive leadership style has been shown to positively predict market orientation as well as reduce organisational structures of formalisation and centralisation (Lee, 2008). Thus, supportive leaders encourage work settings which have less formalised structures, allow employees to have more decision-making power, and treat them with sympathy and respect which in turn foster a market orientation.

Conclusion

Both participative and supportive leadership styles have been shown to positively influence market orientation, an important feature of marketing which adds value to products in value chains. The means through which they do this is through organisational culture and creating a participative organisational

group culture. Inclusion of these leadership styles in the New Zealand agri-food sector allows for marketing leaders to orient their marketing strategy toward meeting the needs of consumers.

5.4 Transformational leadership and market orientation

Transformational leadership is another style of leadership the research considers important for engendering a market orientation which is facilitative to value creation. As discussed earlier, transformational leadership is characterised by five first-order factors: idealised influence (attributed), idealised influence (behaviour), inspirational motivation, intellectual stimulation, and individualised consideration (Avolio and Bass, 1991). Transformational leadership can be considered a managerial-based competency which enhances market orientation, giving organisations a position advantage and improving performance (Menguc, Auh and Shih, 2007).

Transformational leadership has been shown to significantly positively predict market orientation which has in turn predicted marketing differentiation, innovation differentiation, and organisational performance (Menguc *et al*, 2007). This has been attributed to top management influencing strategy formation, implementation, and culture cultivation (*idem*). Transformational-based managerial competencies should be considered key antecedents to market orientation.

A mechanism through which transformational leadership may exert its influence is how it moderates the relationship between task conflicts and market orientation. Task conflict is defined as “disagreements among group members about the content of the tasks being performed, including differences in viewpoints, ideas, and opinions” (Jehn, 1995, p. 258). When conflict is focused on the task, effort from disagreeing group members may cultivate innovative and creative solutions, meaning task conflict can be functional (Amason, 1996). By implementing an integrative conflict handling style, transformational leaders may assist task conflict in fostering market orientation by facilitating communication and sharing information (Menguc and Auh, 2008).

Empirical evidence supports the relationship between transformational leadership, task conflict, and market orientation. Menguc and Auh (2008) found that when task conflict is present, market orientation is higher when transformational leadership is also high. Menguc and Auh (2008) also found that the relationship between task conflict and market orientation is curvilinear with a distinctive U-shape. Market orientation is higher at high or low levels of task conflict, with market orientation being higher when transformational leadership is also high. Market orientation was highest when task conflict was low, suggesting if possible, it is best to avoid task conflict, however transformational leadership is important to ensure that market orientation is boosted regardless of task conflict level, and to facilitate communication and information sharing when task conflict is high.

Conclusion

Transformational leadership has been empirically shown to boost market orientation and positively influence organisational performance. Transformational leaders have the competency of an integrative conflict handling style which allows for task conflicts to become opportunities for creative, innovative efforts. By being able to utilise task conflict and make it functional to innovation, transformational leaders improve an organisation’s market orientation. Transformational leadership can be considered important for New Zealand agri-food organisations to market products to consumer needs.

5.5 Entrepreneurial leadership and marketing

Entrepreneurial leadership is the characteristics of entrepreneurship and leadership concepts combined (Zyl and Mathur-Helm, 2007). Entrepreneurial leaders “directly contribute to opportunity recognition and exploitation in their organisations, as well as influence their followers by acting as role models. They direct followers’ attention to entrepreneurial goals and motivate and encourage them to pursue these goals” (Renko *et al*, 2015, p. 69). Musa (2014) defines entrepreneurial leadership in terms of four dimensions: a strategic dimension, communicative dimension, motivational dimension, and personal and/or organisational dimension. These are outlined in Table 5.1 below.

