The Effects of the Web as a Form of Stakeholder Communication: An empirical case study of a co-operative

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Abstract

This research aims to add some understanding to the existing stakeholder management literature with a focus on the management of stakeholder communication. It explores how the Web can assist the management of the communication between a dairy co-operative and its farmer supplier-shareholders. An exploratory case study and semi-structured in-depth interview research design is used to collect, analyse, and present the perceptions of interview participants.

This research highlights a paradox, which results from the inconsistent needs of the farmers as both suppliers and shareholders of the co-operative. A number of factors that have influenced farmer interviewees' decisions to either reject or embrace the Web are also identified. These factors are divided into two categories, those closely associated with individual characteristics, namely, perceived values, perceived self-efficacy, and awareness; and these outside the individual's control, namely, infrastructure and media conflict.

These findings suggest that the Web adds flexibility to organisations' stakeholder communication strategies by offering an additional communication form. In particular, this research shows that the Web contributes to overall management of stakeholder communication through 1) increased accessibility to personalised and up-to-date information, 2) added flexibility to self-service programs, and 3) a recreated sense of 'conventional' community.

Furthermore, the Web should be used as a complement to, rather than a replacement for, conventional communication forms in stakeholder communication strategies. Although the Web may not be the answer for all stakeholder communication challenges; what seems undeniable is the tremendous potential of the Web in facilitating and leveraging the management of stakeholder communication. Three considerations are proposed for organisations planning to include the Web as part of their stakeholder communication strategy: organisational needs, stakeholder characteristics, and communication media factors. Research limitations are discussed, and recommendations for further study are outlined in the conclusion.

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Chapter 1 - Introducation

1.1 Overview of the Chapter

This chapter provides an introduction to the research paper. Section 1.2 gives an introduction to the research context by addressing the research rationales. Section 1.3 presents the research approach. Section 1.4 concludes chapter one by outlining the whole research paper.

1.2 Research Context

This research aims to explore how the Web can support the management of the communication between a dairy co-operative and its farmer supplier-shareholders, in an effort to contribute some understanding to the stakeholder management literature. Using a website as a point of illustration, this research examines the extent to which the Web is being developed by a dairy co-operative to communicate with its farmer supplier-shareholders. It also explores potential factors that can influence the adoption and development of the Web as a form of stakeholder communication, and as part of the communication strategy of the co-operative.

Communication is critical to build long-term relationships with stakeholders. Stakeholder communication is important in developing organisational strategies aimed at improving an organisation's performance. The concept of stakeholders has drawn growing interest in the field of organisational research. Research have been undertaken to identify who the stakeholders are and what relationships they have with organisations; however, little research has been undertaken into the methods in which an organisation communicates with stakeholders in order to build promising relationships.

The four main types of communication media are face-to-face (F2F), telephone, paper, and the Internet. Putting these four communication media in the context of stakeholder communication, they can be further divided into eight communication

forms. The eight communication forms are one-to-one F2F meeting, one-to-many F2F meeting, telephone using persona, telephone using auto-messages, personalised document, non-personalised document, email and the Web. Organisations often utilise a mix of the eight forms of communication in their stakeholder communication strategies. The Web has become increasingly important in communication with stakeholders (Adams & Frost, 2006). It provides an additional form of dialogue, as well as increased accessibility of useful information by providing an electronic gateway to organisations. Moreover, the Web offers three key benefits for organisations: 1) the ability to reach a large number of stakeholders simultaneously, 2) the ability to establish communication dialogues with stakeholders, and 3) the potential to provide personalised communication dialogues.

The dairy co-operative studied in this research is Fonterra Co-operative Group Ltd (Fonterra). Fonterra is a leading multinational dairy company, which is co-operatively owned by more than 11,000 New Zealand dairy farmers. Fonterra farmers are both raw milk suppliers, and shareholders of the co-operative. The dual roles of Fonterra farmers provide an interesting case to the existing stakeholder communication literature. It is hoped that the findings of this research can offer a competitive advantage for a co-operative's ability to attract, retain and serve its farmer supplier-shareholders. In addition, responding to the call from prior research (Kohli et al., 2001), this research also attempts to provide practitioners and researchers with an example of managing non-traditional customers, thus demonstrating wider applicability of CRM.

1.3 Research Approach

The research primarily aims to find out how the Web can facilitate a better management of the communication between a dairy co-operative and its farmer supplier-shareholders. In particular, the objective of this research is achieved through the following steps:

1) to identify the communication methods employed by a dairy co-operative between the processing firm and its farmer supplier-shareholders;

2) to describe the experiences, attitudes, and perceptions of the farmer supplier-shareholders towards the co-operative's stakeholder communication practices, particularly, the perceived usefulness and effectiveness of the Web among farmer interviewees; and

3) to discuss the management implications of the Web in relation to stakeholder communication strategies.

In examining interview participants' experiences, this research intends to encourage reflection on current practice compared to theories. The research takes an interpretive approach and uses a qualitative research design. The research method is case study with semi-structured in-depth interviews. Thirty-one interviews were conducted in total. The interview sample in this research includes twenty-four farmer supplier-shareholders, and seven Fonterra management staff, so as to look at the co-operative overall approach to stakeholder communication from both a stakeholder's perspective and a management point of view. The experience of interview participants is the primary data used in this research. Data is also collected through examining the co-operatives' publications and a field trip to a stakeholder meeting. It is hoped that the findings have implications for organisations in developing effective communication strategies to enhance their relationship with key stakeholder groups.

1.4 Research Paper Structure

This research paper is divided into six chapters including the introduction as the first chapter. This Introduction chapter is followed by a review of relevant literature. The purpose of the second chapter is to examine prior literature in the area of stakeholder communication management in order to see if the preliminary research interest has been previously explored. As a result, several research questions arise from the literature review, which provide a foundation for the inquiry of this research.

Chapter three examines and discusses the methodology of social research. It also addresses the chosen research approach. Given the research questions, ethical considerations, and available resources, the exploratory case study method is determined to be the most suitable for this research. The sampling technique is then discussed in relation to its strengths and weaknesses given the underlying philosophy of this research.

Chapter four introduces the selected case by 1) presenting the case background and 2) addressing the reasons for choosing the selected case.

Chapter five presents and discusses the findings of this research. Interviewees' responses are contrasted and compared with each other in order to identify similar or different attitudes and perceptions. The interviewees' responses to the inquiry have been organised and presented in four sections. The first section discusses the general attitudes and perception towards the studied co-operative's communication strategies. The second section looks at factors that have influenced farmer interviewees' decision to either reject or embrace the Web as a form of communication with the co-operative. The third section examines the potential benefits of the Web from a management perspective. The last section puts forward three key considerations to organisations' stakeholder communication strategy, and concludes chapter five.

Chapter six summarises the main findings of the research, and discusses research contributions and implications. It concludes the whole research paper through addressing the research limitations and possible future research areas.

Chapter 2 - Literature Review

2.1 Overview of the Chapter

This chapter reviews literature that is relevant to this research. To provide an outline for this chapter, Section 2.2 examines the existing communication practice between organisations and various groups of stakeholders, in particular, shareholders and suppliers. Section 2.3 discusses how organisations can use the Web as a form of stakeholder communication. Section 2.4 then provides specific considerations for co-operatives on the benefits in which the Web may provide opportunities for communicating with its primary group of stakeholders. The chapter ends with a brief summary.

2.2 Stakeholder Communication

2.2.1 Overview

There has been a growing interest in the area of stakeholders and stakeholder relationship management. Although the concept of stakeholders is put forward and developed mainly to emphasise the significance of a wide range of groups in society other than just the owners of organisations, fundamental to the concept of stakeholder management is a need to have an active relationship with various groups of stakeholders. Such relationship is critical to the success of any organisation. Organisations add dynamics to the relationship with stakeholders by engaging them in order to identify stakeholder concerns and issues. It is, therefore, important to learn to engage with stakeholders in some way. One of the fundamental means of engaging this group of individuals is through effective stakeholder communication (Crane & Livesey, 2003; Foster & Jonker, 2005). Thus, from a stakeholder communication perspective, this research looks at effective communication as a means of building relationships. In particular, this research focuses on how organisations communicate with stakeholders at an individual level.

According to Freeman (1984), stakeholders can be defined as,

> "any group or individual who can effect, or is affected by, the achievement of the organization's objectives" (p. 46).

Communication with stakeholders is characterised by a complex array of changing, ambiguous and contested interactions (Crane & Livesey, 2003). However, one thing is certain: communication with these groups of individuals is important to an organisation in identifying and responding to various issues faced by the organisation (Dyer & Singh, 1998; Post, Preston, & Sachs, 2002). The impacts of effective communication with stakeholders is well recognised and generally accepted by most researchers. For example, immediate communication with stakeholders is necessary to maintain confidence in crisis situations (Perry, Taylor, & Doerfel, 2003). Effective communication allows organisations to set objectives and targets of performance for each identified group of stakeholders (Cooper, 2003), and leads to greater stakeholder involvement (Kaptein & Tulder, 2003). Moreover, Foster and Jonker (2005) suggest that stakeholder communication is the basis of any constructive engagement between an organisation and its stakeholders.

2.2.2 Communication Media

A number of communication media are available for organisations to include into their stakeholder communication strategies. A medium (or media) is defined in the Oxford Dictionary as the "means by which something is expressed or communicated". There are four basic types of communication media; they are face-to-face (F2F), telephone, paper, and the Internet. Many theories in the literature have looked at various dimensions of communication media, and the most influential theory is the media richness theory (R. Daft, Lengel, & Trevino, 1987; R. L. Daft & Lengel, 1986). According to the media richness theory (R. Daft et al., 1987), the "richness" of a medium can be described by 1) the extent to which the medium generates immediate feedback, and 2) the extent to which the medium conveys non-verbal aspects of communication, such as, voice inflection, body gestures, and physical presence. In other words, if a communication medium

is able to generate immediate feedback and convey non-verbal communication cues, the medium is considered as a 'rich' medium.

In this research, six key media dimensions are considered. According to Daft et al. (1987), the richest medium is F2F, and paper documents are at the bottom, with telephone somewhere in the middle of the richness scale. Rich media are believed to have a greater impact on the success of communication. As Daft and Lengel (1984; 1986) pointed out, rich media provide strong support to communication in high equivocality, because participants in the communication are able to integrate, and interpret the meaning of a situation, as well as are able to negotiate and regulate that meaning. However, the media richness theory was first proposed before the emergence of the Internet, and so, the theory had not included the Internet in the richness scale. In addition to the two dimensions put forward by the media richness theory, four other dimensions considered in this research are: temporality (i.e., synchronous or asynchronous communication), interactivity (i.e., low or high average of turn-changes), orientation (i.e., one-way or two-way flow of information), and reach (i.e., small number or large number of audiences).

Furthermore, in the context of stakeholder communication, the four communication media can be further divided into eight communication forms with stakeholders. The eight communication forms are one-to-one F2F meeting, one-to-many F2F meeting, telephone using persona, telephone using auto-messages, personalised document, non-personalised document, email and the Web. In one single communication instance, these eight forms of communication are different in the six media dimensions.

Both one-to-one and one-to-many F2F meetings support synchronous communication, multiple communication cues and two-way flow of information; they both offer high interactivity, and are able to generate immediate feedback. One-to-one F2F meetings can only reach one stakeholder at a time comparing a group of stakeholders in one-to-many F2F meetings. Nevertheless, the limited reach ability of a one-to-one F2F meeting is also its biggest strength, because it offers a personal focus in organisations' stakeholder communication strategies. Telephone reaches only one stakeholder at a time, and it supports limited communication cues, that is, voice inflection and language content; other

communication cues such as facial expression and body gesture are filtered out. Moreover, when a telephone is used by organisation staff, it is characterised as synchronous, high interactivity, two-way flow of information, and it is able to generate immediate feedback. However, where organisations make use of technologies such as voice mail and digital voice in their stakeholder communication, the telephone can also be asynchronous, low interactivity, one-way flow of information, and slow in generating feedback.

Both personalised documents and non-personalised documents are characterised as asynchronous, low interactivity, one-way flow of information, and has the ability to reach a large number of stakeholders; however, these two forms of paper-based communication are slow in generating feedback, and they are only able to convey a single communication cue (i.e., language content).

Email is seen as asynchronous communication, low interactivity, and one-way flow of information; email is relatively slow in generating feedback, and it only conveys a single communication cue (i.e., language content). In term of the reach dimension, while an email may be sent to only one recipient, it can also be sent to a large number of recipients simultaneously. The Web, which is short for World Wide Web, is another form of stakeholder communication using the Internet medium. The Web is commonly characterised as asynchronous, low interactivity, and has the ability to reach a large number of stakeholders at a time. The Web is relatively slow in generating feedback comparing to communication forms that are supported by F2F and Telephone. Depending on which technologies are employed, the Web can be either one-way flow of information and conveying single communication cue, or two-way flow of information and conveying multiple communication cues.

Table 1 summarises the eight stakeholder communication forms in terms of their temporality, interactivity, orientation, reach, ability in generating feedback, and ability in conveying multiple communication cues.

Table 1: Stakeholder Communication Forms and Communication Media Dimensions

Medium / Form \ Dimension		**Temporality**	**Interactivity**	**Orientation**	**Reach**	**Feedback**	**Communication cues**
Face2Face	**One2one**	Synchronous	High	Two-way	One	Immediate	Multiple
	One2Many	Synchronous	High	Two-way	Small No.	Immediate	Multiple
Telephone	**Personae**	Synchronous	High	Two-way	One	Immediate	Limited
	Auto-Message	Asynchronous	Low	One-way	One	Slow	Limited
Paper	**Personalised**	Asynchronous	Low	One-way	Large No.	Slow	Single
	Non-personalised	Asynchronous	Low	One-way	Large No.	Slow	Single
The Internet	**Email**	Asynchronous	Low	One-way	Small/Large No.	Relatively Slow	Single
	The Web	Asynchronous	Low	One-way/ Two-way	Large No.	Relatively Slow	Single/ Multiple

Keys:
Temporality: refers to either synchronous or asynchronous communication;
Interactivity: refers to either low or high average of turn-changes among communication participants;
Orientation: refers to either one-way or two-way flow of information;
Reach: refers to the ability to reach either small number or large number of audiences at a time;
Feedback: refers to the extent to which the medium generates immediate feedback;
Communication Cues: refers to the extent to which the medium conveys non-verbal aspects of communication, such as, voice inflection, body gestures, and physical presence.

2.2.3 Stakeholder Communication in Practice

A number of researchers have examined current stakeholder communication practice. Ayuso et al. (2006) propose the concept of stakeholder dialogue as a source for ideas. The authors further argue that well-managed stakeholder dialogue is characterised as having two-way communication, transparency, and appropriate feedback. From a communication costs perspective, Wadeson (1999) explores potential costs of two-way communication. While two-way communication ensures the receiver understand what the sender is attempting to transmit, it may not always be more cost effective than one-way communication (Wadeson, 1999). While there are differences in individual researchers' claims, it can be argued that a promising practice exists where a selected communication medium or a mix of communication media possessing the following three "ideal" traits: 1) enabling interactive dialogue, that is, the medium or media supports/support synchronous communication and two-way flow of information, and is/are high in the interactivity dimension, 2) such dialogue is 'personal', that is, it allows immediate feedback and non-verbal communication cues, and 3) reaching a large number of stakeholders simultaneously.

Nevertheless, whether a particular communication medium, or a mix of communication media, is appropriate and effective may still vary among individual stakeholders. Previous studies (Ayuso et al., 2006; Cooper, 2003; Wadeson, 1999; Woodward, 2006; Yates & Beech, 2006) have looked at communication with different groups of stakeholders. In the form of either an individual or a group of individuals, stakeholders often have different attitudes and perceptions with regard to an issue under consideration. Stakeholders are often considered in two general categories; those who are related to the operation of the business such as employees, shareholders, suppliers, and customers, as well as those who do not have a formal business connection with organisations such as social and political stakeholders. The former category is considered as the primary stakeholders; whereas, the later category is considered as the secondary stakeholders. Further, different group of stakeholders should be considered and examined separately in term of communication strategy planning. On the one hand, different groups of stakeholders have different needs and requirements, as

well as varied level of interests in an organisation. According to Ayuso et al. (2006), stakeholders have different, often contradicting goals, priorities and demands. On the other hand, depending on the nature of an organisation, different groups of stakeholders represent different level of significance to the success of the organisation.

In brief, organisations often make use of a mix of communication media in their stakeholder communication strategies, and therefore, the challenge is to develop appropriate strategies to make best use of each type of medium. To illustrate, this research focuses on two fundamental groups of stakeholders: they are shareholders and suppliers. The following two sub-sections look at how organisations communicate with each of these two particular groups of stakeholders respectively.

2.2.4 Organisation to Shareholder Communication

Shareholders generally refer to those who have direct financial involvement with an organisation. A shareholder is any person who owns shares of an organisation, and so shareholders are the owners of the organisation. Shareholders often have the privilege to access commercially sensitive information in order to make vital buying or selling decisions. There has been considerable interest and research in the area of shareholder communication, in particular, under the subject of corporate governance. Shareholders have been seen by some scholars as the primary group of stakeholders of an organisation (Sternberg, 1998). While prior researchers have different beliefs as to whether shareholder wealth is the sole criteria of all organisation decisions, shareholders are undoubtedly very important to an organisation; thus, communication with this group of stakeholders becomes a necessity to focus organisational attention on. Organisations need to treat this group of stakeholders with a certain degree of priority in their stakeholder relationship strategies.

Organisations normally use a mix of face-to-face communication and paper-based communication with their shareholders. For those organisations that have relatively small number of shareholders, they frequently use paper-based

communication forms, which are one-way communication aiming to inform shareholders on business related matters. Personalised documents, such as, CEO and Chairman letters, are used wherever a personal focus is required; whereas, non-personalised documents, such as, annual reports and corporate magazines, are used for updating shareholders on daily operational matters. Face-to-face meetings are considered as the most effective way of communicating and engaging small number of shareholders. This is because face-to-face communication allows immediate feedback and non-verbal communication cues; as a result, personal dialogues between the organisation and its shareholders can be established which is critical in dealing with "important" individuals.

Where there are a large number of shareholders, a face-to-face meeting is not always practical and may not be cost effective at all. In the case where face-to-face meeting is not feasible, organisations tend to utilise alternative communication methods in an effort to achieve the same communication results. For instance, some organisations make use of shareholder representatives as a method of establishing stakeholder dialogue. Face-to-face meetings thus can be conducted with shareholder representatives. Afterwards, shareholder representatives organise face-to-face meetings with their fellow shareholders at their area of representation. In addition, when there are a large number of shareholders, prior research find that organisations tend to prefer a certain method over the other under a particular circumstance. For example, Perry et al. (2003) find in their research that organisations use news release to communicate with its shareholders during crisis, and no addressed letters sent out in order to avoid personalising situations. Their findings further reveal that organisations employ the news release method to fulfil their mandated disclosure obligation (Perry et al., 2003).

2.2.5 Organisation to Supplier Communication

Suppliers are the stakeholder group that has been received very little attention in the area of the management of stakeholder communication. Depending on the nature of an organisation, this is also a stakeholder group that has been neglected in organisations' relationship strategies.

Traditionally, suppliers have been seen as the bottom stakeholder group. Communication between an organisation and its suppliers has been mainly a one-way flow of information. Organisations make decisions of their best needs and then inform suppliers of those decisions. According to Foster and Jonker (2005), such communication is a linear model where suppliers are the "receivers" of messages sent by the organisation. Information mainly flows from the organisation to suppliers in which the organisation is in control of the communication process.

Depending on the significance of the suppliers, organisations often employ different mixes of the eight stakeholder communication forms. Both one-to-one and one-to-many F2F meetings are preferred, if the suppliers are central to the success of the business. In that case, it is crucial that the receiver (i.e., the suppliers) understands what the sender (i.e., the organisation) has been trying to transmit. In less significant cases with a large number of suppliers, paper-based communication forms, such as letters and company brochures, are supposedly desirable, because the objective is to "inform" and "persuade", and the focus of such communication is information itself rather than seeing communication as a process of "negotiation" and seeking "agreement". Telephone-based communication forms, such as call centres, are frequently employed by organisations as a contact point for their suppliers when there is an issue. However, a call centre is often used reactively in communicating with stakeholders. Therefore, it has limited ability to find out suppliers' needs and gather quality feedback.

Furthermore, some modern organisations make an effort to communicate with their suppliers differently. They seek to become more involved in a two-way flow of information, in which interests and concerns of both parties are addressed. These organisations acknowledge that their suppliers have different sets of interests and concerns, and often these are conflicting. However, they also believe that by addressing various objectives, organisations "acknowledge the existence of an alternative perspective" (Foster & Jonker, 2005, p.51-52). Consequently, such modern communication practice creates a solid basis for continuing relationship with stakeholders.

2.3 A Form of Stakeholder Communication on the Web

2.3.1 Overview

While mail boxes, call centre and face-to-face meetings are still fundamental to most organisations, there exists considerable evidence of changes in stakeholder communication practice. These changes have been a result of the fast development of the communication medium of the Internet in stakeholder communication. As discussed previously, there are two main forms of the Internet-based stakeholder communication; they are email and the Web. For the purposes of this research, the following focuses on the Web in stakeholder communication.

2.3.2 The Web and Stakeholder Communication

Since 1990, the Web has become an increasingly important communication form between organisations and their stakeholders. It introduces an additional approach of communication (Adams & Frost, 2006; Barton, 2003; Ratchford, Talukdar, & Lee, 2001). The Web has the potential in establishing personal dialogues. It also increases accessibility of information to the geographically widely dispersed stakeholders through providing an "electronic gateway" (Adams & Frost, 2006, p.282) to the organisation. According to Walther (1997), the Web provides,

> "information to glean, expertise on which to draw, coordination never before possible with such little expense, and new challenges to the way that we manage our interpersonal and professional relationship" (p.24).

The literature points out a large number of benefits and advantages of the Web (Cooper, 2003; December, 1996; Fjeld & Molesworth, 2006; Jones, Alabaster, & Walton, 1998; Myhr & Spekman, 2005; Perry et al., 2003; Winsor, Leisen, Leach, & Liu, 2004). According to Heath (1997), the Web is "being used to supply information as well as elicit commentary and problem solution advice from stakeholders and stakeseekers" (p.285). Information gathered from the Web helps organisations adjust policies and actions for a better relationship with its various groups of stakeholders. Moreover, the Web helps organisations communicate

decisions quickly to its stakeholders, such as, shareholders and suppliers, and generate quality feedback from these groups of stakeholders. The advent of the Web has provided management with an alternative means of information dissemination (Adams & Frost, 2006), in particular, this is significant in emergence situations (Perry et al., 2003). In addition, from an issue-management perspective, Thomsen (1995) notes that organisations should use the Web to shift from reactive communication strategy to proactive strategy. In brief, the major three benefits of the Web as a form of stakeholder communication are: 1) the ability to reach mass stakeholders simultaneously, 2) the ability to carry interactive dialogue, and 3) the potential to provide personalised communication to stakeholders. In other words, the Web has the potential to support all of the three 'ideal' traits that are identified previously for effective stakeholder communication practice.

