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A Conceptual Framework for Research into Co-operative Enterprise

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CONTENTS

A CONCEPTUAL FRAMEWORK FOR RESEARCH INTO CO-OPERATIVE ENTERPRISE

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ABSTRACT

This paper outlines a conceptual framework for approaching research into the co-operative enterprise business model and its sustainability. The model examines the co-op from three perspectives, that of the member, that of the co-op as a business entity, and the wider systems level. Key units of analysis for each level are outlined. Also considered within the model are three primary objectives for the co-op: i) the need to build identity; ii) the need to build social capital and iii) the need to build sustainability. The application of resilience architecture to help understand the dynamic behaviour of the co-operative enterprise over time is also discussed.

Key words: co-operative enterprise, social capital, conceptual framework, member value.

INTRODUCTION

Co-operative enterprises are unique business models which fit uncomfortably into existing organisational paradigms. This is due to their dual function or 'symbiosis' in which they simultaneously serve both an economic and a social purpose (Fairbairn 1994). As noted by Levi and Davis (2008), co-operative enterprises are the *'enfants terribles'* of economics; too socially focused for mainstream economics and business, but too economically focused for the non-profit or "third" sector.

The establishment of a co-operative is justified where the cost of contracting with a firm's suppliers or customers exceeds the costs of these suppliers and customers owning the firm (Hansmann 1996). From an economic perspective the co-operative enterprise differs from an investor owned firm (IOF) in at least five significant ways (Van Sickle and Ladd 1983):

1. The customers/suppliers are also the owners/shareholders;
2. The price of the co-op's share capital is generally fixed by its articles of incorporation and are not openly traded;
3. Co-ops can offer members deferred patronage refunds, essentially returning to them the cost of their transactions with the co-op (once expenses have been deducted);
4. Co-ops can enjoy tax exemptions and may pay no tax or a single tax on income; and
5. Co-ops exist for the sole purpose of delivering value to their members.

The 'symbiotic' or dual function of the co-operative is mirrored by the dual role of its members who are both owner-investors and patrons (e.g. customers-suppliers). Nilsson (2001) points to the tensions that this dual

role can generate and the impacts that this can have on the management of the co-op. Where they place more importance on their patronage role the co-op will tend to operate in a traditional manner. This Type I 'Traditional Co-operative' encounters only minor property rights problems, and is an effective counter to market failures. Ownership or shareholder rights are of much less concern to members than their ability to receive the benefits that accrue from patronage.

When both investor and patronage interests are significant the co-op moves towards a Type II "Entrepreneurial" model which may allow for proportional member investment, appreciation of equity and the inclusion of non-trading investors through a multiple-class share structure. The Proportional Investment Co-operatives, Member-Investor Co-operatives, New Generation Co-operatives, and Investor-Share Co-operatives (Chaddad and Cook 2004) represent a range of ownership right structures that have been adopted by this type of co-op.

Should members view their investor role as more important the co-op will face pressure to demutualise and move towards an investor-owned firm (IOF) business model. This Type III 'Ex-Co-operative' no longer has property rights concerns but is also not able to address market failures. Members can redeem their equity value through the sale of their shares. By contrast, where the members don't value either role the co-op degenerates. Like any business co-ops will fail when they do not offer an attractive value proposition to their customers and owners (Cook and Illiopoulos 1999).

These concepts focus on the organisational dynamics of the co-operative enterprise and help to explain aspects of their structure and capacity for survival. However, there is a need for a much wider perspective to be taken in order to fully understand the co-operative enterprise. This paper outlines a conceptual framework for research into co-operative enterprise from a business model perspective. It seeks to provide a conceptual architecture that identifies the key units of analysis that should be considered when researching the co-operative with attention to both its economic and social role.

In the following sections we outline a proposed conceptual architecture for undertaking research into co-operative enterprise. This framework seeks to address the co-operative at the macro and micro levels and to draw together a range of theories from different disciplines that can be of use in understanding the behaviour of co-operatives. This framework seeks to provide a 'road map' for future research by identifying the key units of analysis and their inter-relationship.