Table 5.1: The four dimensions of entrepreneurial leadership

Dimension	Description
Strategic dimension	The ability to determine the organisation system in a comprehensive manner, considering the resources, people, strategy, and business model the organisation adopts. The strategic thinking entrepreneurial leaders must have to ensure the vision of future possibilities is shared so the organisation has a sense of direction. The flexibility in decision-making and willingness to face ambiguity. The ability to think in time by understanding the gap between the current and future state to improve quality of decision-making and speed of implementation. Finally, the capacity to develop good hypotheses and test them efficiently in complex and changing business environments.
Communicative dimension	How the vision of future possibilities is shared throughout the organisation. The ability to persuade organisational members to manage conflicts and to foster knowledge management by understanding people emotions in social interactions.
Motivational dimension	Human action within the organisation that affects motivation and cognition of people in the organisation. The ability to motivate people, to understand the needs of the organisation, to maintain entrepreneurial spirit people in the organisation, and have self-confidence to influence others.
Personal and/or organisational dimension	Factors relating to creativity, stability, placing people in their proper place, and discipline. Resource allocation to enhance knowledge management, recognising efforts, and linking entrepreneurship and strategic management.

Source: Musa (2014).

Entrepreneurial leadership is an area of research that is still in its infancy, thus will require years of research and review to develop a greater understanding of how and why entrepreneurial leadership exerts its influence (Leitch and Volery, 2017). There is currently no published literature which has empirically tested how entrepreneurial leadership relates to entrepreneurial marketing or leads to marketing success in general. Links are consequently tenuous but based on research where entrepreneurial leadership may distally be related. Any links between entrepreneurial leadership and marketing outcomes need further research and testing.

Entrepreneurial leadership creates value through combining innovation and resources to respond to opportunities (Darling, Keeffe and Ross, 2007). This resonates with entrepreneurial marketing as leaders encourage employees toward innovation and recognising unique opportunities, orienting them toward entrepreneurial goals, such as branding a product to have values not common or salient currently in the marketplace, but for which a demand could be created.



Conclusion

Entrepreneurial leadership is a style of leadership that is young and underdeveloped. This style does however share philosophies with entrepreneurial marketing in that entrepreneurial leaders use innovation and resources in response to real and potential opportunities, and entrepreneurial marketing requires new approaches to marketing to better meet the needs of consumers or create needs not currently present. The entrepreneurship present in entrepreneurial leadership could be beneficial to entrepreneurial marketing however these links have not yet been empirically established.



Chapter 6

Conclusions

This literature review assessed how leadership relates to value-adding processes in agri-food value chains. The literature indicates that through innovation and coordination, employees in agri-food value chains can add value to agri-food products. Marketing strategies of branding, market orientation, and entrepreneurial marketing align products to foreign consumer demands and communicate the “New Zealand made” value to consumers. Leadership plays important roles throughout the value chain and is a critical antecedent to agri-food organisations adding value to products.

Innovation is an essential process in the value chain as it differentiates agri-food products, adds values that are demanded by consumers, and gives agri-food organisations a competitive advantage. Innovation includes product and process innovation, depending on whether the product itself or the processes utilised to create it are innovative. Both forms of innovation are required as consumers will have values and standards pertaining to both the finished product (such as its physical features) and its creation (such as animal welfare concerns).

Regarding innovation, there is a plethora of research linking leadership to creativity and innovation in employees. A major theory that dominates the innovation leadership literature is transformational leadership, which has both direct and indirect effects on innovation. Transactional leadership is another classic leadership theory, however both positive and negative relationships with innovation have been found depending on several other variables. Servant leadership and authentic leadership have also been found to positively influence innovation. The research linking leadership to innovation however is plagued by inconsistencies and an overabundance of mediator/moderator variables and contextual factors that cause these relationships. While their inclusion in agri-food leadership strategies is recommended, care should be given to the context in which they operate.