The Web also offers benefits to individual stakeholders in a number of ways. First of all, it provides instant access to the latest information related to organisations and their business. As Adams and Frost remarked (2006), the Web has led to a communication revolution that has changed how individuals view and engage with an organisation. Secondly, individuals no longer have to wait for organisations to feed information to them; they are able to retrieve information from the Web proactively whenever they want and wherever they are. Moreover, through the Web, individuals can search through enormous amounts of business-related information and so self-service themselves. The Web allows stakeholders to identify information relevant to them without having to go through endless irrelevant data (Cooper, 2003). Thirdly, using the Web, stakeholders can not only communicate with the organisation, but most importantly, with other stakeholders (Fjeld & Molesworth, 2006) as well.

As a relatively new form of stakeholder communication, the Web has changed the usage of other conventional forms of stakeholder communication. For instance, Perry et al (2003) point out that paper-based communication forms such as news releases, news conferences, fact sheets, corporate publications, and letters to stakeholders can be adapted easily to the Web. Moreover, stakeholders, to a greater degree than ever, are able to access a wide range of documents through utilising Web hyperlinks. The use of hyperlinks also allows organisations to easily

connect with various stakeholder groups. It suggests that organisations can also make use of the Web features, such as interactive chat, threaded dialogue, real-time video and audio, to communicate with their stakeholders.

Nevertheless, there are also challenges of employing the Web in stakeholder communication. First of all, while expected accessibility of the Web is high, it is reasonable to argue that not every individual will be able to access the Web easily. There may be a wide range of reasons why an individual cannot access the Web. However, for those who can not access the Web due to external reasons, such as, unavailable network infrastructure, in the result will be various degrees of negative feeling towards the organisation. Secondly, although organisations can utilise software tools to find out the number of hits to their website, it is difficult to know who actually read and use the information on the Web. In that case, organisations may fail to recognise the real strategic profitability of the Web, or overestimating the benefits of the Web in stakeholder communication. Thirdly, when a Web initiative fails to deliver a personal dialogue with stakeholders, it will be easily seen as "impersonal" and therefore is not able to demonstrate "commitment" and "care" (Fjeld & Molesworth, 2006), which can eventually damage the relationship. In addition, it is also important to note that the Web cannot substitute face-to-face interactions in many circumstances. According to Myhr and Spekman (2005), nothing replaces face-to-face interaction at the early stage of relationship building, and so, the Web should be seen as an enabler and complementor. In order to build a trusting relationship with stakeholders, it is the process of communication and not the content of the communication that is important (Myhr & Spekman, 2005).

A review of current literature points out that organisations have been primarily using the Web for two main strategic objectives. First, the Web provides critical leverage for organisations attempting to implement a CRM strategy. The second key strategic use of the Web is in its ability to be used as a vehicle for self-service tools.

2.3.3 The Web and Customer Relationship Management

One common understanding of Customer Relationship Management (CRM) is using information systems to maintain business relationships. Nevertheless, CRM is more than just sophisticated information systems (Seeman & O'Hara, 2006). CRM is a strategy, an approach, and a philosophy. According to Gordon (2001), CRM refers to

> "the ongoing process of identifying and creating new value with individual customers, and sharing the benefits over a lifetime association" (p.6).

In other words, CRM emphasises a mutual understanding of the importance of ongoing collaboration between every party in the value chain.

A CRM approach is often used in the service marketing sector. However, it is also possible to apply its basic principles to other non-traditional customers' relationships. A number of studies have looked at the application of CRM in managing of non-traditional customers. For instance, earlier research has looked at the CRM approach in the context of hospital-physician collaboration, where the authors (Kohli et al., 2001) argue that CRM is a valuable concept for hospitals to establish long-term relationships with physicians. CRM principles have also been applied in higher education, where students have been treated as customers. In the study conducted by Seeman and O'Hara (2006), the two researchers claim that the benefits of implementing CRM in a college setting are 1) improved student-centric data and process management, and 2) increased student loyalty, retention and satisfaction with the college's services. For that reason, it suggests that CRM principles can be applied to enhance the relationship between an organisation and its shareholders, as well as its suppliers.

A simple CRM system involves the use of a database to better identify individual's needs and provide customised services to that individual. Put differently, it allows organisations to obtain and evaluate a large amount of stakeholder information, and so organisations are able to better communicate with stakeholders. More complex CRM systems combine databases with a Web presence to enable organisations to provide more accurate and timely information and service. In those advanced CRM systems, it suggests that highly responsive

and customised service can be provided (Winsor et al., 2004). Winsor et al. (2004) further argue one of the biggest benefits for CRM that is fully integrated with the Web, is the potential of bi-directional interaction. That is, the Web can be used not only in communicating with stakeholders, but also for obtaining information back from them.

Overall, when combining CRM initiatives with the Web, both the organisations and their various groups of stakeholders have the opportunity to access more relevant, useful and customized information (Winsor et al., 2004). In particular, it makes possible an ongoing one-to-one relationship (Seeman & O'Hara, 2006) between organisations and stakeholders; and it empowers stakeholders to interact with organisations in an individualised and need-specific way (Seeman & O'Hara, 2006).

2.3.4 The Web and Self-service Technologies

The second key strategic use of the Web is to provide a self-service function. Types of Self-Service Technologies (SSTs) include interactive voice response, interactive kiosks, as well as Web applications such as an online profile updater. SSTs are not a new concept in its pertinent literature. They are also increasingly implemented in stakeholder communication and engagement projects (Lin & Hsieh, 2006). SSTs are technological interfaces that empower individuals to take advantage of a service without any help from others (M L Meuter, Ostrom, Roundtree, & Bitner, 2000). SSTs bring flexibility to organisations and save time for them. To illustrate, organisation representatives are able to free themselves from daily transactional activities, and thus they can be involved in more proactive management strategy planning.

The marriage of SSTs and the Web represents a new evolutionary path in the pursuit for the best stakeholder communication practice. When the Web becomes a platform for SSTs, it gives organisations opportunities to make their self-service function mobile; in that case, stakeholders can access and use the SSTs anytime and anywhere, as long as they are able to access the Web. Organisations also have the ability to provide the SSTs to a large number of stakeholders who so locations

may be dispersed throughout the globe. It thus suggests that the Web-supported SSTs are a powerful tool for stakeholder communication, and this is particularly true for organisations that need to manage relationships with a large number of stakeholders.

However, using Web-supported SSTs is not without challenges. Although stakeholders are increasingly skilled in using SSTs, an individual stakeholder may avoid certain SSTs if she or he is uncomfortable with it, even though the benefits are apparent (M L Meuter, Ostrom, Bitner, & Roundtree, 2003). The disccomfort can also result in negative attitudes and perceptions toward an organisation, and so frustration and disappointment with the organisation. An individual stakeholder's characteristics should be taken into consideration; thus, organistions are able to identify if a certain SST application is appropriate and effective in communicating with a particular group of stakeholders.

2.3.5 Acceptance and Readiness

It is logical to conclude that the Web enables greater potential for, and application of, CRM initiatives and SSTs as part of stakeholder communication strategies. And it is also reasonable to argue that the psychographic characteristics of individual stakeholders influence the acceptance of the Web initiatives to a great extent. Prior literature mostly draws theories from the area of social psychology to explain individual's utilisation of new technologies. The three most frequently cited theories are 1) the Theory of reasoned action (Fishbein & Ajzen, 1975), 2) the Technology acceptance model (Davis, Bagozzi, & Warshaw, 1989), and 3) the Theory of planned behaviours (Ajzen, 1991).

2.3.5.1 Theory of reasoned action (TRA). According to TRA, the main determinant of an individual's behaviour is one's behaviour intention, which, in turn, is determined by attitude and subjective norm. Attitude refers to an individual's overall assessment of performing the behaviour. Applied to the context of stakeholder communication, attitude means a stakeholder's belief about a communication medium's characteristics and the degree of subjective

importance the stakeholder attaches to those characteristics. Subject norm refers to a stakeholder's belief of the expectation of people important to the stakeholder about a specific behaviour.

2.3.5.2 Technology acceptance model (TAM). TAM is an adaptation of the TRA to the field of information systems. TAM has been widely employed to understand an individual's behavioural intention to new technology (Wixom & Todd, 2005). It claims that the intention to use a system is determined by two beliefs: perceived usefulness and perceived ease of use (Davis et al., 1989). Moreover, TAM is primarily used to explain information technology acceptance in organisational settings (Davis et al., 1989; Igbaria & Tan, 1997). Perceived usefulness refers to an individual's perception of the extent that a system will improve their work performance. Perceived ease of use refers to users' perceptions of how much effort is required to utilise a system (Davis, 1989).

2.3.5.3 Theory of planned behaviour (TPB). Both TRA and TAM assume that when an individual forms an intention to act, she or he will be free to act without limitations. In practice, there are constraints, such as limited resources, that will limit one's ability to act. Theory of planned behaviour (TPB), an extension of the TRA, attempts to resolve this limitation (Gentry & Calantone, 2002). TPB recognises that most behaviours are influenced by external variables, and it generalises TRA by adding a third perception: perceived behaviour control (Pavlou & Fygenson, 2006). Perceived behaviour control refers to an individual's belief of the difficulty of performing a specific behaviour. Applied to the context of stakeholder communication, it refers to a stakeholder's belief about his/her facilitation of resources, or opportunity.

2.3.5.4 The TRA theories family. In general, TPB and TAM are two derivatives of the TRA, and so these three theories use some of the same constructs (i.e., beliefs) as well as provide predications of behaviour. Thus, it is sensible to use TRA and its family theories to explain stakeholders' behaviour towards the Web communication form. The core formulations of TRA family theories have argued that an individual's behavioural intention is influenced by the individual's belief. Thus, it suggests that the TRA theories family can be seen

as a "belief-intention-adoption" chain. A synthesis of the three acceptance theories is presented in Appendix 1.

2.3.5.5 Technology readiness. Besides the TRA theories family, another emerging concept that looks at individual psychographic characteristics in adopting new technologies is technology readiness (TR). TR can be defined as the overall state of mind of an individual towards technologies, which are jointly determined by a collection of mental enablers and inhibitors (Parasuraman, 2000). According to Lin and Hsieh (2006), there are four key constructs in the concept of TR; they are 1) optimism, 2) innovativeness, 3) discomfort, and 4) insecurity. The first two constructs are enablers. Optimism and innovativeness encourages stakeholders to use the Web to communicate with organisations. The last two constructs, that is discomfort and insecurity, are the inhibitors; stakeholders can become reluctant to use the Web as a result of these two inhibitors.

In brief, given the literature review so far, the Web no doubt adds great potentials to the existing stakeholder communication practice. While there are challenges facing organisations who want to adopt the Web in their stakeholder communication strategies, the Web undeniably opens up opportunities for organisations to better communicate with their stakeholders, such as suppliers and shareholders. For further understanding, the following sub-section looks at stakeholder communication in a co-operative setting.

2.4 Stakeholder Communication in Co-operatives

2.4.1 Co-operatives Overview

2.4.1.1 Co-operatives history and development. There are several definitions on co-operatives. A frequently cited definition is the one suggested by Roy (1964). The researcher argues that a true co-operative is,

> "a business organized, capitalized and managed by, of and for its member patrons, furnishing and/or marketing at cost goods and/or serves to patrons' (p.1).

The Rochdale Equitable Pioneers Society established in England in 1844, later known as the Rochdale Pioneers, is considered as the first true co-operative type of business organisation (Akoorie & Scott-Kennel, 1999). The Rochdale Pioneers consisted of twenty-eight English weavers, and their set of policies and practices became a code over time, known as the Rochdale Principles. These have been very influential throughout the co-operative movement. The Principles are regarded as the prototype of the modern co-operative in all of its various guises.

The evolution of the modern co-operative era has its basis in historical development. As well as England, co-operatives also started to emerge in France, Ireland, Germany and the United States during the Industrial Revolution period (Akoorie & Scott-Kennel, 1999). The increasing establishment of co-operatives was in response to the pressure of industrialisation; the co-operative structure served as a "counterweight" to the increasing hierarchical capitalism (Akoorie & Scott-Kennel, 1999, p.134). However, the co-operative movement was greatly slowed down during the economic depressions period between 1920's and 1930's (Watkins, 1967).

It must be noted that the Rochdale Principles were drafted for a co-operative in retail industry. There are many types of co-operatives including, but not limited to, consumer co-operative, agricultural co-operative, co-operative housing societies, and co-operative education and training. This research focuses on a New Zealand diary co-operative, which is a type of agricultural co-operative. The development of agricultural co-operatives were a result of farmers entering into the market economy (Watkins, 1967). In the case of the dairy industry, this means that farmers are not only producing milk for their own consumption, but also producing milk for sale in the marketplace. With the development of the market economy, the markets shifted further and further away from dairy farmers. As a result, individual farmers became unable to look after the sales and marketing of their products.

Furthermore, the world is becoming an increasingly sophisticated society; as a result, farmers are having to purchase advanced equipment to meet daily production needs. Farmers also realise an increasing necessity to share some specialised services and equipments which are too sophisticated to obtain for

themselves. For the above reasons, dairy co-operatives are formed as a result of trying to make milk production more effective and efficient. The co-operative structure also gives individual farmers, who were previously at the end of the supply chain, the power to have industry-level research conducted and the opportunity to participate in further reorganisation of the market (Watkins, 1967). In this global market age, co-operatives face a number of challenges as they have to response to the market effectively while holding on to their co-operative identity and mission. Lang (1995) argues that the future of co-operatives rely on their ability to convince members to structure themselves in order to compete globally.

2.4.1.2 Co-operative characteristics. Previous researchers (Akoorie & Scott-Kennel, 1999; Nixon, 1998) point out three features of co-operatives which differentiate them from investor-owned companies; these three features are "mutuality", "democracy", and "patronage". Members of co-operatives supply both capital and people, and they share a mutual understanding of each other. Individual members can be either customers or suppliers of the co-operative, but most importantly, they are also the shareholders of the organisation and so they share the same objectives. In investor-owned companies, the shareholders and suppliers are often separate entities and so they may have very different sets of objectives. Moreover, a co-operative is collectively owned by its members, and any member who has a share in the company has the right to vote, thus, it is democratic. The third feature is patronage; this means co-operative members may receive a rebate from their co-operative; the rebate may be a portion of the purchase price of merchandise or a portion of the surplus earned by the co-operative.

Individual members are the biggest stakeholder group to any co-operative (Roy, 1964). While co-operatives share some common objectives with investor-owned companies, such as maximising profits for their shareholders; a central difference is that co-operatives must maximise the long term wealth both at a co-operative level and at an individual member level (Lynch, 1998). Nixon (1998) further argues that the co-operative philosophy requires an emphasis on meeting members' needs and requests more than on maximising its profit.

2.4.2 Co-operative Member Communication and the Web

2.4.2.1 Importance of co-operative members' communication.

Communication with individual members is vital to the success of modern co-operatives, as it opens up the possibility of achieving mutual understanding and joint problem solving, which are both crucial to co-operatives. Lacking proper communication, the relationship between an co-operative and its members may suffer, with a consequent deterioration in member loyalty (Wadsworth, 2001).

Relationship with members is a co-operative's asset that releases inherent value to create wealth. Such a relationship is an intangible asset and it is "the key to unlocking all other corporate values" (Phillips, 2006, p.37). In that case, it suggests that ongoing communication with this group of stakeholders is essential to co-operatives. Co-operatives need to be constantly communicating with the primary stakeholders, that is, co-operative members, and informing them of the co-operative's performance. Although communicated information may be within commercially-sensitive boundaries (Donoso, Shadbolt, & Bailey, 2004), constant communication should be given top priority everyday, not just during times of change (Haigh, 2000).

Thus, strategies must be considered for effective communication with this group of stakeholders. This is especially significant for big dairy co-operatives, with a large number of member farmers who are both the suppliers and the shareholders of the co-operative.

2.4.2.2 Challenges of dairy co-operative communication. In the case of dairy co-operatives, shareholders and suppliers are often the same people; they are individual diary farmers. This creates somewhat unique challenges for the co-operative's member communication strategy; that is because shareholders and suppliers often have different levels of information needs and requirements. On the one hand, shareholders should have access to an organisation's financial information, and they also have more interest in the operation of the business. On the other hand, suppliers do not need to, or should not, access an organisation's

financial information, and suppliers are less directly concerned with the performance of the organisation.

Dairy co-operatives can be owed by a large number of individual farmers who are somewhat independent entities of their own. It is, therefore, not a surprise that a dairy co-operative will encounter various attitudes towards the co-operative's future growth direction from its members. This could result in disagreements between members and lead to difficulties in making major business-related decisions (Nixon, 1998). Moreover, dairy co-operatives used to be small and local; however, some modern co-operatives are now large international enterprises. The dairy co-operative studied in this research employs thousands of staff, and has more than 11,000 farmer supplier-shareholders. Thus, the decisions are different in kind.

Nevertheless, dairy co-operatives are also well placed to take advantages of such difficulties and confusion. First, the existing co-operative principles, that links shareholders and suppliers together, is undoubtedly a factor in facilitating enterprise-wide initiatives to serve the needs of a larger group of stakeholders. Furthermore, the alignment of suppliers' incentives with co-operatives' returns may remove many of the privacy and information ownership obstacles (Howell, Corbett, Mishra, & Ryan, 2004).

2.4.2.3 Dairy co-operative communication and the Web. Gibson (1947) found that the four most important communication methods in co-operatives are: 1) managers, 2) co-operative publications, 3) meetings, and 4) other members. However, this has changed considerably in the last two decades with the emergence of the Web as a form of stakeholder communication. Moreover, both TRA family theories and TR suggest that individual stakeholder's characteristics have an impact on the utilisation of technologies. Dairy co-operatives members are dairy farmers. This suggests that the distinctive characteristics of dairy farmers can result in characteristic behaviours when they try to embrace the Web. Previous researchers offer different suggestions. On the one hand, it suggests that farmers generally are positive about the Web, and they see the Web as a tool for

information (Barton, 2003). On the other hand, some dairy farmers interviewed in Barton's (2003) research also indicated that they were not ready for the Web yet.

In brief, co-operatives can gain valuable returns by including the Web in their stakeholder communication strategies. Unfortunately, little evidence exists about the use of the Web in communicating with co-operative members in the current literature. Therefore, drawing upon the above points, this research aims to answer the following three general research questions:

1) What are the methods employed by the dairy co-operative to communicate effectively with its farmer suppliers/shareholders;

2) What are the experiences, attitudes, and perceptions of the farmer supplier-shareholders towards the co-operative's stakeholder communication practices, particularly, the perceived usefulness and effectiveness of the Web among farmer interviewees;

3) What are the management implications of the Web in relation to stakeholder communication strategies.

Chapter 3 - New Zealand Dairy Industry and Fonterra

3.1 Overview of the Chapter

This chapter describes the selected case for this research. The background information allows the researcher to move from the hypothetical or abstract to a concrete research picture. It also helps readers to understand relevant aspects of interview participants' perceptions and experience. To provide an outline of the chapter, it begins with brief background information on the New Zealand dairy industry and an overview of Fonterra Co-operative Group Ltd. Section 3.3 outlines the management of farmer supplier-shareholders communication, in particular, Fonterra's current communication methods. Section 3.4 focuses on Fonterra's Fencepost website as an Internet-based communication form. Section 3.5 concludes the chapter by addressing the rationales for choosing Fonterra as the studied case of this research.

3.2 The New Zealand Dairy Industry and Fonterra

3.2.1 The New Zealand Dairy Industry

The New Zealand diary industry is highly vertically integrated, and has a farmer-owned co-operative structure. Vertical integration means the linking of different stages of the supply chain under one control. The suppliers, who mostly have family-owned farms, supply their co-operatively-owned processing factories with milk. The dairy products that come out from the processing factories are then co-operatively marketed and sold to customers. New Zealand dairy companies export over 90 percentages of its products overseas, and majority of those products are commodities, such as milk powder, butter and cheese. Such large percentage of total production being exported overseas markets is unusual internationally; according to Sankaran and Luxton (2003), only about 5 percent of total production is usually exported, with the remaining 95 percent consumed within the country of origin. Currently, the two biggest dairy farming areas in New

Zealand are the Waikato region and Taranaki region. These two regions in the North Island account for almost half of the total New Zealand herds; however, herds on the South Island, on average, are larger than those in the North Island in term of cow numbers. According to Dairy Statistics (Livestock Improvement & Dairy InSight, 2005), average herd size in New Zealand is 315 cows in the 2004-05 season; and the average herd size on the South Island is 470 cows in 2004-05, comparing to 280 cows per herd on the North Island.

The New Zealand dairy industry has experienced significant changes in the last decade, particularly due to the merger between the two largest co-operatives at the time. Prior to June 2001, New Zealand dairy farmers throughout the country owned the co-operative processors, and the New Zealand Dairy Board (NZDB) which had wide regulatory powers acting as the marketing arm of the industry (Nixon, 1998). In 2001, the merger of the two largest co-operatives at the time, Kiwi Co-operative Dairies and New Zealand Dairy Group, with the integration of the NZDB formed Fonterra Co-operative Group Limited (Fonterra). The $11-billion farmer-owned dairy cooperative swallowed 95% of the industry (Bland, 2002). Another two smaller dairy co-operatives, Westland and Tatua chose to remain independent.

3.2.2 Fonterra Co-operative Group Ltd

Fonterra, headquartered at Auckland, is the largest corporation in New Zealand, as well as one of the world's leading multinational dairy companies (Just-food.com, 2006). As a dairy co-operative, Fonterra has a relationship with more than 11,000 dairy farmer-shareholders and approximately 5000 sharehmilkers/farm managers. The number of shares owned by each individual farmer is equal to the amount of milksolids supplied to Fonterra each year (Maher & Emanuel, 2005). Fonterra operates 29 manufacturing sites domestically in New Zealand, and another 35 overseas. According to the Fonterra annual report (*Fonterra annual report 05/06*, 2006), its gross revenue (year ended May 2006) is approximately $NZ13 billion.

Fonterra has two marketing divisions; Fonterra Ingredients and Fonterra Brands. Fonterra Ingredients manufactures ingredient products and deals with restaurants

and fast food outlets. Fonterra Brands deals with end consumer products, selling branded food and dairy products to customers worldwide. Underpinning the two marketing arms is Group Manufacturing, which is the factory side of Fonterra; it handles production once the milk is delivered to the production facility. Fonterra Milk Supply is a sub-unit of Fonterra Group Manufacturing, responsible for dealing with the supplier-shareholders; it handles all of the Fonterra farmer interactions, in terms of managing shareholder interface and also the milk supply interface. Fonterra Shared Services provide HR, finance, and strategy functions to the co-operative.