THE PROPOSED CONCEPTUAL ARCHITECTURE

Figure 1 illustrates a proposed conceptual architecture of the co-operative enterprise for future research. In subsequent sections each element is explained in detail. The overall framework contained in this model comprises three levels of analysis focusing on:

1. The individual member level,
2. The co-operative enterprise level and
3. The macro-environment or 'systems' level.

This is consistent with the approach generally taken to the investigation of business entities in which attention is given to the managerial characteristics of the firm's owners, the organisational configuration of the business venture, and the task environment in which the firm is operating (D'Amboise and Muldowney 1988). This three-part framework has also been used to examine innovation within firms (Tan et al 2009).

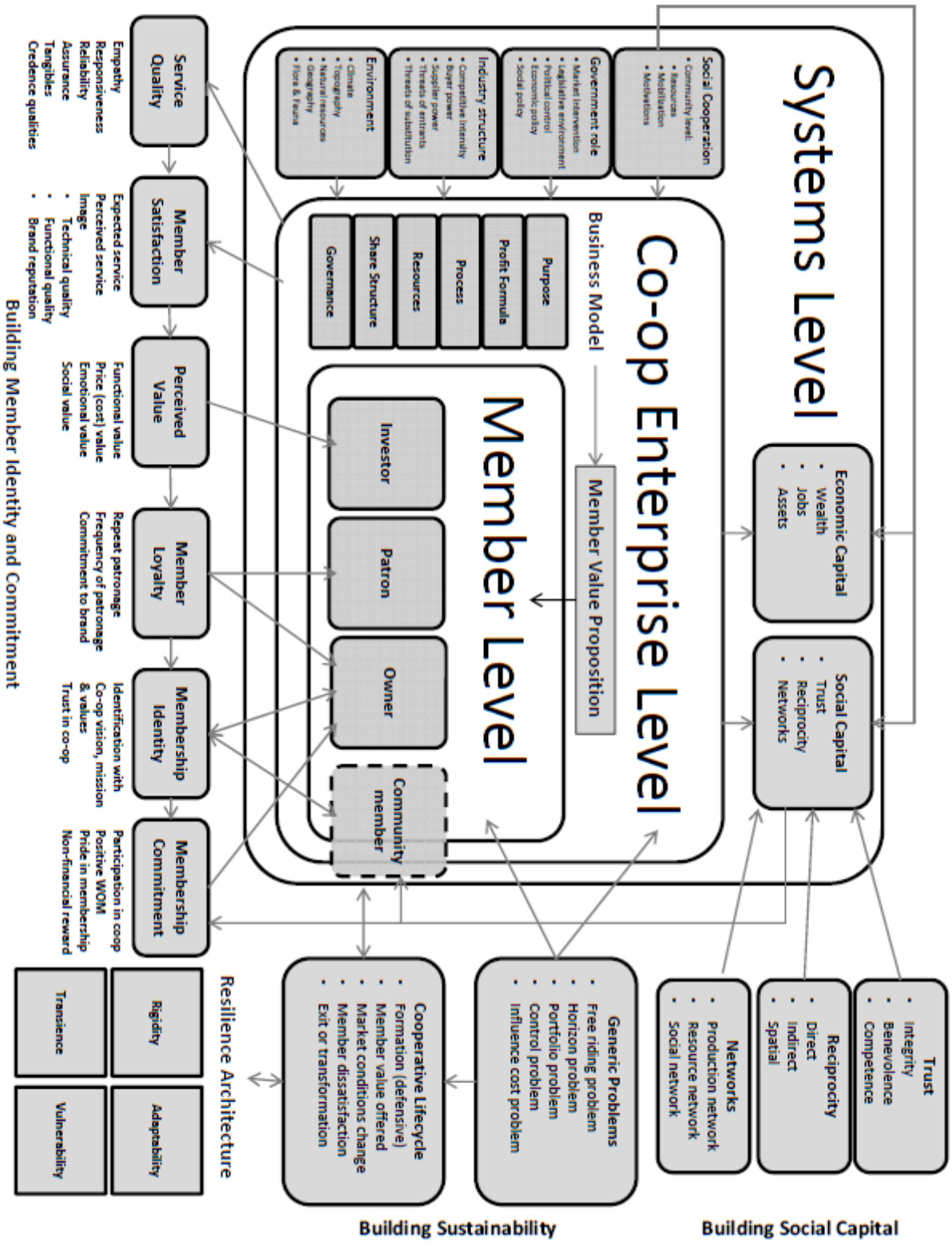

FIGURE 1: CONCEPTUAL FRAMEWORK FOR CO-OPERATIVE ENTERPRISE RESEARCH

Within each level there are key units of analysis that relate to the roles and characteristics of the members and the co-operative enterprise, as well as the key inputs and outputs from and to the systems level environment.

Surrounding these three interwoven perspectives are a series of important conceptual and theoretical constructs that need to be considered in undertaking research and analysis. These are:

1. The need to build member identity and commitment with the co-op;
2. The need to build social capital from the co-op;
3. The need to build sustainability within the co-op.

It can also be seen in Figure 1 that there are a series of directional arrows indicating the nature of influence effects of one or more elements upon another. The nature of these influence effects are discussed further in this paper.

MEMBER LEVEL ANALYSIS

At the level of the individual member there is the need to recognise the multiple roles played by the members within a co-op. As shown in this model the member has at least four distinct roles that they play: i) investor; ii) patron; iii) owner and iv) community member. Although these roles are intertwined their analytical separation within this framework is deliberate. This is justified on the grounds that each has something different to tell us about the dimensions of membership. The role of community member stands somewhat outside rather than within the co-op, but can have important implications so is included within the framework.

MEMBER AS INVESTOR

As noted by Nilsson (2001) the co-op member has a role as investor. This involves them being required to invest some form of financial capital into the co-op in order to secure or retain membership. In many co-operatives this can be a small, almost inconsequential investment, but in others (e.g. producer co-operatives), the investment level can be substantial. Much attention has been given in the co-operatives literature in relation to ownership rights and how a co-op might reward and recognise shareholders (Chaddad and Cook 2004).