One theory in innovation leadership attempts to unravel the inconsistency in findings by breaking innovation down into two key processes: idea generation and idea implementation, which require opening and closing leader behaviours respectively. Ambidextrous leadership has been proposed as a leadership style where leaders have a repertoire of opening and closing leadership behaviours and the temporal flexibility to switch between them depending on the requirements of the innovation task. This theory holds value in applying leadership theory to innovation accounting for the complex nature of innovation and the changing requirements of employees throughout the process in order to achieve value-adding success.

LMX has been applied to innovation research and suggested as an antecedent to innovation. By building positive relationships with followers built on the basis of mutual trust and respect, leaders may encourage innovative behaviour. Transformational leadership has been suggested as an antecedent to LMX, suggesting an interplay between them.

Coordination is another important value-adding activity in value chains. Agri-food organisations in value chains need to coordinate activities both horizontally (at the same level of the chain) and vertically (at different levels of the chain). Horizontally, agri-food organisations may combine resources and exploit

shared opportunities, as well as face shared constraints. Vertically, value can be communicated up- and down-chain, linking product characteristics and production processes to consumer demands and meeting market standards.

Four leadership styles are suggested to positively influence coordination:

- participative,
- directive,
- strategic, and
- collaborative.

Strategic leadership is the balance of participative and directive leadership styles. Participative and directive leadership have been established as supporting coordination, however strategic leadership allows for these styles to be used simultaneously depending on the coordination requirements. Strategic leadership has not yet been empirically tested with regards to its effects on coordination, however its theory holds promise. Collaborative leadership surrounds the competencies of leaders to form relationships with other organisations and form organisational networks. Collaborative leadership has been shown to successfully build collaborative environments and enhance organisational performance, however it has not yet specifically been assessed with regards to horizontal and vertical coordination.

Marketing is essential to identifying consumer demands and communicating product value to consumers. Strategies outlined are branding, market/brand orientation, and entrepreneurial marketing. Branding defines agri-food products in terms of its qualities and aims to align with the values and needs of consumers. Market orientation is an organisation's means of creating products which match those identified in the target market, while brand orientation uses brand identity to focus marketing efforts. Finally, entrepreneurial marketing communicates innovation to consumers and is proactive in its approach, creating value where it possibly did not already exist.

Participative and supportive leadership have been suggested to enhance market orientation via organisational structure. Transformational leadership also enhances market orientation, which improves product differentiation and organisational performance. Transformational leadership may achieve this through utilising integrative conflict handling to ensure task conflict is facilitative to developing a market orientation. Entrepreneurial leadership is a leadership style in its research infancy which shares characteristics with entrepreneurial marketing, and thus warrants further investigation into whether entrepreneurial leadership can facilitate entrepreneurial marketing.

Overall, the literature suggests two very important points for adding value to New Zealand agri-food exports:

- 1) Leadership does not directly add value to agri-food products; and
- 2) Relationships between leadership and value-adding processes is complex.

Leadership has been found to affect innovation, coordination, and marketing, and where research is not abundant, links have been drawn more distally. However, the means through which leadership affects value-adding activities is through various mechanisms as well as the influence of several mediators and moderators. Leadership is also not as simple as applying a single leadership style and expecting results. A

leader is not necessarily one style or another, but encompasses attributes of different styles which may change depending on contexts, etc.

Leadership styles also interact with one another, and the best results may be found by finding the right balance between leadership styles and attributes (e.g. ambidextrous and strategic leadership). While several conclusions can be drawn about what leadership styles are facilitative to adding value to New Zealand agri-food exports, it is essential that leaders are assessed in terms of the context they are in.

While relationships between leadership and value creation in agri-food products is complicated, the importance of leadership cannot be understated. This review has found a multitude of evidence supporting relationships between leadership and value creation. Leadership should not only be considered an important correlate of value creation, but a critical antecedent without which value-adding would likely be unsuccessful. While practitioners will find difficulties in finding the right styles of leadership and assessing leadership in terms of context, its inclusion in agri-food export enterprises is crucial for the creation of price premiums and encouragement of sustainable exporting success.



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