Within Fonterra Milk Supply are the Sustainable Milk Growth, Milk Collection, Commercial Services, and Shareholder Relations units. These four units have quite distinctive responsibilities in term of interface management with farmers. Sustainable Milk Growth focuses on the environmental aspect of milk production, as well as milk forecasting; and as the name suggests, it is responsible for making sure that Fonterra grows in a way that is environmentally sustainable. Milk Collection is milk transport, respondible for collecting raw milk from supplier farms and transporting it to the factories. Commercial Services deals with the monthly payment to Fonterra suppliers and it also controls the company share registry; who owns what shares and any changes to supplier-shareholder membership. Shareholder Relations is responsible for managing the actual relationship between Fonterra and its farmer supplier-shareholders. A diagram of the Fonterra' business model is provided in Appendix 2.

3.3 Fonterra's Supplier-Shareholder Communication Management

3.3.1 An Overview of the Supplier-Shareholder Communication Management

There are three distinct teams sitting under Shareholder Relations. The service team which is the service centre of Fonterra and operates a toll-free call centre, as well as a supplier-shareholder website (i.e., Fencepost). The field team has regional managers and 28 area managers based around the country. There is also a

relatively small Events team which manages Fonterra farmers' event strategies and also the implementation of the events. These sub-units of Shareholder Relations demonstrate three distinct methods in terms of physical engagements with Fonterra farmers. Fonterra service specialists interact with farmers through the call centre. Area managers go and see farmers on the farms, and they also directly engage in events. Fonterra leadership members engage through these events as well. Appendix 2 illustrates how the three teams fit into Fonterra's business model.

Sitting outside Shareholder Relations, Fonterra also has a communication team that is responsible for most of the paper-based communication between Fonterra and farmers. A good example of such paper-based communication is Fonterra's monthly magazine (i.e., Farmlink) which is sent out to all of its supplier-shareholders around the country. In short, the communication team overseas all the paper-based communication with farmers, and make sure that messages sent out to farmers are consistent and accurate.

In a large co-operative, it is difficult to obtain every individual member's opinions on all business matters. Therefore, there is a need for a representative body of all supplier-shareholders in the governance structure (Zwanenberg, 2001). In Fonterra, that representative body is the Shareholders Council, and it is responsible for taking views of the farmer supplier-shareholders and concisely reporting back to the Board. The Shareholder Council represents an important component of Fonterra. It undoubtedly provides a valuable mechanism in communication between individual supplier-shareholders and the co-operative. Nevertheless, a shareholder councillor is no different from other farmer supplier-shareholders. Individual farmers have an equal voting right on co-operative related decisions, as well as for the election of the Board of Directors. Moreover, the Shareholder Council does not have final decision rights over its members; to a certain extent, it is a monitoring body who act as a bridge between the suppler-shareholders and Fonterra (Zwanenberg, 2001). The Fonterra Shareholder Council is also responsible for the Fonterra Network, which consists of a number of farmers who are willing to be a contact point between the co-operative and their fellow farmer supplier-shareholders.

3.3.2 Fonterra's Supplier-Shareholder Communication Methods

Fonterra makes use of a mix of stakeholder communication forms. First of all, both personalised and non-personalised documents are used to inform farmer supplier-shareholders. Farmlink magazine consists of a number of useful non-personalised documents are sent to all farmer supplier-shareholders monthly; it gives detailed information about the co-operative's activities. More than half of the information in Farmlink magazine comes from Fonterra Milk Supply; it contains financial and performance information, as well as general farm production information. Farmlink magazine also includes general messages to farmers from Fonterra management. Besides Farmlink, personalised documents such as CEO letters are used to inform farmers of important business matters, such as capital structure issues.

Secondly, Fonterra utilises several communication methods, which emphasises a personal link with farmer supplier-shareholders; these are Cowshed Meetings, Area Managers, Networkers, and the Shareholder Councillor. Fonterra runs Cowshed Meetings 3 or 4 times a year at farmer supplier-shareholder farms. These meetings are primarily designed to give farmers an opportunity to meet the senior management and discuss critical issues such as the financial performance of the co-operative. Shareholder Council is the representative body that takes the views of Fonterra farmers and reports back to the Fonterra Board. The Fonterra Networker is a joint initiative between the Shareholder Council and Fonterra Milk Supply. Networkers are another method used by Fonterra to engage farmers through personal links. On a ratio of approximately one to every 25 farmers, the Fonterra Networkers are essentially a group of farmers who are responsible for passing information to their fellow farmers from Fonterra management, as well as gathering feedback from farmers to the management.

Furthermore, Fonterra's farmer relationship strategy has evolved since it is first established in 2001. Area Managers used to have the title of Field Representative and have a very transactional focus on farmers dealing with operational issues around shareholding and milk quality. However, Area Managers will increasingly take on a more strategic relationship role with farmers over the next couple of

years. In the past, Area Managers had a responsibility of maintaining relationships with approximately 500 farmers in their regional area. Although they still have the same amount of farmers in their area of responsibility, Area Managers will focus on 200 - 250 relationships instead of 500 relationships, with the service team looking after the remainder proactively through phone account management.

The call centre is also a contact point for farmer supplier-shareholders. Farmers are encouraged to call the 0800 number at any time when you have a question about anything. These particular changes of strategy have been driven by the Shareholder Relations team with a proactive relationship management philosophy. Instead of having a "one size fits all" model which expects the Area Managers and service specialists duplicating effort, the team essentially aims to apply a tailored service model where relationship management is handled by both teams for distinct groups of farmers.

3.4 Fencepost Website

3.4.1 An Overview of the Fencepost Website

Fencepost (www.fencepost.com) is part of the shareholder services of Fonterra. The Fencepost team along with the call centre are based in New Zealand's largest city, Auckland. Information that is available through the call centre, such as shareholding information, stock prices, weather forecasts, and farm-specific information such as milk production, milk quality and payments, can also be accessed by farmer supplier-shareholders through the Fencepost website.

The Fencepost website is a result of a rationale of transitioning onto the Web. The original concept originated in 1999, before the actual formation of Fonterra. There were three key objectives that the Fencepost website was designed to achieve. One was creation of a community. Traditionally, diary co-operatives in New Zealand were all quite small and they had a geographically concentrated community allowing people to meet and talk to each other. However, the

proposed new dairy co-operative, Fonterra, was going to have farmers based throughout the country. The Web therefore was seen as being a means of recreating the 'conventional' sense of community. The second objective was around information. A key success factor in a modern co-operative is to enable everybody to have the same level of information access as quickly as possible. In the diary farming community, farmers may hear some information via their own personal network before the official letters arrive. With the Internet-based form of communication, the same information can be distributed to farmers in little time. The third objective was to improve farm productivity and so to improve farm management capabilities in terms of both time and financial assets.

The Fencepost website was first launched in August 2000 by Kiwi Co-operative Dairies. It then changed to Fonterra ownership, after the big merger in New Zealand's dairy industry. With the new owner, the three key objectives are still the same as when the website first started. Nevertheless, there is some change by Fonterra around the understanding of what is the best method to give services to their farmer supplier-shareholders.

Currently, a number of farming related information is available on the Fencepost website. Farmer supplier-shareholders can check weather information and rural jobs information through the website. Farmers can also engage in online discussion groups to discuss any farming related topics and get feedback from other farmer supplier-shareholders. Farmers can place classifieds on the Fencepost website, as well as keep up-to-date with latest events through its Calendar page. Moreover, farmer supplier-shareholders are able to access historical information of their production on the Fencepost website. It is hoped that the Fencepost website can reduce the amount of paper-based information exchange between farmers and Fonterra, and also speed up the exchange between the two parties by providing timely and accurate information. To date, farmers can use the Fencepost website to do a limited level of self-service; for instance, they can self manage their service in term of ordering tankers, start the milk collection at beginning of the season, and stop the collection at the end of the season.

To provide a general feel of the Fencepost website, a number of screenshots of the Fencepost website are provided in Appendix 3.

3.4.2 CRM System and the Fencepost Website

Fonterra used to have one primary system for storing and managing information related to farmer supplier-shareholders, with other systems, such as the Fencepost website, linking to that primary information system. The primary system is called Aspire, which handles all of the shareholding information, such as sharemilking, payments, milk quality, milk volume, and milk composition. Aspire also houses fundamental data for individual farmers, such as address details, phone numbers, the herd size, and the number of cows on the farm. With such an information system structure, Fonterra can only achieve one-way flow of information; and individual application systems are somewhat disconnected with each other. For instance, because there is only a one-way link between the Fencepost website and Aspire, farmers can only view and download their milk quality and production information through the Fencepost website but not update such information via the Fencepost website to Aspire. Although the "Your Details" page (see Appendix 3) on the Fencepost website allows farmers to fill in a form and update their details, the updated information stays with the website and so nothing updates in Aspire.

Fonterra has very recently launched Microsoft Dynamic which serves as a CRM system. The new CRM system offers a number of benefits, in the aspect of better relationship with farmers. First, there will be live links between all Fonterra's application systems. In that case, farmers will be able to update their own information through the Fencepost website, for example. Updated information from the Fencepost website which feeds back to Aspire is subsequently fed into the CRM system. The same applies to the service centre team. Service centre staff will be able to input information into the CRM, which can be viewed by other business unit staff of Fonterra, such as Area Managers.

3.5 Why Fonterra was Selected as the Case

There are several reasons why Fonterra was selected as the case in this research. First of all, Fonterra is chosen because it fits the research objectives well. Dairy farmers are both raw milk suppliers and shareholders of the co-operative, and this provides an interesting case for existing stakeholder communication literature. Their dual roles create a challenge tothe existing theories.

Fonterra is a dairy co-operative. Farmers therefore are the owners of the co-operative, and shall have a high degree of involvement in decision making. There are more than 11, 000 farmer shareholders compared with just a few shareholders in some other businesses. According to Zwanenberg (2001), Fonterra is the only large dairy co-operative where its farmer members have a direct vote in the election of directors, as well as any important Board decisions; in contrast, election and decisions are done through member representatives in other co-operatives. Moreover, like shareholders in other companies, several rounds of discussions may be required before initiating any changes. However, farmers are also suppliers; they do not need to receive as much information as shareholders do, which may be due to the consideration of commercial confidentiality. Thus, it suggests that the huge number of shareholders and lack of sufficient information slow down the decision making process of the co-operative. As Sankaran and Luxton pointed out, the extensive consultation process in decision making is "a hindrance to change" for the co-operative (Sankaran & Luxton, 2003, p.10).

Additionally, this research also aims to provide practitioners and researchers with an example of managing non-traditional customers using CRM principles, thus demonstrating wider applicability of Customer Relationship Management. Fonterra, therefore, is a suitable case to achieve these research objectives.

Secondly, the New Zealand economy's reliance on the dairy industry also explains the need for this research to some extent. New Zealand has an economy that is heavily dependent on exports for growth, and Fonterra, without any doubts, is the leading exporter of the country. Thus, it suggests that a study on Fonterra will ultimately deliver benefits to the country's economy in some measure. While this research studies stakeholder communication from a dairy co-operative

perspective, it is hoped that this research will contribute to the general knowledge of stakeholder communication.

Thirdly, Fonterra has been previously used for a number of case studies by many scholars. For example, Knott and Hamilton (2004) present a study of Fonterra during its establishing and ownership changes phase. Hamilton (2004) analyses the international strategy of Fonterra in achieving ambitious growth objectives. However, none of these cases have specifically looked at the communication practice between the co-operative and its farmer supplier-owners, much of the existing research has been into Fonterra's organisational structure and market strategies (Donoso et al., 2004; Ohlsson, 2004), as well as its environmental management practice (Jay & Morad, 2005). In addition, these case studies were largely written during the establishment phase of the co-operative in 2001-02, and there has been little research conducted in recent years. As the co-operative becomes more and more mature in its business, new issues will emerge. For one, there is an increasing concern that Fonterra's size might make it remote from its supplier-shareholders; thus, the feeling of being remote, and impersonal, might have started to create negative feelings towards the co-operative. It is hoped that the research findings can provide some insights to Fonterra's management; as a result, effective communication with farmer supplier-shareholders can be achieved.

Chapter 4 – Methodology

4.1 Overview of the Chapter

The previous two chapters provide the theoretical and practical background for this research. This chapter looks at how the research was carried out by providing a discussion on underlying research assumptions and methodologies of the research. The discussion is intended to help the researcher to select an appropriate research strategy. In particular, Section 4.2 presents the research approach through 1) examining the underlying assumptions of the research, and 2) identifying the research method. Section 4.3 discusses various issues related to the research design, including unit of analysis, data collection and analysis techniques, research quality issues and ethical considerations of this research.

4.2 Research Approach

4.2.1 Underlying Assumptions

The aim of methodology is to help researchers and other interested readers to understand the process of enquiry. Choice of a particular study has its methodological reasons (Holstein & Gubrium, 1995). Some topics are more suitable to a particular research approach, whereas an alternate approach may be more appropriate for other topics. Hence, it is important to examine these methodological issues before carrying out the research. While a number of research methodologies are available to choose from, researchers make their choices between these methods in accordance with their underlying assumptions about the nature of the world and "the grounds of knowledge" (Burrell & Morgan, 1979, p.1).

4.2.1.1 Ontology and epistemology. It is conventional to begin a discussion on research methodologies around the twin concepts of ontology and

epistemology (Burrell & Morgan, 1979; Cornford & Smithson, 1996). First, ontology refers to the theories of reality, that is, whether the phenomenon to be studied is external or internal to the researcher (Burrell & Morgan, 1979; Cornford & Smithson, 1996). Ontology can be described in terms of two perspectives: nominalist and realist (Burrell & Morgan, 1979). The former contends "reality is subjective and multiple as seen by participants in a study" (Creswell, 1994); the latter, on the other hand, suggests that reality is objective and universal. In this instance, the research reflects a nominalist point of view with regard to the nature of reality. A number of factors in particular seem to support this perspective. Firstly, this research is an exploratory study and it aims to understand attitudes and perceptions; the researcher also understands that the findings may only be specific to those participants involved in this research. Secondly, the researcher does not agree that there is such a thing as a universal solution, and so believes that the study can have multiple solutions.

Secondly, epistemology concerns how one may obtain knowledge about a phenomenon in a study (Burrell & Morgan, 1979). According to Burrell and Morgan (1979), two perspectives of epistemology are positivism and anti-positivism. To a great extent, this research shows an anti-positivist perspective. Anti-positivists consider knowledge is experienced rather than acquired; they argue that beliefs determine what should be treated as facts (Smith, 1983). To illustrate, the researcher is aware that it is essential to employ data collecting methods such as semi-structured interviews and observations, that is, to collect data from those who have experiences in the research subject. This research chooses a way in which to determine facts in accordance with information collected from those involved.

4.2.1.2 Positivistic vs. interpretivist paradigm. Another pair of paradigms currently debated when considering research methods are: the positivistic paradigm and the interpretivist paradigm. The two paradigms rely on different underlying assumptions with regards to ontology and epistemology (Cassell & Symon, 1994; Collis & Hussey, 2003). This research adopts an interpretivist paradigm. An interpretivist paradigm tends to be nominalist and anti-positivist (Burrell & Morgan, 1979), and so it stresses the participant's own frame of

reference (Collis & Hussey, 2003). To illustrate, the research aims to provide some freshness from a stakeholder's perspective for an organisation's relationship management practice. Moreover, the focus of the research is on obtaining thick, rich data to gain insights about people's perception, attitude and understanding. In other words, the theory is generated from the data collected, that is, it reflects a phenomenological and interpretive approach.

The interpretive approach empowers the researcher to interpret and analyse the viewpoints of the research participants from their perspective so as to deepen the understanding of what really happened (Angen, 2000). A positivist approach aims to generalise and standardise research findings in its search for rules and/or laws (Rubin & Rubin, 1995). Although the positivist framework may be appropriate for many types of research, it is less useful in trying to hear and understand meanings in a context.

Thus, the interpretive paradigm is selected in this research; it is characterised as concerned with individual understanding and attempting to understand the subjective world of one's experience (Cohen, Manion, & Morrison, 2000). In other words, this school of thought takes the position that people create and add their own meanings to the world around them (A. S. Lee, 1991). The interpretive paradigm is appropriate for this research because the focus is on gaining an understanding of stakeholder communication practice, and providing a valid interpretation on the studied phenomena.

Additionally, the nature of the research therefore means that the issues under investigation are subject to interpretation. Given the primary paradigm of this research, i.e., the interpretive paradigm, the research method used should search for description and translation and come out with meaning, rather than the frequency of studied phenomena in the social world (Collis & Hussey, 2003).

4.2.2 Research Method

The above discussion may provide explanation of ways in which researchers' basic beliefs about the world will be reflected in the way they conduct their

research; however, it does provide exact directions of how to set about research tasks.

As discussed above, this research sits in the interpretive paradigm. According to Silverman (2001), "the choice between different research methods should depend upon what you are trying to find out" (p.25). Hence, qualitative research methods are appropriate for this research. Qualitative methods are not new to researchers in many fields, such as psychology, education, and medical research. It also has a long history within business and management research. A number of authors (Gummesson, 2006; T. W. Lee, 1999; Marshall & Rossman, 2006) have identified the key advantages of using qualitative research methods in the business and management fields. Gummesson (2006), who proposes the concept of complexity theory, argues that qualitative methods are superior to quantitative methods in addressing the complex reality of business and management issues. Qualitative research methods can be utilised to provide deep insights of studied subjects, because it enables researchers to access the subjective experiences of the studied phenomena (Cassell, Symon, Buehring, & Johnson, 2006). In addition, this research intends to gather full and in-depth information, and so quantitative research methods, such as surveys and questionnaires, are not suitable (Kumar, Stern, & Anderson, 1993).

4.2.3 The Case Study Method

Yin (1994) refers to the case study method as "a way of investigating a contemporary phenomenon within a real-life context" (p.13). A case study can be done from several perspectives, such as functionist, critical, and interpretivist; however, a case study may be seen as an essentially interpretivist approach and a means to develop deeper understanding of the studied phenomena (Cornford & Smithson, 1996). Case study research method provides opportunities to gain a holistic view of studied phenomena (Gummesson, 2000). It can sensitise practitioners to potential issues of concern (Green & Browne, 2005). One great benefit the case study method bringing to this research lies in the richness of data that can be obtained using multiple means (Cornford & Smithson, 1996).

Case study is also the chosen method due to a number of research-specific reasons. First of all, case study is a suitable research method in accordance with the research questions. Yin (1994) points out that "how" and "why" questions are likely to lead to the use of case studies. In other words, case study research aims to explore or explain things rather than measure them, that is, it searches for answers to How and Why questions. In this research, the research questions are used to explore a phenomenon; and according to Gummesson (2006), case study research "entails efforts to address complexity accepting that the object of study can be confusing and ambiguous" (p.173).

Secondly, case study is preferable when the aim of a research is to develop general understanding and provide the basis for the application of ideas (Soy, 1996; Yin, 1994). The objective of this research is to gain general understanding in the use of the Web as a means of communicating with stakeholders, and so provide management some valid insights for their future strategies.

Thirdly, case study method also gives synergy to data analysis. It can be used to put variables and categories that developed through the data analysis process into context. A Case study may be less "rigourous" than traditional quantitative methods; nevertheless, it offers more "realism" and "relevance" (Gummesson, 2006, p.173).

The case study design adopted in this research is a single case design. Having multiple cases may be seen more compelling. However, according to Yin (1994), a single case study can be well justified if it meets at least the following criteria: 1) the single-case design represents a critical test of existing theory, 2) the single-case is a rare or unique event, or 3) the single case serves a revelatory purpose. Rowley (2005) points out that single case designs are suitable when the case has something especial to reveal, and that something might serve as a point of departure for challenging prior perspectives and assumptions. The objective of this research is to explore the chosen case in order to contribute to the general understanding of the studied phenomenon. It can be argued that the chosen single-case serves a revelatory purpose, and it serves as a point of departure for challenging the existing stakeholder communication literature.

While the case study research method has a number of advantages in this research, there are also drawbacks of using case study. According to Cornford and Smithson (1996), some of the weaknesses of the case study research method include: 1) the lack of control of individual variables, 2) the difficulty of locating causality, and 3) generalisablity issues. Nevertheless, these drawbacks are not the main concerns of this research, and they are addressed later in this chapter.

4.3 Research Design

4.3.1 Unit of Analysis

The unit of analysis of this research is an individual interviewee that is either a Fonterra employee or a farmer supplier-shareholder. According to Patton (2002), the key question to ask when researchers try to select their unit of analysis is: "what do you want to be able to say something about at the end of the research?". The purpose of this research is to explore perceptions and attitudes towards the Web as a form of stakeholder communication in the management of the relationship between a co-operative and its supplier-shareholders; therefore, it is appropriate to choose individual interviewees as the unit of analysis of this research. Thus, the primary focuses of data collection and data analysis are: 1) to explore and describe the experiences, attitudes and perceptions of interviewees towards the management of farmer supplier-shareholders communication, particularly, the usefulness and effectiveness of the communication form of the Web, and 2) to examine and understand the extent to which the Web is being developed by the co-operative to strategically communicate with its supplier-shareholders.

4.3.2 Sample Selection

Prior researchers (Kumar et al., 1993) point out that when using multiple source of information, there are two challenges, namely the selection problem and the

perceptual agreement problem. The selection problem concerns the validity of the source of information. The researchers argue that the closer the source of information is associated with the studied phenomena, the higher the validity of the response (Kumar et al., 1993). The perceptual agreement problem refers to how the discrepant responses can be combined into a logical and organisational response. The researchers also argue that the disagreements are often caused by "informant bias" due to their different positions within the studied organisation.

The method of 'snowballing' is used in this research. Key research informants who have invaluable knowledge about the co-operative and who are known by the researcher are contacted first. These individuals then introduce potential interviewees after inquiring about their interest in participating in the research project. One could argue that the selection criteria of this research are very subjective; and that the 'snowballing' technique may lead to a sample of like-minded people. However, selecting groups of people and then a representative body of the group is not a requirement of this case study research. As suggested previously, the purpose of this case study is to examine the case that is based on the interests of the study. Mitroff (1972) points out that "objectivity often results from the heated, intense, and biased confrontation between the somewhat biased ideas of somewhat biased individuals" (p. 615). The objective of this research is to solicit and analyse "representative horizons of meanings" but not so much to capture "a representative segment of the population" (Holstein & Gubrium, 1995, p.74). For the above reasons, the selection of potential interviewees is appropriate in this particular research.

A total of thirty-one interviews were conducted; interviewees consisted of seven Fonterra management staff involved in supplier-shareholder management, and twenty-four farmer supplier-shareholders including ten from the Taranaki area and fourteen from the Waikato region in New Zealand. Interviews were conducted in the Waikato Region and Taranaki region is because these two regions account for almost half of the total New Zealand dairy herd. Other reasons are, first, these thirty-one interviewees are supposedly knowledgeable about the studied issues, and they are able to and willing to communicate about them. It is noteworthy to know that they are not representative of the studied subject in any statistical sense. Secondly, two groups of interviewees are selected, that is Fonterra management

staff and farmer supplier-shareholders. That is because the understanding of the investigated phenomena can be improved by examining the same phenomenon from different party members' perspectives (Schwenk, 1985).