Of importance here is how the co-op recognises, values and ultimately returns investor capital within its business model. According to Fairbairn (1994) this issue of how investment returns and profit distribution is handled within the co-operative enterprise has been one of the most important areas for debate during the second half of the last century.

There are wide ranges of funding options available to co-operatives that can deal with different levels of investor. For example, Van Bekkum and Bijman (2006) identified six financing options used by co-operatives comprising: i) appreciable and/or internally traded shares; ii) externally traded subordinated bonds; iii) external corporate investors at subsidiary or group level; iv) publicly listed or preferred stock; v) conversion into member-owned limited liability companies and vi) converted listed co-operatives. Each of these options has different ownership rights as well as returns to investment.

MEMBER AS PATRON

The member's role in the co-op as a customer or supplier is of critical importance and requires attention to be given to the nature of the supply-chain relationship that exists between the member and the co-operative. Member patronage is focused on several factors:

1. **Price paid or received** – this relates to the prices paid by the co-op for inputs in producer owned enterprises or charged by the co-op in consumer owned enterprises.

2. **Transaction costs** – in addition to the prices paid or charged, there is the efficiency of the co-op in transacting its business with the member. Co-operatives have been accused of being less efficient than IOF in some aspects of their management, but this is not always the case. The patronage refund, paid as a dividend in proportion to the extent to which members trade with the co-operative, ensures that members pay only what goods and services actually cost plus the operating expenses of the co-operative and allocations to reserves. There is often considerable member interest in the size of this co-op dividend, and this can serve as an important driver of efficiency. Where high levels of trust are found in co-operatives, this can also serve to reduce members' long-term transaction costs.

3. **Service quality** – a final point of focus is the overall level of service quality provided to members by the co-op. This is associated with the intangible aspects of the co-op's relationship with its members. However, it is an important element in building identity with the co-op as will be discussed later.