4.3.3 Data Collection

Both the exploratory nature of the research and the research questions dictate that rich and deep data are required. The data collected is primarily concerned with attitudes and perceptions. Therefore, in this research, the concept of active interviewing is at the core of the data collection process, and semi-structured interviewing is employed.

4.3.3.1 An overview of the process of data collection. The data were collected between September and December 2006 in the form of reviews of the co-operative's documents and in-depth semi-structured interviews with relevant management staff and farmer supplier-shareholders. While the questions were left as open as possible, the interviewees were asked about how the co-operative was managing the communication with the farmer supplier-shareholders generally, and in the case of using the communication form of the Web specifically. Samples of milk dockets and CEO letters, as well as Farmlink magazines were collected to add an additional aspect to the overall data. The researcher also attended a Fonterra supplier-shareholder cowshed meeting in December 2006.

Individual interviewees were initially contacted by email or telephone. Most of the individuals approached were happy to contribute to the research project, many suggesting that this was an important area which needed some investigation. Most of the interviews were conducted face-to-face at a place of the interviewee's choice, with only two interviews carried out through telephone as preferred by two interviewees. The interviews were recorded, and then fully transcribed. This was to free the researcher from note-taking, and so a good rapport could be developed between interviewer and interviewee. The use of interview transcripts also allows a full analysis of the interview (Green & Browne, 2005) in the data

analysis process. Moreover, the research interviews were also analysed with an awareness of the interpretive nature of this research.

In addition, the research has not included sharemilkers as interviewees, because sharemilkers do not hold shares in the dairy co-operative. Contract milkers were also excluded in this research with the same reason as sharemilkers. Thus, only farmer supplier-shareholders were interviewed in this research.

4.3.3.2 Active interviewing. Qualitative research proposes that the researchers, often the interviewers, are not the "mythical" and "neutral" (Fontana & Frey, 2003, p.91) tools as traditional survey research have suggested. The qualitative interviewers are increasingly considered as active participants in interactions with interviewees; and the interview findings are situated in the contexts in which they occur (Fontana & Frey, 2003). Holstein and Gubrium (1995) put forward the concept of active interview as an interpretive practice. The phrase, active interview, does not refer to a type of interview; it rather suggests the interactive nature of qualitative interviews. As Holstein and Gubrium (1995) further argued, any type of interview, including highly structured and standardised ones, would unavoidably involve interaction between the interviewer and the interviewee.

One of the biggest criticisms of active interviewing is that the finding may not be valid, because an active interview could be easily influenced by individual bias. However, bias is a constraint only if the research is trying to generalise findings and attempting to uncover universal answers to the studied phenomena. In this research, an interpretive approach is employed; and this research does not aim for any universal answers. Moreover, all types of decisions – from top-level strategic decisions to daily operational decisions – involve facts as well as judgement calls. It suggests that data collected by a researcher inevitably entails interpretation and judgement calls. Holstein and Gubrium (1995) propose the concept of persona in an effort to illustrate the human, individual personalities, collective consciousness, and environmental aspects of qualitative research. Therefore, bias should not be seen as a constraint, it is rather a form of active construction of meaning. The

concern of bias contaminating the research findings is replaced by the "awareness of activeness" under the concept of active interview.

Furthermore, although the concept of active interview emphasis the conversational aspect of qualitative interviews, it does not necessarily suggest that there are no guidelines or plans needed (Holstein & Gubrium, 1995). A number of research questions were drafted before the actual interviews. These pre-determined questions serve as an interview guideline, in order to incite interviewee's response in the area that addresses the research agenda.

In short, the use of active interviewing in this research aims to extract the meaning of the studied phenomena from a subjective perspective. The researcher is interested in subjective interpretations, or more generally speaking, the process of interpretation. Thus, the chosen data collection approach is the most appropriate in the above instances.

4.3.3.3 Semi-structured interview. As mentioned previously, thirty-one semi-structured interviews were conducted. Seven Fonterra management staff who were involved in the management of the relationship with farmer supplier-shareholders were interviewed. A further twenty-four of Fonterra's supplier-shareholders were also interviewed. The seven interviews with Fonterra management staff are integral to the validity of the research findings as they provide a channel for comparing Fonterra farmers' responses through examining those of a sample of the other end of the relationship.

Interviews vary in several different ways. For one, interviews can be classified according to how 'standardised' (Maccoby & Maccoby, 1954) they are; in other words, whether the interview is conducted strictly following well-defined and structured questions, or using semi-structured questions for guidance only, or employing no pre-designed questions for more flexibility in the interview. Moreover, John Madge (1965) differentiates interviews between "formative" and "mass", on the basis of how much freedom a respondent has in choosing the interview topics and the way in which the topics are interviewed. Most survey interviews are "mass" interviews; whereas, "formative" interviews, that is informal interviews, are preferred by psychotherapists such as Carl Rogers

(Rogers, 1961). Holstein and Gubrium (1995) take a constructionist perspective on the classification of interviews, they therefore put forward the concept of 'active interview', which addresses the interactive aspect of interviews.

The decision on which is the most suitable interview approach depends on the objectives of a research. The primary objective of this research is to understand individuals' attitudes and perception towards the Web in the communication between a dairy co-operative and its farmer supplier-shareholders. Unstructured or semi-structured interviewing gives understanding (Fontana & Frey, 2003). Semi-structured interviews allow researcher to probe deeply into specific areas of interest. More, Green and Browne (Green & Browne, 2005) point out that a less structured approach is the most useful, if the objective of the research is to explore in detail individuals' own perceptions and accounts. Therefore, semi-structured interviews are employed in this research.

Additionally, as Whyte (1980) would have done, the interview findings are treated as displays of perceptions, but not true or false reports on the studied phenomena. The interviews are also considered as giving the researcher access to the repertories of narratives that can be used to produce accounts (Gilbert & Mulkay, 1983).

The thirty-one interviews were guided by open-ended questions which the interviewees had not been provided access to prior to the interview. A set of open-ended questions were designed and employed as a guideline for the semi-structured interview. Open-ended questions were preferred and used because of several reasons. According to Norman Denzin (1970): 1) it allows interviewees to use their own way to define and explain the studied phenomena; 2) it gives that flexibility to alter the sequence of questions where appropriate; and 3) it provides an opportunity to reveal important issues that are not included in the original schedule.

A copy of the two sets of interview questions are provided in Appendix 4. These questions serve as a guideline for the data collection in this research. Holstein and Gubrium (1995) suggest that the use of interview guidelines vary from one interview to another. On the one hand, it can be the core of the interview; on the other hand, it can virtually be abandoned when necessary. In this research, the

guideline contains a set of pre-determined open-ended questions; and it is used to engage the interviewees in the interview. All the pre-designed questions were asked in all of the interviews, but there were variations in term of the order of the questions. The interviewee's response was used as the leading frame of reference, which determined the order of interview questions. This technique leads to a "rather improvisational, yet focused, quality to the interview" (Holstein & Gubrium, 1995, p.77).

4.3.3.4 Document analysis & field notes. "The collection and examination of documents are often an integral element in qualitative research" (Bryman, 1992, p.149). According to Duffy (1993), two main categories of documents are the primary source document and secondary sources document. In this research, both primary source documents such as daily milk dockets and CEO letters, and secondary source documents such as corporate magazines were collected and examined to complement the main interview data.

Field notes were also used in this research to complement the interview data. The research approach determines the importance of field notes. This research sits in the interpretative paradigm, and takes a qualitative research approach. One feature of such a research approach is the belief that human actions are strongly influenced by the settings in which they occur. The researcher made some field notes as a result of observation during the visit to a cowshed meeting. Information from these observations is used to supplement the main research data. These include notes on what type of information have been covered and discussed in the cowshed meeting, how well farmers were able to interact with senior management staff in the meeting, and how much information was communicated during in the meeting.

4.3.4 Data Analysis

4.3.4.1 Overview. The analysis of the research does not aim to achieve state-of-the art conclusions in the studied area; instead, it seeks to identify issues in the areas of interest rather than trying to generalise such views. The objective of data analysis in this research are not only to report and describe individual's attitudes

and perceptions, but also to show how what is being said relates to the experience and lives being studied. In other words, the objective is to examine issues through the interviewee's point of view. This objective is achieved through presenting ample illustration and reference to records of what are being said. Briefly, the main analytical approach for data analysis is thematic analysis, and data displays are also used to assist the data analysing process through illustrating the data in a systemic manner.

4.3.4.2 Thematic analysis. The overall analytical approach adopted in this research is thematic analysis (Owen, 1984, 1985). Thematic analysis was conducted on the interview transcripts. Thematic analysis is used to uncover themes shared between interviewees through examining the recorded talk for reappearance of keywords, phrases, and sentences. Not all the data collected will fit into a specific theme or sub-theme precisely; therefore, there is also a need to often cut across different themes or sub-themes (Cassell et al., 2006).

In the context of the present research, thematic analysis is used to categorise and qualify elements in interview participants' responses. Working from an interpretive perspective, qualitative data collected from the interviews is analysed and grouped into categories, themes and perceptions. They are grouped in accordance with main topics and sub-topics emerging from the recorded conversation.

Basing on the research objectives and interview questions, main themes shared between interviewees were identified first. The transcripts were then coded into broad themes using these main themes. During the process of grouping, broad themes were further examined and might be modified if the initial themes were not sufficient or accurate. Each broad theme was then analysed in more detail; more specific themes were developed as sub-themes within each main theme. These main themes and their sub-themes then formed a simple code system for the research. Using a code system helps the researcher to work on each separate transcript while keeping in mind the relationships between themes; and so the process of coding encourages "hearing the meaning in the data" (Rubin & Rubin, 1995, p.240).

There are two main stages of data analysis in the research. First, findings within the same themes and sub-themes were examined and compared. Secondly, findings across themes were compared and contrasted in order to define the similarities and differences. It is believed that well-founded and applicable themes emerge from breaking out of the old, non-applicable themes through constant comparisons of data and concepts. Moreover, Rubin and Rubin's (1995) method was used to determine whether further analysis was needed. According to these two researchers (1995), data analysis only ends when overarching themes are found, and those themes answer the question 'so what?' in the context of broader research theory.

In addition, interviewees are identified throughout the analysis and discussion sections based on their involvement in the co-operative either as a Fonterra employee or farmer supplier-shareholders. In the data analysis, the Fonterra Management employees are given names that begin with the letter "M" such as Michael, Michelle, and Mike. Similarly, the farmer Supplier-Shareholders are given names that begin with the letter "S" such as Steven, Shane, and Sally.

4.3.4.3 Data displays. This research uses data displays as an analysis tool, in order to better understand what is happening in the collected interview data. According to Miles and Huberman (1994), a data display is a "visual format that presents information systematically, so the user can draw valid conclusions and take needed action" (p. 91). In the instance of this research, data displays were developed using qualitative data collected from the thirty-one interviews as sources. Data displays were in the form of a matrix. Titles of rows and columns of matrices are themes or categories that developed from thematic analysis.

4.3.5 Deduction vs. Induction: How Much Prior Theory?

A combination of induction and deduction is used in this research. Induction and deduction are related research approaches, and a case study can be made based on either a 'loose' or 'tight' initial theoretical framework (Miles & Huberman, 1994). In this research, prior theories play a fundamental role in the design of this

research and analysis of the data; however, some induction is also used to explore the complex phenomena.

On the one hand, there is need for deduction. First, while inductive study make good sense in terms of exploring the studied phenomena (Eisenhardt, 1989; Miles & Huberman, 1994), it may be a waste of time and too complex to conduct. For some topics, "existing works may provide a rich theoretical framework for designing a specific case study" (Yin, 1994, p.28). Yin (1994) argues that the pure inductive approach "is fraught with dangers" (p. 115) for postgraduate students who new to qualitative research. Secondly, it is important to have a 'prestructured' research design for new interpretive researchers working in areas where some understanding has already been achieved (Miles & Huberman, 1994, p. 17); otherwise, the researchers may run the risk of drifting away from their literature review and make no contribution to their thesis.

On the other hand, prior theory should only provide a rudimentary theoretical framework to guide data collection but not to dominate it. Pure deduction may hinder the development of new and useful insights to the studied phenomena. In this research, the prior theory provides a focus to the data-collection phase in the form of research questions but not testable hypotheses.

4.3.6 Research Quality Issues

Regardless of whether it is qualitative or quantitative, research quality issues must be addressed in any research. Conventionally, research quality is assessed by examining the research's reliability and validity. In conceptualisation, reliability refers to the extent to which research design leads to the same conclusions whenever and wherever it is employed; and validity means the extent to which a particular research design gives the 'correct' conclusions (Kirk & Miller, 1986).

However, when the data collection is considered as a dynamic and interactive process, different criteria apply. Reponses on one occasion can not be replicated to other occasions, simply because they are differ in its "circumstances of production" (Holstein & Gubrium, 1995, p.9). This research takes an interpretive approach and follows a qualitative research design; therefore, key research quality

issues discussed here are Credibility and Reliability. In addition, the generalization issue is also addressed in this section.

4.3.6.1 Credibility. By definition, qualitative research is not qualified for the credibility reward, because it does not, in particular, concern process or measures such as quantification, statistical analysis, and systematisation (Cassell et al., 2006). Yin (1994) points out that credibility, that is internal validity issues in quantitative research, is inapplicable to exploratory studies, because it is not about making causal statements; however, it is argued that credibility may be extended as to making inferences in the context of a case study. Moreover, credibility is often influenced by particular contexts and what make qualitative research credible may change each time (Cassell et al., 2006).

In this research, credibility concerns the "truth value" (Miles & Huberman, 1994, p.278) of the research, that is, does the research make sense to others. It is largely achieved through presenting the research report in particular ways. Credibility is addressed by the following ways: 1) using a pattern matching technique, that is, thematic analysis, to analyse data; 2) making consistent comparison between the finding and relevant literature, that is, to build a chain of evidence; and 3) discussing and presenting the research approach and research design honestly and explicitly, so that readers of this research paper know exactly how this research is carried out.

4.3.6.2 Reliability. In qualitative research, the objective of "reliability" is to minimise the errors and biases in a study (Miles & Huberman, 1994). The following steps are taken in an effort to address the issue of reliability. Firstly, as mentioned before, all of the interviews are tape-recorded and carefully transcribed. Secondly, as Silverman (2001) suggested, long extracts of data are presented in the finding and discussion chapter. Thirdly, this research uses multiple sources of evidence, that is, conclusions are drawn on a number of sources including pertinent literature, onsite observation, existing documentation, and the interview data.

Moreover, an interview protocol is developed and used throughout the data collection phase; so that some necessary degree of consistancy can be achieved. Three primary rules in the interview protocol are:

- Never get involved in long explanations of the research; use the standard explanation outlined in the research information sheet.
- Never let another person interrupts the interview; do not let another person answer for the respondent or offer his or her opinions on the question.
- Never improvise, such as by adding answer categories or making wording changes.

4.3.6.3 Generalisation. One of the biggest criticisms of case study research is that generalisation can not be made on the basis of the case study (Gummesson, 2000); that is, the research finding is not useful and applicable outside the studied case. However, it suggests that there are a number of ways that the concept of generalisation can be interpreted. Gummession (2000) points out that there are two ways of interpreting the concept of generalisation,

> "On the one hand, quantitative studies based on a large number of observations are required to determine how much, how often, and how many. The other dimension involves the use of in-depth studies based on exhaustive investigations and analyses to identify certain phenomena" (p.90).

The choice on one interpretation over the other very much depends on an individual researcher's belief and understanding of the world. This research, thus, demonstrates the second interpretation on the concept of generalisation. This research takes an interpretive approach and employs a qualitative research design, and so the data collected in this research is qualitative data. The value of qualitative data is not to draw conclusions in any statistical way, but that is can lead to the generation of new concepts and theoretical insights (Green & Browne, 2005).

4.3.7 Ethical Considerations

Ethical considerations focus on the steps taken to ensure the research met the ethical principles set out in the University's Handbook on Ethical Conduct in Research (2001). While it is difficult to conduct any research without confronting ethical arguments (Collis & Hussey, 2003), the research is carefully carried out to meet the rules of what may be there for conducting research at the very beginning. Special consideration is given to the steps taken to gain informed consent from the research participants, and how issues of anonymity and confidentiality are managed.

According to Fontana and Frey (2003), ethical concerns normally revolve around three key issues. First, researcher need to obtain consent from the participants after informing them about the research carefully and truthfully. Secondly, the researcher needs to protect the identity of the participants, that is, there is a need to inform the participants of their right to privacy. Thirdly, the researcher must protect the participants from any harm both physically and emotionally. Therefore, both an information sheet (see Appendix 5) and a consent form (see Appendix 6) were given to the participants before commencing any data collection. Additionally, the information gathered in this research will remain confidential; only the researcher and the researcher's supervisor will be privy to the notes, tapes, the paper written and any other individual information. No participants will be named in the research report, and every effort will be made to disguise the participants' identity.

The notes taken from the meeting and the audio tape transcripts will be used by the researcher to carry out data analysis of the topic. Once the tape has been transcribed, a copy of the transcripts will be kept by the researcher for the purpose of further study on the topic, but no individual, other than the researcher and the researchers' supervisor, will have access to the transcripts after this research. The participants have also been given the right to 1) refuse to answer any particular question, and to withdraw from the research at any time; 2) ask any further questions about the research that occurs to them during the usability studies; 3) access the summary of the finding from the research when it is concluded by their request.

Chapter 5 – Results and Discussion

5.1 Overview of the Chapter

In this chapter, the research findings are presented and discussed. The presentation is focused on the research questions as set out in chapter one. The discussion links the research findings with the literature reviewed in chapter two. Wherever appropriate, direct quotes from the interviewees are given to illustrate the argument in this chapter. Furthermore, Section 5.2 discusses eight communication methods employed by Fonterra and how these methods were portrayed and perceived among the thirty-one interviewees. Section 5.3 outlines and examines the influential factors that have led to behaviours of either rejecting or embracing the Fencepost website as a form of stakeholder communication. Section 5.4 looks at the potential benefits of the Fencepost website from a management perspective. Section 5.5 discusses the implications for organisations that plan to include the Web as part of their stakeholder communication strategy. The chapter concludes with a brief summary.

5.2 General Attitudes and Perceptions

5.2.1 An Overview

Overall, research findings showed that farmers were confident in Fonterra's supplier-shareholder communication strategies. While various issues were raised by farmer interviewees, all twenty-four farmer supplier-shareholders acknowledged that Fonterra had done a reasonably good job at their best. Comments, such as, "they did their best", "they are doing a reasonably good job", and "they are doing the best job they possibly can" were frequently made by farmer interviewees. This general perception is consistent with previous research results. In their research, Donoso et al. (2004) find that Fonterra's communication structure and mechanism is relatively comprehensive. Thus, the authors (Donoso

et al., 2004) argue that Fonterra's challenge therefore relies on the continuous evaluation of the communication strategies currently in place.

By examining Fonterra's existing communication strategies, a majority of the farmer interviewees indicated that they were overall satisfied with the amount of information they received from Fonterra, and the way in which they received it. Comments commonly made were, for examples, "we are pretty well-informed", and "they are doing all they can to supply us with information they think appropriate". Farmer Sean, in particular, was satisfied with the fact he had been given enough time to respond,

> "…they also seem to give you plenty of time; for example, if there is going to be a big change, they will start to talk about it at least six months before the change. That gives you a chance to think about yourself and be prepared when it comes."

Findings showed that Fonterra employed a very comprehensive communication strategy. Fonterra used all four types of communication media (i.e., face-to-face, telephone, paper, and the Internet) in their eight key communication methods with farmer supplier-shareholders. These eight communication methods were CEO letters, corporate monthly magazines (i.e., Farmlink), Call Centre, Cowshed Meeting, Area Manager, Networker, Shareholder Councillor, and Fencepost website. Findings indicated that these eight methods were used with different communication focuses. CEO letters and Farmlink were used to inform farmer supplier-shareholders on various business-related issues. The Call Centre focused on dealing with daily transactional and operational issues. According to Fonterra staff interviewees, the Call Centre was also increasingly used to deal with relatively complex issues. Cowshed meetings were employed when complex issues, such as, capital structure matters, were involved. Moreover, communication methods that make use of multiple forms of communication media are Area manager, Shareholder Councillor, and Networker; and the biggest advantage of these methods is that they provide a personal link between Fonterra and farmer suppler-shareholders. The Fencepost website was primarily being used to inform farmers, and the biggest advantage of it recognised by the co-operative was its ability to deliver quality and personalised information in a timely and cost-effectively manner. Table 2 presents the eight communication methods employed by Fonterra in their corresponding communication forms.

Table 2: Supplier-shareholder Communication Methods & Communication Forms

Communication Form / Method	One-2-one F2F	One-2-Many F2F	Telephone using Persona	Telephone using auto-message	Personalised Document	Non-Personalised Document	Email	The Web
CEO letters	X	X	X	X	√	X	X	X
Farmlink Magazine	X	X	X	X	X	√	X	X
Networker	√	X	√	X	√	X	√	X
Shareholder Councillor	√	X	√	X	√	X	√	X
Area Manager	√	X	√	X	√	X	√	X
Call Centre	X	X	√	√	X	X	X	X
Cowshed Meetings	X	√	X	X	X	X	X	X
Fencepost Website	X	X	X	X	X	X	X	√

Keys: √: a particular communication form is included;
X: a particular communication form is not included;

By comparing and contrasting responses from Fonterra farmer supplier-shareholders and Fonterra management staff, these eight methods are further divided and discussed in three sub-sections. The first sub-section discusses methods that employ a single communication form, such as, Cowshed Meetings, Call Centre, CEO letters and Farmlink magazine. The second sub-section includes methods that make use of multiple communication forms such as Area Manager, Shareholder Councillor, Networkers. The last sub-section looks at the Internet-based communication form, that is, the Fencepost website.

5.2.2 Methods of Using Single Communication Form

5.2.2.1 CEO letters and Farmlink magazine. Interviews with Fonterra Management staff showed that methods employing solely paper communication media, such as Farmlink and CEO letters, were primarily used to inform farmers on day-to-day operating issues. The focus of paper-based communication was on the information, but not much about generating dialogue. This aligns with basic media theories. For instance, one of the advantages of paper communication media is their ability to reach a large number of stakeholders, rather than create interactive dialogues. Moreover, research findings also addressed the major strategic differences between personalised documents (i.e., CEO letters) and non-personalised documents (i.e., Farmlink Magazines). On the one hand, non-personalised documents are mainly used to communicate simple, and objective information (R. Daft et al., 1987), such as general company news and reports. On the other hand, personalised documents can be tailored to suit the individuals' requirements (R. Daft et al., 1987), and therefore, they are 'richer' than non-personalised documents and more suitable for important business-related matters. One Fonterra management staff remarked,

> "CEO or Chairman letters tends to be used for specific messages that we really need to make sure that the majority of the shareholders actually get it and read it, as opposed to Farmlink, which is more of an information tool." (Mary).

It appears that these paper-based communication methods have achieved their intended usages. Paper communication media were also identified by most farmer interviewees as the primary source of information from Fonterra. Moreover, this

group of farmers were generally satisfied with the amount of information they received, and the way how they received it,

> "… I got most of the information from Farmlink. If there are important matters coming up, you will hear about it from chairman letters…I haven't had any problem with the communication." (Samuel).

Farmers that were content with paper communication media also displayed some degree of hesitation about whether the Web communication form was actually necessary. As farmer Sabina pointed out,

> "… Fonterra tends to send a lot by paper. Quite often it arrives at breakfast time, so a lot of the information I read on paper [rather] than on the Web. And there is almost too much information; you got whole lots of information from Farmlink and letters; and there is only limited time a day you can sit down and read."

Such stated experiences suggest two reasons why this group of farmers prefer paper-based communication more than the Web. First of all, it may just simply be because of time restriction. Farmers may be perceived as having a different type of lifestyle, which may allow more time to be involved in social interaction than people have who have 9-to-5 jobs. That was generally not the case in the findings of this research. Farmer interviewees revealed busy and extended working days in which they did not have time to visit the Fencepost website for further information,

> "… you have to work on the farm and do all the work instead of sitting in front of a computer. We just don't have much time." (Sanford).

Secondly, the stated experiences show a sign of communication media conflict. In other words, this group of farmers perceive that they have received sufficient information via paper-based communication forms; therefore, they see no need for an extra communication form.

5.2.2.2 Call centre. The 0800 number call centre was very important to both Fonterra management and Fonterra farmers as a method of interacting with each other. Given that the paper-based communication forms only support a one-way flow of information, it was not a surprise that the call centre which employed

telephone as the communication medium was utilised frequently by both parties, in order to have some degree of interaction.

Fonterra management staff recognised that the call centre was their primary source of feedback from farmer supplier-shareholders. There was also a perception that the call centre was very useful in building relationships with farmers that choose to farm for a lifestyle:

> "…we also got a group of farmers that are farming for a lifestyle. They are saying that picking up the milk and paying us properly, and let us be, get the basics right, and if we have got problems we will call you and don't worry about calling us or visiting on us, or whatever that might be. That group will be managed by the service centre specialists, so there would be a proactive calling campaign just to at touch basis trying to build the relationship a bit more with those people." (Mike).

Fonterra staff interviewed also demonstrated confidence in the ability of the call centre in dealing with relatively complex issues,

> "… we are taking our level of knowledge of the service centre way up from where it is used to be, that they can handle a lot of complex issues now, and we will do more so on in the future. So, there shouldn't be too many things that they can't handle themselves." (Mike).

Farmer interviewees in this research tended to put "less significance" on the call centre. At first glance, the call centre seems to be the first point of contact among Fonterra farmer interviewees. Most farmers in the sample suggested that they would phone the 0800 number first, if they had a question for Fonterra. The general perception here was that the call centre was the easiest way of contacting Fonterra. Farmer Stan told the researcher,

> "… I will ring up the service centre as it is probably the easiest way… if they come to see you that would be nice, but it is a bit unrealistic."

Nevertheless, several farmers appeared to be critical of the competence of the call centre in providing quality information,

> "… if I phone the call centre, I don't know who they are, and I find they are incompetent, especially in the weekends. For some reasons, the company doesn't seem to be there on Saturdays and Sundays, but farmers have to be there on Saturdays and Sundays." (Sheldon).

Comments like this suggested that at least some farmers found the call centre insufficient. In other words, a strong view put forward by farmers was that the call centre could be inadequate in dealing with complex issues, which contradicts Fonterra management staff's perception mentioned previously.

Furthermore, farmer Sheldon's experiences suggest that farmers may still feel telephone communication is impersonal even though it offers opportunities to discuss issues on a one-to-one basis. It is suggested that such negative feeling might be a result of a historical consequence. Traditionally, dairy farmers belonged to small local dairy co-operatives in New Zealand; thus, it was common for an individual farmer to have a personal link with co-operative management. Farmer Sara shared her frustration,

> "… I think the fact that Fonterra is getting really big now, we have lost our individuality and the personal contact we used to have. With small companies, the manager knows all his suppliers personally; and he would phone up and say 'your milk is a bit bad today'. But now it has gone to the other extreme that you have to deal with call centre, and that could just be lost in translation."

5.2.2.3 Cowshed meeting. The Cowshed meeting is an example of face-to-face communication in the Fonterra case. Face-to-face meetings allow simultaneous communication of multiple communication cues, and thus it is most effective in dealing with complex situations. Fonterra management interviewees in this sample felt that a cowshed meeting was best for complex and ambiguous issues, such as, issues surrounding co-operative financial performance. In addition to these stated benefits of face-to-face communication, Fonterra management staff believed it was an effective method primarily because the cowshed meeting provided an opportunity for the co-operative senior management to engage with the farmer supplier-shareholders,

> "… at the end of the meetings, those farmers have [been] great[ly] convinced, and that name wasn't just somebody [who] has [an] office up here in Auckland or on the airplane doing their work on a laptop going off to Asia or something, and most importantly, that was the face they knew."

However, it is not to say that there is no perceived problem associated with this communication method. One Fonterra staff pointed out to the researcher,

> "… the problem with cowshed meetings is that it doesn't get enough farmers in. You can run a meeting and it will be a very good meeting and farmers that are there are very pleased. But then, there are a lot of farmers who do not come to meetings."

Such an issue is not new in co-operative history. In Beal's (1955, as cited in Roy 1964) survey, 43% of the co-operative respondents had never attended an annual meeting. While one could argue that the low turnout might be due to physical restrictions, prior literature suggested it was more a limitation of the face-to-face communication medium itself. In other words, unlike paper communication media that are intended to reach a large number of audiences, face-to-face meetings are only practical within small groups.

In addition, an observation of a cowshed meeting revealed that the effectiveness of these meetings also suffered from the 'dominant speaker' (McQueen, Rayner, & Kock, 1999) effect. Using the observed meeting as an example of illustration, more than forty farmers attended the cowshed meeting; however, four farmers contributed about 80% of total discussion time that day, with the remainder contributing to the other 20% of the discussion. According to McQueen et al. (1999), meeting dominance can be measured by examining how frequently a 'takes over' occurs. It then suggests that this kind of domination, by a few participants in face-to-face meetings, reduces the level of interactivity of the communication medium.

Although most of the farmer interviewees believed that "the most effective communication method is still meetings and even informal farmer gatherings"; there was also a noticeable difference across most of the farmer interviewees. Farmers overall gave the cowshed meeting a relatively low weighting in terms of its usefulness, compared to the Fonterra management staff. Most of the farmer interviewees told the researcher that they chose not to go to the meetings. Although individual reasons varied from one farmer interviewee to another, the major perception that led to such unwillingness was the belief that they would never be able to get real answers from the co-operative management,

> "… for the meetings that I went to, you have been able to put forward your opinion, and have a discussion and a debate with senior management. The only concern is that whether they actually take that

> message on board when they make decisions; or, they're just continuing down the track that they wanted to regardless of what the shareholders or suppliers are saying." (Shane).

Similarly, Stella also told the researcher,

> "… farmers don't go to meetings, because they feel that even if they speak up there, they never get a real answer."

These stated attitudes and perceptions towards the cowshed meeting seems to be negative, but some farmers did claim to be a regular of cowshed meetings,

> "… I try to go to most of the meetings they have. There are not a lot of personal contacts now, so I try to go to all the meetings for some personal contact." (Steven).

This suggests that some farmers may be willing to go to meetings because of a desire for personal contact.

5.2.3 Methods of Using Multiple Communication Forms

While farmers were critical about the effectiveness of cowshed meetings, both Fonterra management and Fonterra farmers in this sample stated that the most preferred communication medium was face-to-face; particularly, that face-to-face was most successful in obtaining valuable feedback. Fonterra management staff, Mike, put forward his view on face-to-face communication medium,

> "… the ability to sit down around a kitchen table with farmers and take them through a lot more details around some of the things that they want to know about Fonterra and that is far better than sending out a pamphlet to farmers and expecting them to read it … by attending customer functions, and events, those sorts of things, it always gives you huge insights."

In this research, methods that use multiple communication forms are the Area Manager, Shareholder Councillor and Networkers. The most valuable aspect of these methods is the ability to support face-to-face meetings on a one-to-one basis, instead of one-to-many as in the case of cowshed meetings. In other words, the perception was that these methods provided a favoured personal link between the co-operative and its farmer supplier-shareholders, which other methods did not deliver in this case. The biggest advantage of these one-to-one meetings is its ability to solve complex issues in a very effective manner, because they not only

possess the general characteristics of face-to-face communication medium, but also rule out the dominant speaker effect.

Both Shareholder Councillors and Networkers are very similar communication methods as the Area Manager, but these two methods are also perceived as fundamentally different from the Area Manager in term of their targeted communication segment. There was a general perception that farmers would listen to their fellow farmer supplier-shareholders more than the management. Thus, Shareholder Councillors and Networkers were believed to be a powerful way of communicating with farmer supplier-shareholders, because both methods were composed of farmer supplier-shareholders,

> "… the shareholder council and networkers are obvious methods where they have these quite successful farmers who run, sort of have a network of farmers they are responsible for, so there are quite a lot of communication. It is a cascade type of approach, sometimes it is good for farmers to hear things from another farmer, as opposed to, you know, messages always coming from the top management." (Marry).

Furthermore, farmers in this sample suggested that they would use these three methods for "complex issues" and "in-depth information". Several farmers also expressed that they preferred to contact their councillor, networker, or area manager because they knew them personally. This stated preference was believed to be as a result of dairy farmers' traditions in New Zealand; as farmer Sally stated,

> "… farmers like to be able to talk to someone personally; this is just the way we are."

Overall, while each of the above three communication methods had a different focus, they all inevitably offered an opportunity for a dialogue between the co-operative management and its farmer supplier-shareholders. As one Fonterra management staff believed,

> "… they are great ways for the business to keep in touch with farmers. We know what's happening in the field, and farmers know what's happening in the high level." (Mary).

Findings also show that farmers appreciated the "personal contact" aspect the most in communication with the co-operative's management. This aligns with

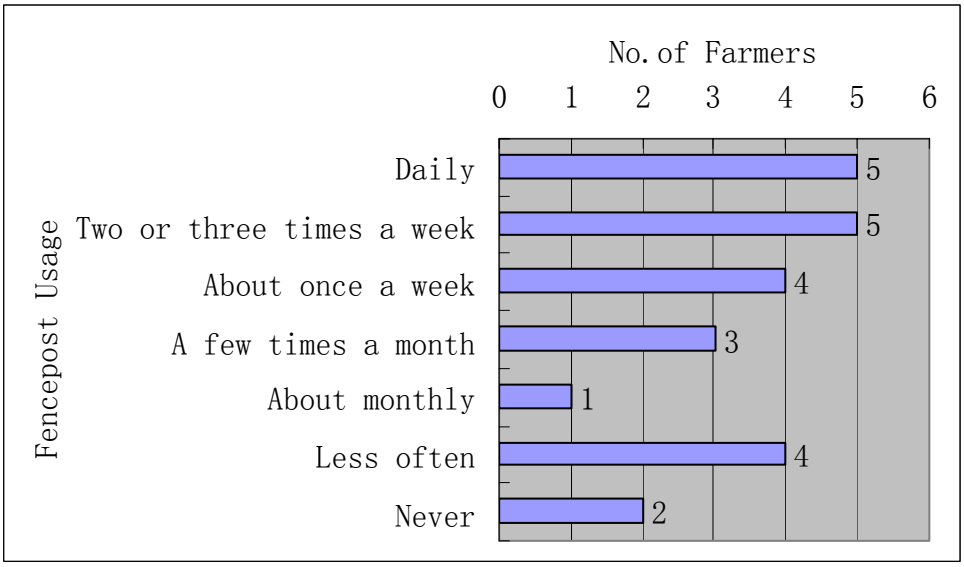
Sligo's (2005) findings on farmers' perception toward informational benefits comparing their interpersonal networks to other sources. Sligo (2005) concludes that farmers often proactively keep up significant interpersonal connections as a quality information source. The high preference among farmer interviewees for the face-to-face communication medium illustrated the above point well. Moreover, it is possible that a strong personal preference for face-to-face communication may result in dismissal of the Web; and such observation is also supported by previous research findings (Fjeld & Molesworth, 2006). For one, the strong preference might be a result of individual characteristics. One farmer supplier-shareholder put forward his view,

> "… some farmers are just conservative by nature, they just don't feel the need to go onto the computer, they probably don't trust the computer". (Sam).

5.2.4 Fencepost Website

5.2.4.1 General usage of Fencepost website. Five out of the twenty-four farmer interviewees used the Fencepost website on a daily basis. There were also two farmers who indicated that they had never used the Fencepost website. The rest of the farmer interviewees have embraced the Fencepost website at various levels from several times per week to just a few times per year. Figure 1 presents the frequency of the usage of the Fencepost website among the twenty-four farmer interviewees.

Figure 1: Frequency of Fencepost Website Usage



The Fencepost website was generally used for accessing milk production and quality information, weather information, co-operative documents, general co-operative news, industry news, historical data, co-operative payment information, placing farm staff recruitment advertisements, and starting/stopping seasonal milk collection.

5.2.4.2 Attitudes and perception towards the Fencepost website. Most of the Fonterra management staff interviewed generally were aware of the potential of the Fencepost website in term of building better relationships with farmer supplier-shareholders,

> "… the key of a good relationship is the two sides, the suppliers and the co-operative, acknowledge each other. I think Fencepost probably is the most powerful [way] to create that environment."

However, it appeared that the Fencepost website had not been used to its full potential. Fonterra management staff in this research acknowledged the "contribution" of the Fencepost website in term of communication and engagement with farmer supplier-shareholders; however, they believed that, currently, the Fencepost website was just a method for Fonterra farmer supplier-shareholders to obtain information, describing the Fencepost as "an information thing", and "a portal for information". Mike remarked,

> "… it essentially mainly one way that we are pushing information out through rather than it is being a two-way channel, like someone talking on the phone with farmers."

This particular finding is consistent with previous research work. According to Howell et al. (2004), information exchange between farmers and the co-operative has been mainly from a 'push' of Fonterra information to farmer supplier-shareholders; however, there is little information that the farmers have been able to 'share' with the co-operative.

Attitudes and perception towards the Fencepost website among farmer interviewees were divided into two extremes. On the one hand, some farmer interviewees were passionate about the Fencepost website and what the website could do for them. These farmers tended to be the 'large' farmers in their region, who were content with Fonterra and saw a future with the co-operative. They were enthusiastic about trying out the Web as a method of keeping themselves up to date with the management.

On the other hand, some farmers were not very enthusiastic about the Fencepost website. One criticism of the Web was a stated belief that the Fencepost website was designed for farmers who did not have to be involved in the daily operation of the farm. This group of farmers appeared to be relatively 'small' farmers in their region. One farmer from the latter group put it this way,

> "… if you are a farm manager, not actually hands-on the farm, you will then have plenty of time on the computer, and you probably will use Fencepost a lot. We just don't have much time." (Sara).

Furthermore, in Fjeld and Molesworth (2006) investigation of PR practitioners' use of the Web in crisis communication, the authors suggest that good stakeholder communication develops from good strategies rather than from attention to a particular communication form. Fonterra's communication strategy appeared to be consistent with this perspective, the Fencepost website was considered by Fonterra management as one method in their overall farmer supplier-shareholder communication strategy,

> "… Fencepost has been set up so it is a place farmers can easily go and find out information about the company, about the industry that may help them making farm decisions. It is a place that they can go to find out information about milk they've supplied to Fonterra and

> results etc. so, it is really a portal they can access to get information [that] may help their daily running of their farm."

The above attitude and perceptionhelped explain why the Fencepost website was currently perceived as just an additional method by the co-operative's management. Moreover, from the stated attitudes and perceptions of the farmer interviewees, it is reasonably to conclude that the perceived values of the Web were influenced by farmers' conservative tradition and the individual farming situation. The acceptance of the Web was closely associated with farmers' characteristics.

5.2.5 The Paradox

The overall attitudes and perceptions towards Fonterra's communication practice with its farmer supplier-shareholders highlighted a paradox currently faced by most of the co-operatives and their members. Fonterra farmers are both the shareholders and the raw milk suppliers, and so they represent two different groups of stakeholders. These two groups are believed to have theoretically different communication needs and requirements. Thus, the multiple roles of farmers in relation to the co-operative create a paradox in the management of the relationship, which subsequently poses challenges for both the co-operative management staff and farmer supplier-shareholders themselves.

First of all, the paradox raises challenges for the management staff. Although the management staff interviewed all had a clear idea who their primary group of stakeholders were, that was, farmer supplier-shareholders, there were some interesting issues in identifying what exact roles the farmers have in the co-operative. One management staff stated,

> "… with the co-operative way we [are] structured, we are in a very unique situation where a shareholder supplies capital, but also supplies the raw material. So we [have] got a quite complex relationship to manage with these people." (Mike).

Nevertheless, interviews with Fonterra staff also revealed an opportunity to address this particular challenge through introducing a third group of stakeholders.

There was a strong belief that farmer supplier-shareholders were also 'customers' of the co-operative,

> "… it is interesting; because to a certain extent you know that they are suppliers, they are shareholders, and but if you don't put a customer lens over how you are actually going to see them, you are kind of not going to treat them the way you need to in order to increase loyalty. So, I always think of them as customers. I talk about them as customers as well." (Mary).

Moreover, this 'customer' view was also justified by the need for quality supplies from the farmers. According to another Fonterra management staff,

> "… the relationship is complex, because there are two different aspects, but I don't think we would manage the relationship any differently if the shareholders weren't our suppliers as well, because you still need a guaranteed supply of milk in order to be able to give a good return on capital." (Mike).

Whether the 'customer' view is justified needs further proof from the practice; however, the paradox certainly places challenges to the co-operative management in terms of their farmer stakeholder communication strategies. Interviews with farmers also showed that this paradox raises challenges to farmers at two different levels.

First, it raises confusion at the information dissemination level. There was a belief that Fonterra failed to communicate major management decisions to its farmer shareholders. Farmer Shane addressed the issue in his way,

> "… I am not saying that we have to have complete decision making. But we still need to be able to show our opinion, and hopefully keep the company as a co-operative. After all, we are the owners of the co-operative."

This issue was also addressed from a somewhat contradictary comment made by another farmer interviewee,

> "… I think they have really strongly taken on board that shareholders are the owners of the company. Sometimes, they really have gone over board in making people feel part of the company." (Sylvia).

These comments show that most of the farmer supplier-shareholders consider themselves as more a shareholder of the co-operative rather than just a supplier to a dairy company. This may be account to the strong stated belief among farmers

that they are the "owner" of the co-operative. Consequently, when farmers felt they had been treated solely as suppliers, the subsequent potential for damage to the co-operative was increased frustration, which in turn might have led to negative attitudes towards the co-operative,

> "… at the moment, there seems to be a gap between the supplier-owners and the co-operative. They [have] still got to listen [to] what the shareholders have to say. At times, they tend to have the tendency to brush that off." (Shane).

This kind of messages from farmer interviewees demonstrated a desire to be treated as the same as shareholders in investor-owned companies. Nevertheless, the co-operative nature of Fonterra determines that farmers are also suppliers, who should not or do not need to have access to all of the information. As a result, there ware demonstrated tension in this sample among Fonterra farmers at an information dissemination level.

Such tension also leads to confusion at an identity level. As a result of the paradox, it was suggested by one farmer interviewee that individual farmers had found it was difficult to position themselves in the relationship with the co-operative,

> "… in a processing co-operative, the raw materials suppliers and the owners are the same people. Those suppliers-owners find it is difficult to separate these two parts of relationship out. That introduces some difficulties. The expectations may be different. For example, I was in the meeting the other night where this guy said we want more cash. We find it is difficult making a profit and we want more cash, end of the story. So, that person is acting simply as the supplier of the company, whereas, other people would say 'yes we want more cash, but it is going to be a sustainable payout because we need to see a future in Fonterra by way of market development, product development, or the rest of it.'" (Simon).

Although interviews with the seven management staff demonstrated a possibility to resolve the paradox by treating farmer members as 'customers', the paradox certainly places challenges to the co-operative management in terms of their farmer stakeholder communication strategies. Farmers who had been affected most by the paradox were also the most frustrated ones.

Consistent with previous research (Brown & Price, 1956), an active member tends to be a well-informed member and a satisfied member at the same time. This

research found that those farmers who went to cowshed meetings, read Farmlink magazines and CEO letters were significantly more positive and had more favourable attitudes towards Fonterra's supplier-shareholder communication practice. Farmers who considered themselves fully informed were those farmers that had a relatively clear idea on where they stood in the co-operative. Thus, the challenges are how the co-operative builds a relationship with the 'affected' group of farmer stakeholders, and most importantly, can the Fencepost website become an enabler of such a relationship. To answer this, the next sub-section discusses a number of reasons for farmers rejecting or embracing the Fencepost website.

5.3 Factors for Rejecting or Embracing the Fencepost Website

5.3.1 An Overview of the Factors

Conversations with Fonterra farmers revealed a number of reasons that have influenced farmers' decision towards the use of the Fencepost website. Six key reasons of not using the Fencepost website were: 1) not skilled at computer, 2) not interested in computers, 3) no/poor Internet connection, 4) seeing no need to use it, 5) getting information from other methods, and 6) too much cost. Moreover, four main reasons that motivated farmer interviewees were 1) potential for a lifestyle through the ability to oversee on-farm production from overseas, 2) potential for better on-farm decisions through accessing historical production and financial information, 3) potential for cost saving at both the co-operative and individual farm level, and 4) potential for real-time information.

Individuals draw from their past experience for preferences and from these preferences to produce a range of arguments to 'reject' or 'embrace' the Web as a form of the Internet-based communication. It is not to say external factors, which are outside control of individuals, do not influence the adoption of the Web. Those above ten factors can be further examined and so categorized into five primary factors: 1) perceived values, 2) perceived self-efficacy, 3) awareness, 4) infrastructure, and 5) media conflict.

These factors are presented and discussed in this section under two main themes: 1) Internal reasons, and 2) External reasons. Internal reason consists of factors that

are closely related to farmers' personal characteristics; these are perceived value, perceived self-efficacy, and awareness. External reason, on the other hand, refers to factors that are outside one's control; these are infrastructure and media conflict.

5.3.2 Internal Reasons

5.3.2.1 Perceived values. Consistent with other studies, the picture that emerges in the finding is that the perceived values have a fundamental influence on farmers' decision to adopt the Fencepost website. The two perceived values of the Fencepost website were cost saving and real-time information.

Firstly, Fonterra management staff in this sample seemed to be confident in the cost reduction aspect of the Fencepost website,

> "… in term of cost saving, what I was talking about before was in terms of turning a lot of paper-based communication off. You know, we are targeting somewhere in the middle of half a million dollars in 2 or 3 years time, in term of money saved in terms of not generating paper-based communication." (Mike).

Nevertheless, some Fonterra farmer interviewees expressed a level of scepticism about the benefits of the Fencepost website to their individual farm or business. These farmers interviewed expressed they could not see the benefits of the Fencepost website to Fonterra, which in turn, might have an impact on their investment return. They were uncertain about whether the Fencepost website would actually save costs for their business,

> "… they are not going to save a million dollars by stopping that (sending letters). It is very small. So what they are trying to do with the Web, they are not going to save much money." (Seth).

It suggested that such scepticism was holding back some of the farmers from using the Fencepost website. In contrast, one farmer decided to use the Fencepost website to set the start and stop collection dates of each milking season, as he believed that it would save cost for the co-operative,

> "... I don't do much on Fencepost, but I do do a little bit, part of it because I believe that it will save costs." (Steven).

Secondly, a typical perception among farmers who used the Fencepost website on a daily basis was that the website helped their production through providing timely information,

> "…to me, Fencepost provides most up-to-dated information. The quicker Fonterra get information to us, the more effective we can make our decisions. The more effective we are, the more milk we make and the more goods we sell. I think it is the key to both sides of the business to understand that we both eventually benefit." (Steve).

Such affirmative perception could explain why farmer Steve embraced the Fencepost website on a daily basis.

There were also a group of farmers in this sample that used the Fencepost website, on average, once a week. In these cases, the Fencepost website was primarily used for production information. A common perception among this group of farmers was that the Fencepost website was just an "information tool" or an "information" portal. It therefore showed how the perceived value lead to certain usage behaviour. In other words, those farmers who perceived the Fencepost website as nothing but an information tool subsequently used the website for information only. However, farmers who believed the value of the Fencepost website were in terms of timely information and cost saving embraced the website on a more frequentbasis. Therefore, a key to encourage farmers to use the Fencepost website more is through helping them recognise its value in cost saving and access to real-time information.

5.3.2.2 Perceived self-efficacy. Self-efficacy refers to individual's self-assessment of his or her capabilities to perform a behaviour (Pavlou & Fygenson, 2006). In this research context, positive self-efficacy means that a farmer believes in his/her ability to conduct activities on the Fencepost website; and so, one noticeable form of self-efficacy was perceived computer skills. According to Jarvenpaa and Staples (Jarvenpaa & Staples, 2000), adequate computer skills are very important in term of facilitating communication in an Internet-based communication environment. In other words, a farmer's perceived computer skills could influence the use of the Fencepost website. To illustrate, the perception among farmer supplier-shareholders in this sample who used the Fencepost

website less than once a week was that they were not "computer savvy". Farmer Sandy pointed out,

> "… there seems to be plenty of interaction between the website and the farmers coming onto it. But it just doesn't interest me. It is not the information that doesn't interest me; it is more about the computer…I am not very good at it anyway."

Comments like the above show that low perceived computer skills resulted in a certain degree of ignorance towards the Fencepost website. Moreover, farmers in this sample who were relevantly young in age demonstrated high perceived self-efficacy in the use of computers and the Internet. These farmers were also the group who used the Fencepost website at a daily basis in this research.

Consistent with previous research (Simon, 2006), individual farmers gradually adopt the Fencepost website as they become familiar with it. It suggests that perceived self-efficacy can be increased as one became familiar with a certain technology. Therefore, one way to promote the Web is through helping farmers to develop their general computer skills. As they become more familiar with computers, they are more likely turn to the Fencepost website for more communication with the co-operative.

5.3.2.3 Awareness. Some farmers in this sample argued that the slow adoption of the Fencepost website was mainly due to their own lack of interest in the Web in general. As farmer Steven noticed,

> "… I am not using it a lot, not because I have a problem with it, just perhaps because my interest is not there."

There might be a number of factors that had led to the above attitude; factors could include age, gender, and education background. Besides these frequently cited factors, it is suggested in this research, the level of awareness was also one important factor which influenced farmers' behaviour towards the Fencepost website. As Farmer Stuart explained,

> "… the reason was that we didn't really know what the potential of the services were going to be like, because we have grown up without it. We actually didn't realise that we could get the weather at anytime of the day."

Thus, it becomes important for organisations to help to increase the level of awareness. It suggested that such awareness might be increased just by a letter from the management,

> "…… originally, I used to ring up to start up production and finish at the end of the year. Fonterra sent out information said if you were going to do it on Fencepost would be cheaper; and then I thought that was a good place to start." (Steven).

Briefly, these internal factors certainly influenced farmers' behaviours in this sample towards the use of the Fencepost website. Nevertheless, several external factors were also raised during the conversation with farmer interviewees. To a certain extent, these external factors appeared to be critical in shaping farmers' attitude and perception towards the Fencepost website.

5.3.3 External Reasons

5.3.3.1 Infrastructure. Two dimensions of infrastructure were identified in this research. On the one hand, it refers to the physical infrastructure, that is, the tangible dimension of it. One of the main frustrations among farmer supplier-shareholders was the poor accessibility to broadband,

> "… we are in the country. So I haven't got access to broadband. If you go onto Fencepost at night, it is really hard; if you want to download something, it gets disconnected. That's why Fencepost isn't completely reliable for us to use." (Stella).

This inaccessibility to a reliable network slowed down the adoption of the Fencepost website. For one, interactive features that are used to create dialogue between organisations and stakeholders often involve the use of multimedia programs on the Web. In that case, accessibility to broadband becomes essential.

Another criticism about the infrastructure was that broadband was too costly,

> "… to install a satellite alone costs around $800, and then you have to pay monthly connection fees." (Stella).

It suggested that the use of the Fencepost website was believed to be greatly associated with the belief that it provided valuable information in a cost effective

manner. Moreover, in this sample there was a belief that the Web had little new to offer compared with conventional communication forms. Some farmers indicated directly that the use of the Web was just another "communication expense",

> "… we run three mobile phones in this house, and two telephones. So, our communication fees for the month run into the hundreds. We don't really feel like to spend another forty or fifty dollars on the Internet." (Scott).

On the other hand, infrastructure can also be interpreted in term of organisational resources, that is, its intangible dimension. There was a strong perception of negligence among farmer interviewees,

> "… one of the things that I have found frustrating is, sometimes, I have sent out emails to the company on tools they have taken away from the website. I find that you get standard replies from someone way down the picking order. I don't feel that they take it on board."

Such negative perception was a result of insufficient organisational resources. In other words, there were not enough resources available to address farmers' concerns in a timely manner via the Fencepost website. Thus, sufficient resources, both tangible and intangible, are vital in employing the Web as part of the stakeholder communication strategy.

5.3.3.2 Communication media conflict. Media conflict was another external factor that identified from the interviews with farmers. There was evidence that the acceptance of the Fencepost website have been delayed due to an element of contradiction with other available communication media. Concerns have arisen about a lack of necessity about the use of the Fencepost website despite Fonterra assurances of the benefit is paramount. This is of particular concern with respect to paper-based communication used by Fonterra on production and milk quality information,

> "… we get a paper copy of our production on the 10th or 11th of each month and that tells us what our production has done. I am not going to rush into the computer and see how much my production has done everyday." (Samuel).

Another farmer also expressed the similar view,

> "… there is so much information on that piece of paper (i.e., daily milk docket). Why go further onto Fencepost; it is all there." (Scott).

These stated experiences from farmers show organisations need to be aware of the potential conflict among communication media employed. Effective stakeholder communication is achieved through a well-designed holistic approach, rather than simply aiming to provide as many options as possible.

5.3.4 Further Discussion on the Adoption of the Fencepost Website

As the three internal factors illustrated, farmers' behaviours towards the Fencepost website were influenced greatly by their unawareness of the website's usefulness, as well as the low perceived self-efficacy in computer skills. The concept of perceived usefulness and perceived ease of use have been long recognised as key influential factors on the use of the Web. Many theories were developed around the concept of perceived usefulness and perceived easy of use. As reviewed in chapter two, the well-known theories are the TRA theories family; in particular the technology acceptance model (TAM) has been used to explain information system related topics. According to TAM, the perceived usefulness and perceived easy of use have significant influences on individual's satisfaction and behavioural intentions (Davis, 1989; Davis et al., 1989).

While it is important to recognise these internal factors, it does not mean external factors can be neglected. The theory of planned behaviour (TPB) argues that external variables are also important. Consistent with the literature, the infrastructure issues and the conflicts among communication media are all clearly evidences of such external variables that influenced farmers' adoption behaviours.

Furthermore, it is felt by some of the farmer supplier-shareholders that there was a need for more senior management drive on the strategic use of the Fencepost website. As Farmer Shane believed,

> "… someone needs to lead the changes, but it will be the management, not farmers, because by nature we are disjointed. It has to come from the management".

On the one hand, relevant history suggests that organisations do not always take the lead in technological evolutions. It suggests that there is a reciprocal influence between the use of technology and the social context in shaping the way it is used (Postmes, Spears, & Lea, 2000). A very good example is as suggested by Fischer (1992). The telephone was first introduced as a means of business-to-business communication; no one including the designers expected telephones to be used for personal conversion. The 'invention' of the telephone as a personal conversation medium was done by users themselves and only gradually became normative (Fischer, 1992). It could also happen to the Internet-based communication form, that is, the Web. Using the Fencepost website as an example, it is possible that the farmers lead the communication changes by using the Fencepost website as much as possible. Moreover, Simon (2006) observed his research participants over an extended period of time, and he found that his participants adapt to new communication media as they become familiar with it. The research findings are consistent with Simon's work, farmer interviewees indicated that the more they use the Fencepost website, the more they became willing to engage more with the Internet-based communication form. Farmer Sophia told the researcher,

> "… like using Fencepost, once you used to getting on there, and it is good."

On the other hand, this is not to suggest that Fonterra management do not have a role in facilitating the process. Individual farmers often have to deal with day-to-day running of their farm. In conjunction with Dairy InSight, Fonterra Shareholder Council commissioned an independent farm survey in 2004. A number of issues that concerned farmers were quantified including the increasing cost of the land and production, and the lack of skilled and competent labour (Dairy InSight, 2004/05). As the survey suggested, major concerns surrounding farmers tend to be mainly operational matters. In other words, things that are perceived as less urgent can be easily put on hold as more pressing issues take farmers' time. As one farmer interviewee in this research expressed,

> "… there is too much going on but little time to do it." (Samuel).

Thus, it is reasonable to argue that some degree of 'drive' is needed from the management in order to encourage farmers widely embracing the Fencepost website. It is also critical to have more and more farmers adapt to the Fencepost

website. The Web provides an additional method of asking questions and raising concerns about organisations; however, the full potential of such a method is only reached when it is used by the majority. A perception raised in the interview was the low usage of the Fencepost website led to a small amount of investment from the management; and which in turn, resulted in even lower usage of the website,

> "… because it is not getting as many farmers as it could, they are not investing in as much as it could. If they are getting more and more hits on Fencepost, then they will start to invest in it more." (Steve).

However, farmers were a group of stakeholders, who often had a long history with their co-operative, as one farmer interviewee noted,

> "…we've owned this farm for 22 years, we lived here for 22 years, and we worked on the same piece of land and dealt with the same suppliers for 22 years…we pretty much know our way around…"

The demonstrated perception here is that they know their farming business inside out. In other words, farmers do not like to be "told what to do". Consequently, organisations that intend to introduce the Web to dairy farmers need to 'drive' with great 'consideration'. That is because forcing farmers to use the Web might lead to decreases in positive perceptions towards the organisation.

In addition, considerable education is still required, as there is currently not a high level of understanding amongst farmer supplier-shareholders about the potential benefits of the Fencepost website. As pointed out early in the discussion, the lack of perceived benefits was one of the key reasons that slowed the uptake of the Fencepost website. It is believed that education is even more important in co-operatives. Back in 1844, education was among the original eight co-operative principles of the Rochdale Society. According to Donoso et al. (2004), as the business of modern co-operatives become increasingly complex, education will eventually become a key success factor for modern co-operatives. Moreover, consistent with prior research's argument (Howell et al., 2004), the research findings suggest that Fonterra is well placed for such an education role, given the extensive education role already undertaken by the Shareholders Relations team. Farmer supplier-shareholders' education should be a continuous process and the primary purposes of such education ought to be assisting farmers to see the connection of the interest at both an individual level and the co-operative level

(Donoso et al., 2004). The authors further argue that member education helps in creating a sense of ownership and control in the co-operative. Such realisation of ownership in this sample clearly led to the desire to be informed, resulting in higher level of involvement in the co-operative.

5.4 Potential Benefits of Fencepost Website

5.4.1 Overview

The above findings on the attitudes and experiences of the farmer supplier-shareholders reveal a range of opinions about the importance and usefulness of the Fencepost website. In many ways, the findings reflect the ambiguity of the studied phenomenon. At one extreme, some farmers found the Fencepost website had enormous potential in changing their communication and engagement behaviour. At the other extreme, some farmers found it was very easy to reject the Fencepost website as of little benefit. Nevertheless, although various perceptions among farmer supplier-shareholders that have led to different behaviours towards the Web, three evident management implications of the Fencepost website were identified from such diverse attitudes and experiences. Consistent with prior literature, the Web is an enabler for a greater application of CRM and SSTs. The third management implication that is inherent in this Fonterra case is that the Web makes it possible for organisations to gain more quality feedback through an opportunity of recreating a sense of 'conventional' communities.

5.4.2 Customer Relationship Management Implications

The Fonterra case demonstrates two known claims in the existing literature on the subject of stakeholder communication. First of all, this research provides a good example of managing non-traditional customers with CRM principles; therefore, it demonstrates a wider applicability of CRM. It shows the possibility to treat individual farmers using the 'customer' philosophy in CRM, even though individual farmers already hold two other distinct roles in relation to their co-operative.

Looking backward, the simplest form of a supply chain consists of three basic parties; they are suppliers, the co-operative, and customers. The relationship between the co-operative and its customers is considered as the upstream relationship; whereas, the relationship between the co-operative and its suppliers is called the downstream relationship. By adopting the same principles, the CRM application in this case study focuses on the downstream relationship using the theories of upstream relationship management.

It is important to have a good relationship with farmer supplier-shareholders, because the consistency of supply and quality of supply are the fundamentals for the co-operative to survive. In particular, with the co-operative way Fonterra is structured, suppliers of the co-operative are also shareholders who supply capital. Although farmers have two somewhat distinct roles in the management of the co-operative, these two roles are actually closely linked together. As Fonterra Management staff, Mike, pointed out in an interview,

> "… we do essentially treat our farmers as customers; there is a very strong customer culture we are aiming to build in terms of managing [the] interface with our farmers; because you still need a guaranteed supply of milk in order to be able to give a good return on capital."

It can be argued that this 'shared' interest adds justification to the CRM application in this research. Moreover, it suggests that the Fencepost website will have a greater implication in the CRM philosophy. First, more farmers will have the ability to raise issues through the Fencepost website. With the CRM system, a workflow will be started and so the issues are followed up and ultimately solved. There will also be a record of the issue and its solution for later reference. As a result, it helped to free up area managers' time so that they could be more proactive in relationship management with farmers. In other words, one of the major contributions of the Fencepost website was that it took over part of the transactional and operational activities.

5.4.3 SST Implications

Another potential of the Fencepost website was seen by the management as a self-service tool for farmers to obtain 'static' types of information, such as, dairy

production information, company announcements, policies, and weather information. For instance, it is acknowledged by previous studies that there is potential benefit from capturing individual farm data (Howell et al., 2004). Farmers in this case study were able to access information on milk payment, milk production and quality, as well as their shareholding information on the Fencepost website. This added access to farm related information can be used to better manage farm operation, which consequently contributes to the overall operational efficiency of the co-operative.

In other words, another value of the Web might be considered in terms of added accessibility to self-service technologies (SSTs). Farmers in this sample were able to self-service themselves in a number of ways from tasks as simple as checking weather information online, to starting and stopping milk collection at each season. Interview findings with farmer supplier-shareholders align with previous research (Lin & Hsieh, 2006), positive attitudes towards SSTs are associated with three attributes: 1) attitudes, 2) self-efficacy, and 3) willingness. In this research, the higher level of a farmer's positive attitudes towards the Fencepost website, his or her ability to use the website, and willingness to adopt the website, the more likely the farmer appreciated the Web-supported SSTs. Consistent with the argument of Lin and Hsieh (2006), a result of such appreciation in this research was higher perception of service quality, which ultimately enhanced their relationship with the co-operative.

Although the Web-supported SSTs can be a valuable tool for both the co-operatives and their stakeholders, prior literature believes that it is critical to provide more choice (Lin & Hsieh, 2006). Put anther way, it is unrealistic to assume all stakeholders are technologically ready or willing to use the Web-supported SSTs. Taking dairy farmers as an example, there was one farmer interviewed that had never used the Fencepost website to date.

The Web is becoming increasingly accessible and has obvious benefits for both on farm activities and everyday life; however, the full potential uses of the Web have not been recognised in this research sample. TR can be seen as one of the most important drivers of using new technologies, such as the Web. In their study, Lin and Hsieh (2006) argue that the increased TR will result in favourably behavioural

intentions in using self-service technology. Thus, organisations should pay special attention to the TR characteristics of their stakeholders in using the Web. It suggests that one way to address this concern is through talking to farmer supplier-shareholders as much as possible, and so to accurately identify their TR characteristics.

5.4.4 Online Community

It can be argued that the Fencepost website has the potential of supporting all three 'ideal' traits identified in chapter two. As a form of the Internet-based communication, the Fencepost website is undoubtedly able to reach a large number of stakeholders. The ability to employ multimedia technologies makes it possible to establishdialogues through the Fencepost website. The challenge is to develop a personal feeling among farmer supplier-shareholders who use the Fencepost website. One way to achieve the third 'ideal' trait is through building online communities. It is believed that the Web community-building element of relationship management suit many forms of businesses (Winsor et al., 2004), including co-operatives. As farmer Steve urged in the interview,

> "… really, they need to capture the old feelings of the old dairy factory through the community feel to it."

By mutually solving problems and sharing ideas, it suggests that the discussion group feature of the Fencepost website could allow a community of Fonterra farmers to be established. According to Winsor et al.(2004), online communities allow individuals to benefit from enhanced camaraderie, while organisations benefit from increased loyalty.

Another advantage of building an online community is that organisations can leverage their existing corporate network through incorporating external stakeholders' networks and initiatives. The research findings illustrated first-hand experience of such leverage. The research findings suggest that one additional way of obtaining valuable information is through incorporating activist networks. In this research, two farmer interviewees pointed out they would not participate in

the online discussion group on Fencepost, because they had their own online discussion network,

> "… I don't tend to use the discussion group function on Fencepost, because I belong to the Network for Women in Dairying, and we have our own discussion groups."

A wide variety of topics were covered in the Network for Women in Dairying discussion groups. One farmer pointed out,

> "…we ask all sorts of questions, such as, how to recognise a sick calf and how to get them to drink well, and what is a good alternative treatment to giving them anti-biotics. Those kinds of questions should be ok to ask on Fencepost, but for some subtle reasons, it is not." (Sally).

Comments like these show that certain culture is often associated with different online groups. Interviews with farmer supplier-shareholders suggested that the Fencepost website had been seen as being "watched", "judged", and "managed". These perceptions inhibit open communication, which can restrain organisations from extracting real issues from the discussion. This is supported by previous research (Hearit, 1999; Heath, 1997). Heath (1997) argues organisations should examine online discussion groups, activist Web pages, and other online news sources; thus, organisations can to better anticipate upcoming management issues.

5.5 Management Implications: the Three Considerations

5.5.1 Overview

Stakeholder communication strategies have changed dramatically since the growth of the Web. Using the Web, such as the Fencepost website in this case study, to communicate with stakeholders is now part of standard practice. The Web adds flexibility to existing stakeholder communication practice, as well as extends the capacity of the existing communication media. Appropriate use of the Web can help organisations to build better relationships with their various groups of stakeholders through enhanced understanding, changed perceptions, and saved time and capital (Perry et al., 2003).

The Web will not automatically add benefits to organisations' stakeholder communication. Appropriate strategies are still necessary to attain potential benefits. This research proposes the following three considerations in organisations' stakeholder communication strategies. These three considerations are: 1) Organisational Needs; 2) Stakeholder Characteristics, and 3) Communication Media Factors.

5.5.2 Organisational Needs

The use of the Web should be a strategic decision, and it should be part of an overall organisation strategy. Moreover, communication strategies should follow organisational needs so that "the organisation can achieve strategic alignment of its communication plans with organisational goals" (Moorcroft, 2003). It is common to believe that there are apparent advantages of the Web in saving time and organisational resources. However, these apparent advantages may vary from one organisation to another. While management needs to identify the advantages and consequences of using the Web as part of their communication strategy with stakeholders, such identification ought to be within organisational context. To achieve this, organisations need to consider their resources available to implement a Web strategy; resources refer to both physical infrastructure and intangible resources such as personnel. If the Web is designed to achieve a dialogue with a large number of stakeholders, management of the organisation need to ensure resources are available to support such a strategy. First of all, reliable infrastructure is always the most fundamental element of a successful Web strategy. Secondly, any two-way communication is expected to have a hundred percent follow-through (Perry et al., 2003). Having no resources available to follow up issues raised through interactive features such as the online discussion group is worse than not offering the option at all. According to Ayuso, Rodriguez and Ricart (2006), organisations must develop, apply and maintain sufficient management competences and capabilities in order to deal with stakeholders concerns over time, which subsequently result in serving stakeholder interests and creating long-term value.

5.5.3 Stakeholder Characteristics

Stakeholders, like any other individuals, actively construct meaning in a communication process. The constructed meaning "is created in terms of their perspective on the world in which they live and the concrete situation at hand" (Foster & Jonker, 2005, p.52). Therefore, when organisations come to use of the Web, it can be influenced by stakeholders' attitudes and existing communication preferences to a great extent.

Organisations should be able to identify their stakeholders and the general characteristics of these stakeholders. An important question that should be asked before any organisational resources are devoted to the Web communication form is "will the stakeholders use the Web for its designed purposes?" As Perry et al (2003) pointed out, not all stakeholders would go online for information. Several key characteristics of farmers that have influenced the use of the Fencepost website were identified in this research. First, in this case study, farmers are both raw materials suppliers and shareholders of the co-operative. It suggests that the conflicting needs and requirements have created challenges to the co-operative's stakeholder communication strategies. Secondly, most of the farmers interviewed were making very limited use of the Web to communicate with the co-operative. In the sample, there was a belief among farmer supplier-shareholders that the Web had little new to offer, and therefore, they saw little need to change their existing communication behaviour. Thirdly, the average age of dairy farmers in New Zealand is 40 to 45. While young farmer interviewees displayed great confidence in using computers, it was not a surprise that the majority of the farmers had very low perceived self-efficacy in their computer skills. To some extent, this low perception ultimately resulted in the slow adaptation of the Web communication form.

For the above reasons, stakeholders' characteristics should be considered if organisations intend to include the Web as part of their stakeholder communication strategies. It helps organisations making relevant strategies according to stakeholders' needs and preferences. Moreover, consistent with Lin and Hsieh's (2006) research, an understanding of different groups of stakeholders' personal preferences enables organisations to offer personalised services on the

Web. As a result, the potential of the Web communication form is utilised, and the contribution of the Web to the management of stakeholder relationships is maximised.

5.5.4 Communication Media Factors

The third consideration is media factors. The Fonterra case demonstrated that the value of the Web as a form of stakeholder communication might be considered in terms of added flexibility that allows organisations to reach its stakeholders in the way individual stakeholders require, rather than an opportunity for universal Web approaches.

To deliver effective communication to individual stakeholders, management staff need to know both the strengths and limitations of the Web. To illustrate, information types offers more specific use of the Web. In the Fonterra case, it appeared that most of the farmer supplier-shareholders preferred one specific traditional communication form – the CEO letters – when communicating important co-operative matters. Farmer Scott explained,

> "… a letter would be good. If you got a letter with Fonterra letterhead, you would think that must be pretty important, as they [have] gone to [the bother of] spending 90c to send it out, so you will read it."

Paper-based communication forms, both CEO letters and Farmlink magazines, were overall used to communicate 'static' information with farmer supplier-shareholders. Moreover, face-to-face meetings were used to communicate complex issues where immediate feedback was essential. Less complex information was found to mostly have been communicated via the call centre. The growing availability of the computer has led to the increased use of the Web to gather feedback from stakeholders that until now have been carried out almost exclusively by face-to-face communication or telephone-based communication forms. The Web also has an impact on the paper-based communication forms in stakeholder communication. More and more of these traditionally paper-based materials are transferring to the Web. For example, Farmlink magazines and CEO letters are all available to download for farmer supplier-shareholders to read.

5.5.5 More Discussion

Each of these three areas should be considered when making stakeholder communication strategies. With the increasing recognition of the Web as a form of stakeholder communication, and the utilisation of the features, such as chat rooms and digital video, the Web will become more and more beneficial to organisations as part of their stakeholder communication strategies. The Web is not yet a substitute for all other communication forms in stakeholder communication. Rather than an opportunity for universal best approaches, the Web adds flexibility to organisations' stakeholder communication strategies. It has great potential in providing leverage to the existing stakeholder communication practice. In particular, as previous research concluded, one major benefit of the Web is its potential for dialogue between an organisation and its stakeholders (Heath, 1997, 1998).

Moreover, aligned with the observation of Howell et al.(2004), the ability of farmers to access information stored in Fonterra's database is more important than in other investor-owned companies, given that farmers are both suppliers and shareholders of the co-operative. The Web certainly is an enabler and a facilitator of such type of information exchange, but not a replacement. Using the Fonterra case as an example, while the call centre remains the primary method for farmers to contact Fonterra, and the paper-based communication forms are still the main methods to inform farmer supplier-shareholders, increasingly the Fencepost website is used by farmers to access their production information for better on-farm management.

In addition, it is important to reduce the 'perception gap' that exists between stakeholders and the organisation. Taking Fonterra as an example, the challenge is to ensure that the benefits of investments are translated into gains for the individual farmer supplier-shareholder. This probably requires a mixture of improved communication around co-operative wide initiatives/projects such as the Fencepost website, as well as a concerted effort to ensure the features of the website are as practical and user-friendly as possible. It suggests that Fonterra can actively address this concern, for instance, through the inclusion of farmers on new feature development teams. These teams should play an important role in

determining what features and functionalities to invest in. The farmer project members also provide a reality check that the website developers are producing outcomes that can be practically utilised in on-farm production.

Chapter 6 - Conclusion

6.1 Overview of the Chapter

Chapter six concludes the research. Section 6.2 summarises the main research findings. Section 6.3 presents the implications for the exiting stakeholder communication literature and practitioners. Section 6.4 concludes the chapter by addressing the overall research limitations and possible future studies.

6.2 Summary of Findings

6.2.1 General Fencepost Usage

Five out of the twenty-four farmer interviewees used the Fencepost website on a daily basis. There were also two farmers that indicated that they had never used the Fencepost website. The rest of the farmer interviewees had used the Fencepost website at various frequencies from several times per week to just a few times per year.

In this research sample, the Fencepost website was generally used for accessing milk production and quality information, weather information, co-operative documents, general co-operative news, industry news, historical data, co-operative payment information, placing farm staff recruitment advertisements, and starting/stopping season milk collection. These usages can be further summarised into two main areas; these two areas are information and self-services.

Firstly, the research findings show that the Fencepost website is used primarily to access milk production and quality information stored in the co-operative database. It suggests that such milk production information is personalised information for each individual farmer supplier-shareholder, and the information can be accessed anytime and anywhere by the Fencepost website. Moreover, only one farmer interviewee has watched online video on the Fencepost website. While most of the farmer interviewees stated that they read online discussion groups' messages

on the Fencepost website, none of the farmer interviewees had ever participated in the discussion groups.

Secondly, the Fencepost website provides the ability for farmer supplier-shareholders to self-serve. To illustrate, the Fencepost website was frequently used among farmer interviewees to start and stop milk collection at each season. Most farmers interviewed have also used the weather forecast feature to make their on-farm production decisions. Several farmers indicated that they had used the payment indicator feature to foresee their future payments. While farmer supplier-shareholders can request to stop any paper form of communication sent to them on the Fencepost website, most of the farmer interviewees, except one in this sample, stated that they had not yet used the new self-service feature. Once the Fencepost website is fully integrated into the co-operative's new CRM system, farmer supplier-shareholders can also update their personal and farm-related information through the Fencepost website.

6.2.2 Fencepost Website vs. Other Communication Methods

While the Fencepost website has the same reach ability as paper-based forms of communication, research findings showed that personalised letters and Farmlink magazines were still the primary information sources for farmer supplier-shareholders. The call centre was found to be the most frequently used method to gather feedback from farmer supplier-shareholders. The Fencepost website has great potential to collect high quality feedback from farmers in a cost effective manner; however, it has been mainly used to disseminate information to farmer supplier-shareholders.

The cowshed meetings were preferred for discussing complex issues by providing an opportunity for the co-operative senior management to engage with farmer supplier-shareholders. One disadvantage of cowshed meeting is that it can only reach a relatively small number of farmer supplier-shareholders at each meeting. The Fencepost website arguably has the ability to target the same communication objectives through making use of multimedia and it can also reach a much larger number of farmer supplier-shareholders simultaneously; however, the research

findings confirm that it can not replace face-to-face communication yet. The Area Manager, Shareholder Councillor, and Networker employ a mix of communication forms. These methods were valued most by farmer interviewees for its 'personal' trait; it suggests that such a trait has not yet been delivered by the Fencepost website.

Furthermore, while farmer interviewees in this research displayed different preference towards the co-operative communication methods, farmers who believed they were more shareholders than suppliers displayed higher enthusiasm for the Web communication form. One the other hand, farmer interviewees who considered themselves as more suppliers than shareholders of the co-operative demonstrated less enthusiasm, or sometimes a level of scepticism, towards the benefits of the Web.

6.2.3 Reasons to Use or Not Use the Fencepost Website

Six key reasons of not using the Fencepost website were: 1) not skilled at computer, 2) not interested in computers, 3) no/poor Internet connection, 4) seeing no need to use it, 5) getting information from other methods, and 6) too much cost. Moreover, four main reasons that motivated farmer interviewees were 1) potential for a lifestyle through the ability to oversee on-farm production from overseas, 2) potential for better on-farm decisions through accessing historical production and financial information, 3) potential for cost saving at both the co-operative and individual farm level, and 4) potential for real-time information.

Moreover, interviews with farmer supplier-shareholders revealed a certain degree of variation between the intended outcomes and the actual usage of the Fencepost website. First, a number of farmer interviewees demonstrated less confidence in the cost saving function of the Fencepost website than the co-operative management staff. Second, some farmer interviewees were critical of the Fencepost website's ability in delivering real-time information. Those farmers pointed out that the news media were often able to publish co-operative news before they could see it on the Fencepost website. Third, the online discussion feature of the Fencepost website was perceived as an effective way of building a

sense of the 'conventional' farming community; however, none of the farmer supplier-shareholder interviewed in this research has actually participated in the online discussion. Research findings indicate two main reasons for such low participation. One was due to the belief of being "watched" and "managed". The other was because of the lack of interest for conducting discussion on the Web. This group of farmer interviewees expressed that they just had no time for such online discussion.

6.3 Research Contribution and Implication

6.3.1 Contributions to the Existing Literature

This research contributes to the existing understanding of stakeholder communication in the following three aspects. First of all, the research highlights a paradox. The paradox is primarily a result of dual roles of a single stakeholder may play in an organisation. Different group of stakeholders have different, sometimescontradicting, needs and requirements to an organisation. In this research, farmers are both suppliers and shareholders of the co-operative. For one, suppliers should not or do not need to access organisations' financial information, whereas, it is essential for shareholders to have access to organisations' financial information. It suggests that the paradox creates challenges in stakeholder communication. From a management point of view, it creates complexity in meeting the needs of stakeholders who hold multiple roles in relation to the organisation. From an individual stakeholder's perspective, the paradox poses confusion at two levels: one is at the information dissemination level, and the other is at an identity level. It suggests that one likely consequence of this confusion is ambiguous expectation among stakeholders to their organisation. When expectation is not met, the most likely results are frustration and disappointment which consequently affect the stakeholder relationship in a negative way. As this research showed, farmer interviewees who were affected by the paradox demonstrated frustration towards the stakeholder communication practice of the co-operative.

Secondly, consistent with prior literature on technology adoption (Ajzen, 1991; Davis, 1989), this research puts forward five factors that may influence individual stakeholder's adaptation of the Web. The factors are further divided into two categories: internal reason and external reason. Internal reasons are factors that are closely related to personal attitudes and perceptions; they are perceived value, perceived self-efficacy, and awareness. External reasons are factors that are outside individuals' control including infrastructure issues and media conflict.

Thirdly, it suggests that the Web adds flexibility to the organisations' stakeholder communication strategies by offering an additional communication method. In particular, this research show that the Web contributes to overall communication management with stakeholders through 1) increased accessibility to personalised and up-to-date information, 2) added flexibility to self-service programs, and 3) a recreated sense of 'conventional' community. Moreover, the marriage of the Web and CRM principles allow organisations to communicate effectively with stakeholders through offering highly personalised information in a timely manner without physical constraints.

Furthermore, communication is essential to build a sound relationship with stakeholders. It suggests that deterioration of the relationship between organisations and their stakeholders may lead to the generation of conflicts (Donoso et al., 2004). This research uses a New Zealand dairy co-operative as a case illustration. It should be noted that this research treats the dairy co-operative primarily as a vehicle for understanding the stakeholder communication practice, and the findings and analysis suggest a greater implications to other businesses elsewhere in the world. The researcher believes that the purpose of this research is best served by using one specific industry as an anchor for the discussion. In particular, this research looks at the Web as a form of the Internet-based communication in the context of stakeholder communication. The assumption that the Web is all the solution for stakeholder communication may be incorrect. For one, the Web can not replace face-to-face (F2F) meetings for many stakeholder communications. While the face-to-face communication medium is inefficient for reaching a large number of stakeholders simultaneously, it is a powerful medium to enable personal dialogues. Thus, the Web should be used as a complement to, rather than a cannibal of, conventional methods in stakeholder communication

strategy. Nevertheless, although the Web may not be the answer for all stakeholder communication challenges; what seems undeniable is the tremendous potential of the Web in facilitating and leveraging the management of stakeholder communication.

6.3.2 Implications to Practitioners

This research also offers some implications for organisations that intend to include the Web as part of their stakeholder communication strategy in the following ways.

First of all, stakeholders' attitudes and perception towards the Web influence their adaptation behaviour towards it. This suggests three keys in influencing stakeholders' adaptation behaviours. A key to influence stakeholders' adaptation is through helping them to recognise the value of the Web to their business. In other words, once the perceived value is increased, stakeholders become more likely to use the Web to communicate with organisations. Another key to encourage stakeholders to embrace the Web is by assisting them to increase their self-efficacy in using it. The third key is through assisting stakeholders to become fully aware of the potential benefits of the Web; and most importantly, what the benefits are for stakeholders at an individual level.

Secondly, any organisation that wants to include the Web as part of their stakeholder communication strategy needs to ensure a reliable network infrastructure, as well as have sufficient organisation resources available. Moreover, organisations need to be aware of the potential conflicts among their existing communication methods employed. A holistic approach is desired for effective stakeholder communication strategy; so that, each individual communication method employed complements each other, rather than contesting with each other.

Thirdly, the research findings show that a certain degree of senior management involvement is needed to drive the usage of the Web. This is especially true when stakeholders are a large number of individuals who do not have the access to all of the decision-making information to have a holistic view of the situation.

Nevertheless, the research findings also indicate that the drive from the senior management needs to be at an appropriate level in accordance with stakeholders' characteristics to avoid negative feeling towards the organisation. It suggests that one effective way of achieving such 'drive' is through stakeholder education programs.

Fourthly, the Web enables greater application of CRM and SSTs, and it also allows organisations to gather further feedback through creating stakeholder online communities. It suggests that the marriage of the Web and CRM principles creates huge leverage to organisations' stakeholder communication practice through offering personalised information in a quality and timely manner. As a result, organisations are able to provide personalised information and services to its stakeholders, and so, enhanced stakeholder relationships can be established.

When the Web and SSTs are combined, organisations are empowered to make their self-services mobile and available all of its potential stakeholders. It therefore adds flexibility to the self-services in a wider context. The Web removes the physical constraints, as any stakeholder can use SSTs whenever and wherever they need to. This added flexibility sequentially increases stakeholders' perceived usefulness and perceived ease of use of these SSTs, and so, it eases the adaptation process for these SSTs. Where the SSTs are employed to communicate with stakeholders, better adaptation adds strength to stakeholder communication strategy.

Moreover, the Web also provides an opportunity to build a sense of community among geographically dispersed stakeholders. As the research finding pointed out, the sense of community is particularly important for stakeholders who historically belong to local community-based industry such as dairy industry. Through recreating a sense of community on the Web, stakeholder communication is improved and so stakeholders' loyalty is increased. Organisations can also gather better quality feedback, which in turn, can be utilised in communication with stakeholders for better stakeholder relationship management.

Fifthly, stakeholder relations practitioners are suggested to take the following three considerations into account when they making stakeholder communication strategies. These three considerations are organisational needs, stakeholder

characteristics, and communication media factors. The use of the Web should be a strategic decision; in other words, it needs to be fit into the overall stakeholder communication strategies. To do this, it suggests that practitioners need to identify the benefits and limitations of the Web as a form of the Internet-based stakeholder communication; and most importantly, such identification ought to be within the context of individual organisations. Full utilisation of the Web requires the support of sufficient organisational resources. As this research illustrated, the Fencepost website is one of the eight communication methods employed by the co-operative; in that case, the Web should not aim to take over any existing method, but rather be used in an effort to complement and leverage exiting stakeholder communication practice. The second consideration is stakeholders' characteristics. It suggests that organisations should be able to identify different groups of stakeholders and the general characteristics of each group of stakeholders. That's because various group of stakeholders have different needs and requirements in relation to the communication with organisations, as well as different attitudes and perceptions towards the Web. Lastly, practitioners need to take account of communication media factors. In the context of stakeholder communication, the four communication media (i.e., F2F, Telephone, Paper, and the Internet) and their eight communication forms are different in terms of temporality, interactivity, orientation, reach, and richness. In other words, rather than universal best stakeholder communication approaches, a stakeholder communication objective is best severed using its corresponding communication form.

In brief, while the majority of the benefits of the Web remain to be proven, the primary promise of the Web as a form of Internet-based communication is evident and discernable in this research. To illustrate, the Fencepost website adds flexibility to the co-operative's existing communication practice, as well as extends the capacity of other conventional communication methods. Nevertheless, consistent with previous research (Winsor et al., 2004), it is imperative that an organisation understands the range of options available, and the advantages and limitations of these options.

6.4 Research Limitations and Future Studies

6.4.1 Research Limitations

The current research is limited in a number of ways. First of all, the sample selection criteria may be problematic itself. The sample was chosen using the'snowballing' technique, and so it could be argued that the sample was chosen for convenience of access and led to a sample of like-minded participants. However, the objective of the sample selection is not to seek a representative body of the group; rather, the sample selection aims to solicit a representation of understanding of the group. The sample is therefore arguably appropriate for this particular research at a Masters degree level. In addition, while the sample size is appropriate for the specific objective of this particular research, it suggests that this research draws data from a relatively small sample.

Secondly, this research provides a good example of the possibility to use prior literature as a framework to orient data collection and analysis, and thus avoid indiscriminate data collection and data overload. However, it is possible that the direction of the findings and conclusions of the research may have been biased by the previous literature.

Thirdly, this research is limited due to time and the scale of the research for this level of study, as well as the research skills of the researcher in conducting qualitative research.

6.4.2 Future Research Areas

Further exploration with a larger number of interviewees is needed. In particular, future research should include other groups of stakeholders who have different sets of characteristics, so as to challenge the findings of this research. For instance, this research focuses on farm owner-operators who are both suppliers and shareholders of the co-operative. Put differently, the sample excludes sharemilkers and contract milkers; those who have a supplying relationship with the co-operative but without a shareholding interest. However, the relationships

with them are also critical, because the co-operative still has to be interested in the quality of the raw material and the continuality of supply. This suggests that further research may include sharemilkers and contract milkers in its research sample.

This research identified five factors that influenced stakeholders' decision to either reject or embrace the Web. There are bound to be more factors that have an impact on the adoption of the Web in stakeholder communication. Future research may aim at developing a complete list of influencing factors. Similarly, future research may also look at the three considerations (i.e., organisation needs, stakeholder characteristics, and media factors) in more details, and so more detailed considerations can be developed under each of the three key considerations to form some type of framework or guidelines.

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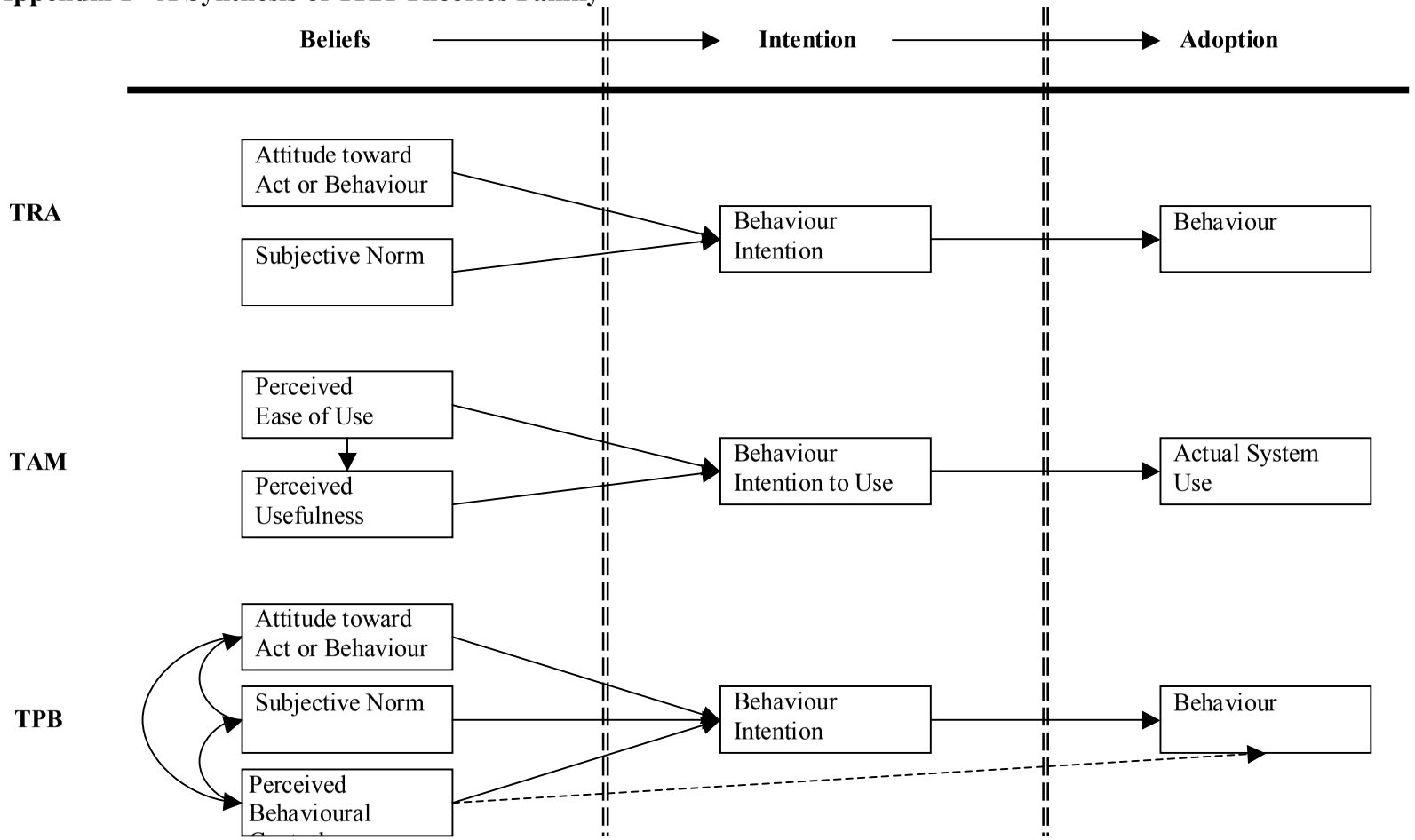
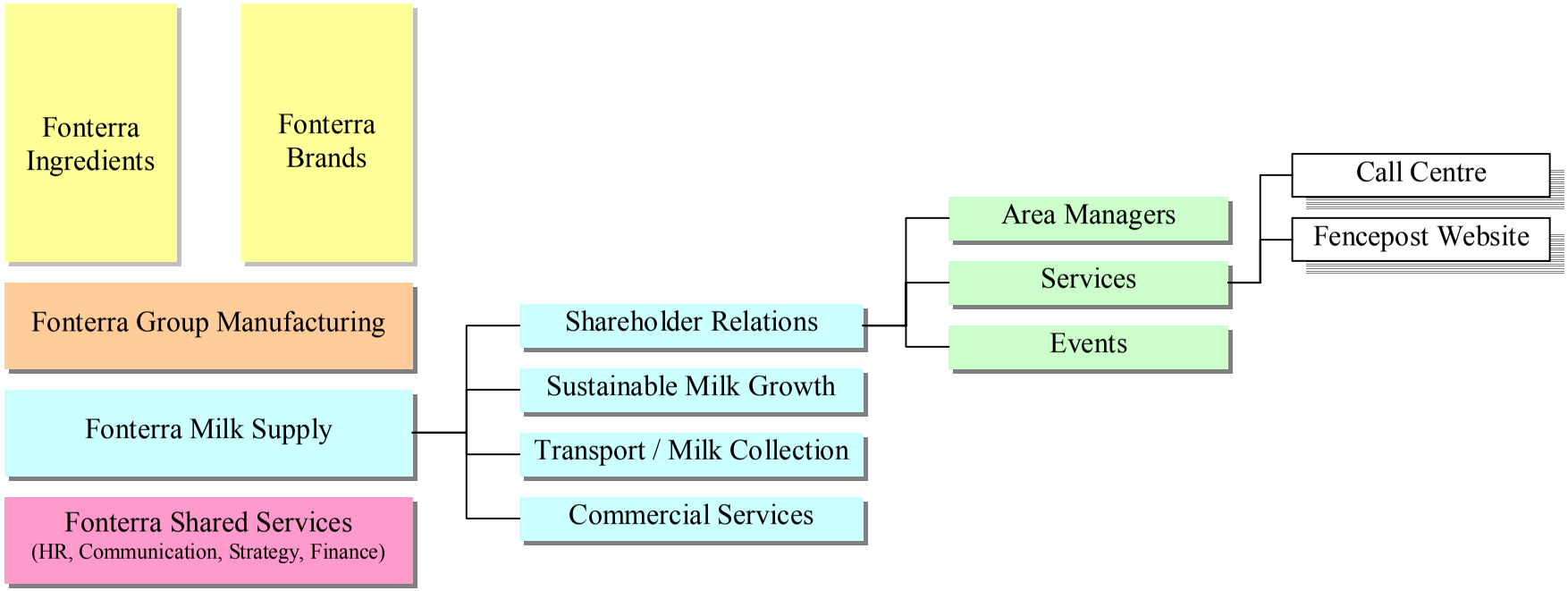
Appendices

Appendix 1 - A Synthesis of TRA Theories Family



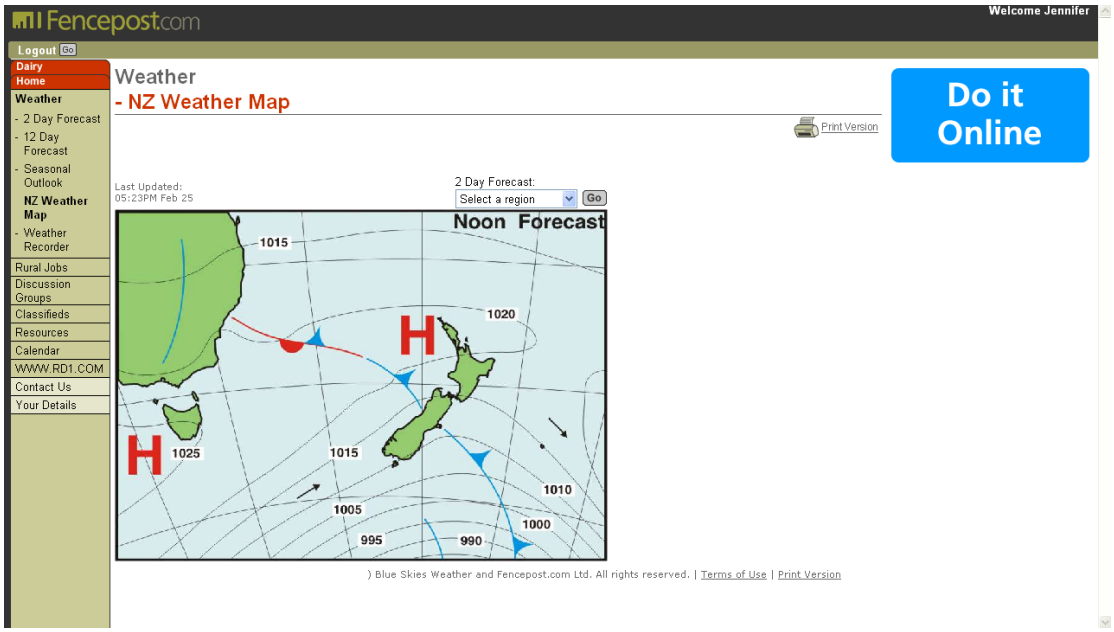
Appendix 2 - Fonterra Business Model



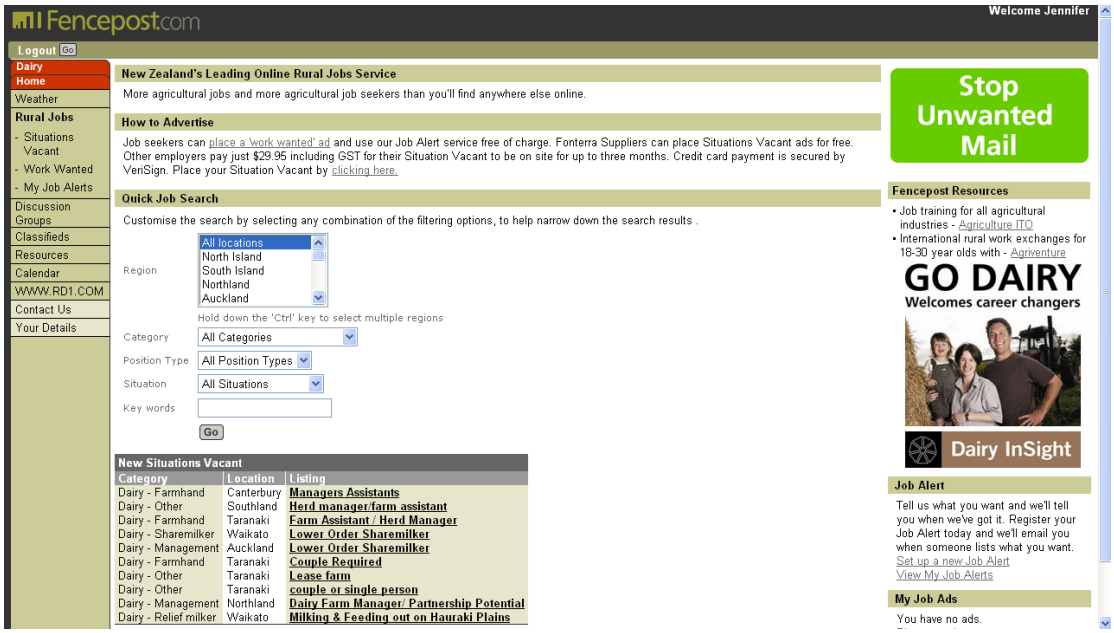
Appendix 3 – Screenshots of Fencepost Website

Home Page

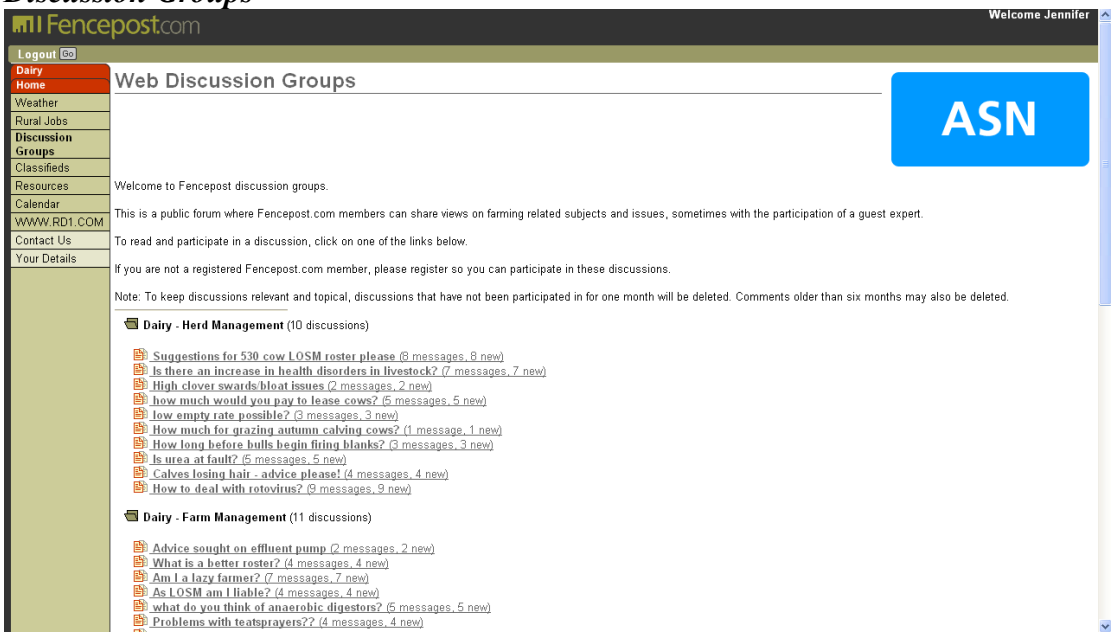
Weather



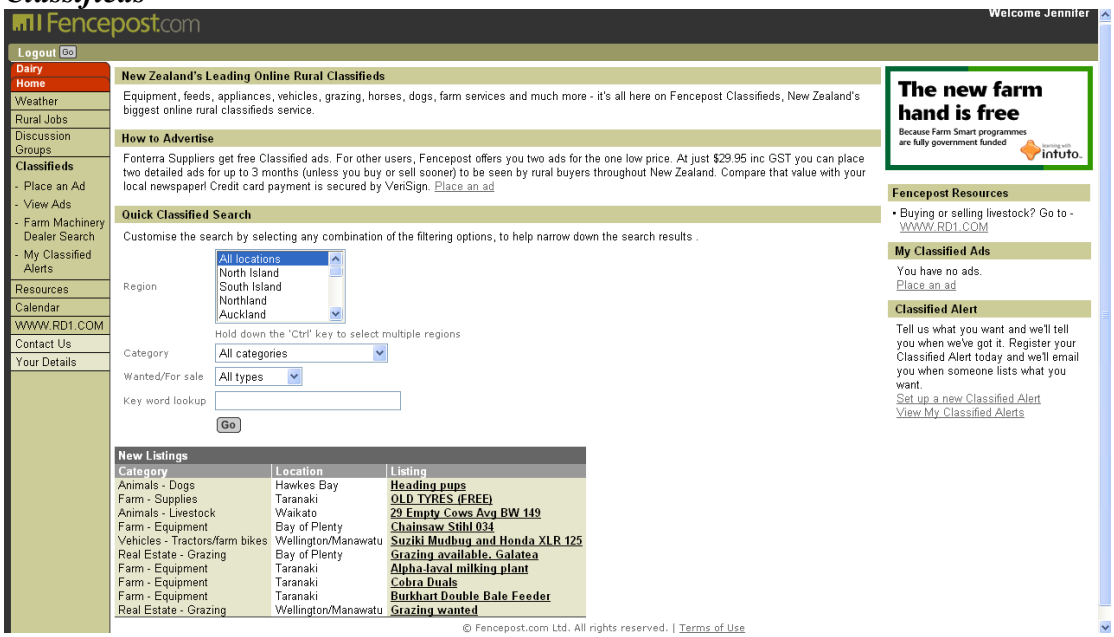
Rural Jobs



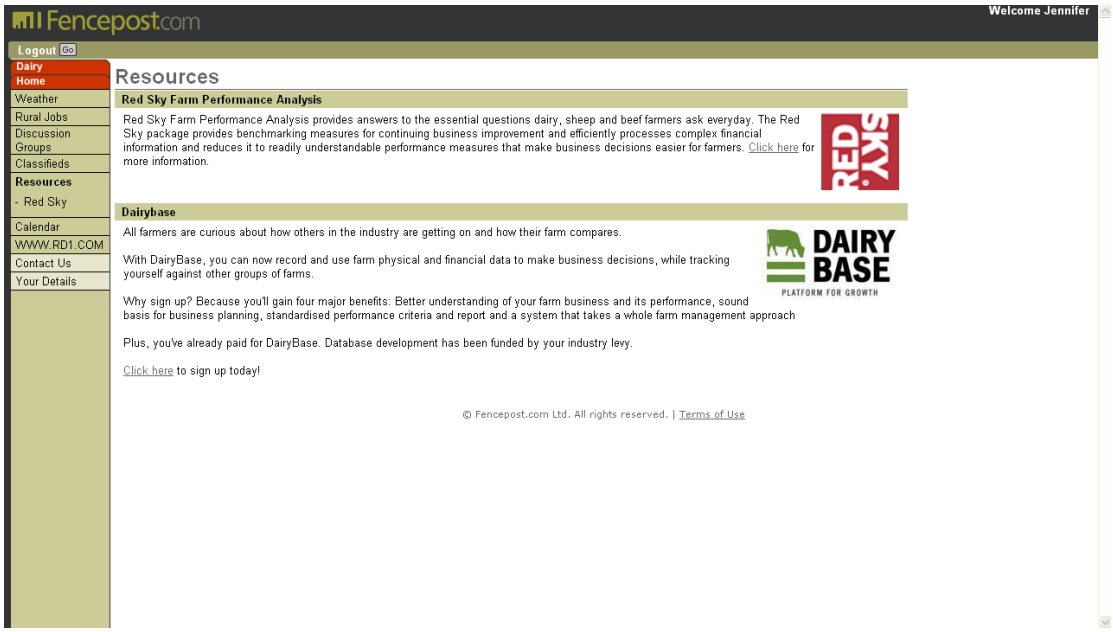
Discussion Groups



Classifieds

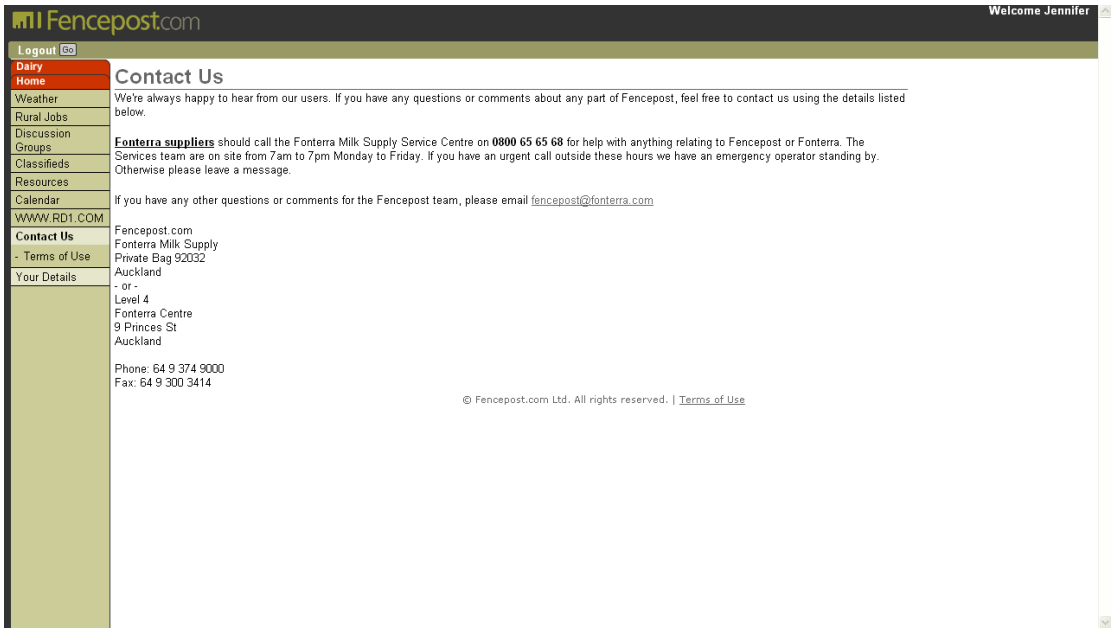


Resources

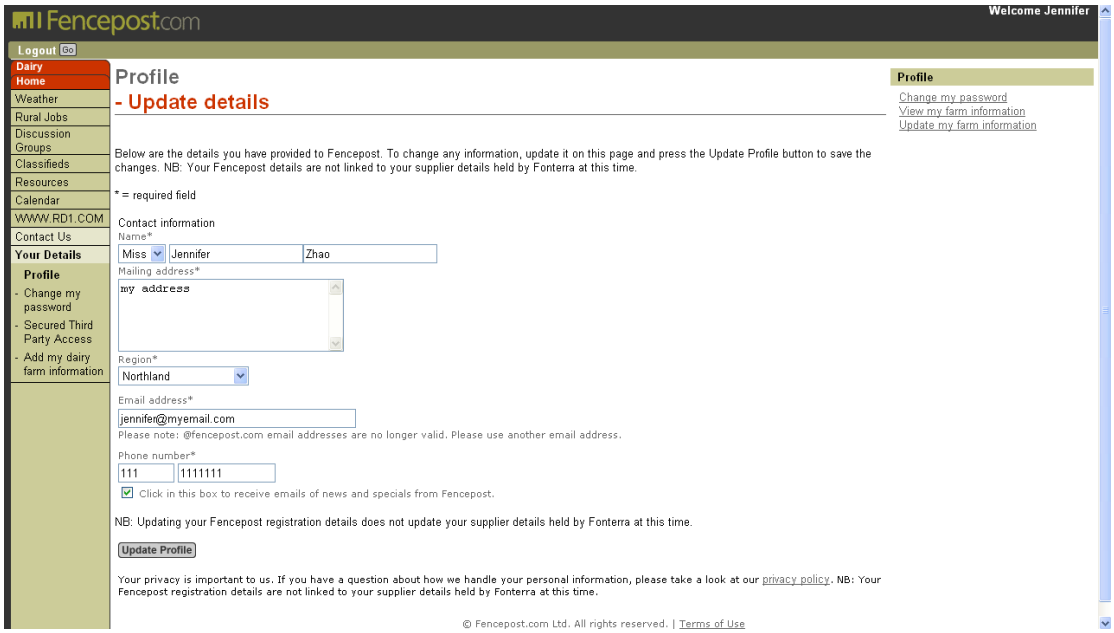


Calendar

Contact Us



Your Details



Appendix 4 - Interview Guideline

For farmer supplier-shareholders:

- What are the most important communication methods (phone, fax, web, local meetings, and email) used by Fonterra to pass information to you?
- Which of these communication methods do you prefer, and why?
- How many times have you used the Fencepost website in the last 4 weeks?
- Do you think you have been informed of all of the information you need from Fonterra? If not, what kind of information is missing?
- Do you have any preferred communication methods? That is, if you need information from Fonterra, which communication methods (local meeting, phone, fax, email, and/or web) would you try first, and why?
- Do you think that Fonterra has provided you with the information you need and access to services you want in the way you want it? Why?
- What do you value most in your business and/or personal relationship with Fonterra?
- In your opinion, what information about supply/shareholding is Fonterra successfully delivery to you though the Fencepost website?
- In your opinion, what information about supply/shareholding could Fonterra be delivery through the Fencepost website?
- Can you describe your experience with Fonterra?
    - What would you like to see for change?
- Is there anything that you would like to be involved in more in the operation of Fonterra?

- Farm size (300 cows)? Small or Large?

For Fonterra management staff:

- What is the rationale for the Fencepost website in terms of supplier-shareholder relationship management?

- What has the Fencepost website achieved to date?

    - What are the short-term and long-term aims/objectives of the Fencepost website portal?

- What do you think are the major benefits that the Fencepost website will bring to Fonterra in term of better communication with supplier-shareholders?

- What do you think is the most valuable and critical thing in the business and/or personal relationship with individual supplier-shareholders?

- Fonterra has been aiming to create a true two-way flow of information throughout the company and its supplier-shareholders; do you think Fonterra has achieved that yet?

    - It not, what do you think still needs to be done?

- Do you think Fonterra is justified in asking farmers to become a lot more comfortable with using electronic information exchange, and requiring farmers to take responsibility for upskilling themselves and their peers in the new systems, such as the Fencepost website?

- Why do you think people choose to supply milk to Fonterra?

- What would you like to see change?

- What do you think are the most interesting things that farmers would like to be involved in, and on what basis?

- What is the vision for the Fencepost website?

Appendix 5 - Research Information Sheet

Researcher's name and contact information:

Yanan Jennifer Zhao
Phone: 0211026397
Email: yjz2@waikato.ac.nz

Supervisor's name and contact information:
Professor Bob McQueen
Professor Ecommerce Technologies – Management Systems
Waikato Management School
The University of Waikato
Phone: 07 838 4126
Email: bmcqueen@waikato.ac.nz

Research Information Sheet

Overview
This research is being conducted as part of the requirement for the Master of Management Studies (MMS) degree. For this research, the student, under the guidance of an academic supervisor, devises and carries out a research study in the area of management.

Who is responsible?
The researcher's name is Yanan Jennifer Zhao. The researcher's supervisor is Professor Bob McQueen, Professor of ECommerce, in the Management Systems Department, the University of Waikato.

You can phone the researcher at 0211026397, email the researcher at yjz2@waikato.ac.nz or alternatively, contact the researcher's supervisor at 07 838 4126, email him at bmcqueen@waikato.ac.nz.

What is the research study about?
The research project is about finding out how Web Technologies can support the management of the relationship between a dairy company and its suppliers/shareholders. The purpose of this research is to explore supplier relationship management in a co-operative business setting. In particular, the objectives of this research are:

1. to identify the communication methods employed by a co-operative (i.e., Fonterra) between the processing firm and its farmer suppliers/shareholders;
2. to describe the experiences, attitudes, and perceptions of Fonterra milk suppliers/shareholders towards Fonterra's supplier relationship management practices, particularly, the usefulness and effectiveness of the Fencepost website to the dairy farmers;
3. to investigate how effectively these communication methods are, i.e., have they achieved what they have designed to?

What will you have to do and how long will it take?
The researcher will schedule a time with you to meet at your convenience. In most of the cases, the meeting will last about 30-40 minutes. You will be asked a set of questions during the interview, which will be audio taped for later reference. In most of the cases, the interviews will be carried out face to face; phone interviews can be arranged, if that would be more convenient for you. In some cases, the researcher may request a further follow-up interview with you for some additional clarification.

What will happen to the information collected?
The source information gathered in these interviews will remain confidential; only the researcher and the researcher's supervisor will be privy to the notes, tapes, and any other individual information. No participants will be named in study reports, and their identities will be disguised if quotations are used in the thesis.

The notes taken from the interview and the audio tape transcripts will be used by the researcher to carry out data analysis of the topic. The tape recording will be erased. While transcripts will be kept by the researcher for the purpose of further study on the topic, no individual, other than the researcher and the researcher's supervisor, will have access to the transcripts after the study.

Subsequent Publications
The expected output of this research is a thesis report which is completed as part of the researcher's Master of Management degree requirement. There may be the opportunity to publish this research in a journal and/or as a conference proceeding.

Declaration to participants
If you take part in the study, you have the right to:

- Refuse to answer any particular question, and to withdraw from the study at any time.
- Ask any further questions about the study that occurs to you at any time.
- Be provided with a summary of the finding from the study when it is concluded, if requested.

Appendix 6 - Participant Consent Form

Consent Form for Participants

I have read the **Information Sheet for Participants** for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I also understand that I am free to withdraw from the study at any time, or to decline to answer any particular questions in the study. I agree to provide information to the researchers under the conditions of confidentiality set out on the **Information Sheet**.

I agree to participate in this study under the conditions set out in the **Information Sheet** form.

Signed: _____

Name: _____

Date: _____

Researcher's Name and contact information:

Yanan Jennifer Zhao
Phone: 0211026397 (cell) 07 856 7217 (Home)
Email: yjz2@waikato.ac.nz

Supervisor's Name and contact information:

Professor Bob McQueen
Professor Ecommerce Technologies – Management Systems
Waikato Management School
The University of Waikato

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