Although co-ops can trade in tangible commodities and products, in many respects the co-op, regardless of what else it does, is fundamentally a service organisation. Members will be keen to continue to provide patronage where they feel that they are getting fair prices, efficient transactions and quality service.

Giannakas and Fulton (2005) have compared the co-op with the IOF in terms of agricultural supply chains. They suggest that the co-op's capacity to offer a member welfare maximising strategy can serve to enhance innovation and lower price inputs. This ability for a co-op to have a favourable impact on prices within agricultural markets is a major benefit to members as patrons (Tennbakk 2004). It also serves to encourage other people within the community into membership. For example, Drake and Llewellyn (2001) describe how financial co-operatives and mutuals help to 'keep the market honest' by reducing the potential for excessive profiteering by IOFs. This is an important externality that supports the existence of institutional 'biodiversity' in the system (Haldane 2009).

MEMBER AS OWNER

The member's roles as investor and owner focus primarily on 'member economic benefits' such as return on investment or patronage outcomes. This is underpinned by expectations of 'distributive justice' (Fehr and Schmidt 1999), whereby economic returns are distributed through sensible rules and fair consideration of members' relative contributions (Ownership Associates 2001). The third role, member as owner, tends to focus on 'member control'. This is underpinned by expectations of organizational democracy and 'procedural justice' (Rawls 1958; 1972; Folger 1996; Folger and Cropanzano 2001), whereby the *status* of ownership provides rights for members to have a voice in decision-making and the *practice* of ownership demands that members fulfil their responsibilities to participate in the democratic governance of the organization.

While the investor and owner roles of members may be considered to be closely intertwined, their separation within this framework is deliberate and justified on the grounds that ownership carries greater responsibilities than is typically associated with investors. For example, many people own shares in publicly listed companies. Even though they technically 'own' a portion of these firms they are generally powerless in terms of their ability to shape the strategic future of such firms, and they don't view themselves as owners. Many of the taxonomies associated with the classification of co-operatives are focused on membership rights (e.g. Nilsson 1999; Chaddad and Cook 2004). In general the more homogeneity there is between members the more easily the co-op can be managed (Palmer 2002). However, there also appears to be a link between ownership rights and the level of member trust in the co-operative (James and Sykuta 2005).

Ownership requires the member to participate actively in the management of the co-operative. This includes attending annual general meetings, exercising voting rights and potentially standing for board membership. The separation of ownership rights from investor rights also reflects the potential for some co-operatives to grant share capital to investors who don't have voting rights. An example is the Australian Dairy Co-operative Murray Goulburn that has "wet" and "Dry" members. The first are active members who provide patronage to the co-op. The second are retired farmers who retain their share capital in the co-op but don't have voting rights.

Beyond the *status* and *practice* of ownership, there is another commonly-held association with a psychological '*sense of ownership*'. This defines a relationship in which people feel part of something and carry a sense of attachment and belonging. This can in turn lead to a sense of cohesiveness that derives from the co-operative mattering to its members. For Clarke et al (2007: 128):

> *'Ideas of belonging carry double meanings. Belonging can both locate an identity and express a relation of ownership: I belong here; this belongs to me'.*

While the status and practice of ownership in co-operatives reflect the idea that 'this belongs to me', the 'belonging' component of membership (i.e. the sense 'I belong here') is supported by the presence of a shared connection: the belief that members share common resources - common history, assets, symbols, experiences, and so on. It is not always necessary that group members have participated in the history in order to share these common resources, but they must identify with it.

Members' sense of ownership often varies in 'intensity' (Simmons and Birchall 2009), or the strength of 'feeling of belonging or of sharing a sense of personal relatedness' (McMillan and Chavis 1986: 9). In practice it cannot be assumed that levels of intensity will be high in all co-operatives, or that such intensity is an essential component of co-operatives' fitness for purpose. These are both context-dependent, empirical questions that require further research. For example, Ownership Associates (2001) suggest that while members' psychological sense of ownership will not be felt strongly until they trust that they will share in the economic benefits of membership, economic incentives are not necessarily sufficient and there is a need for a culture that involves people beyond the purely financial level. In this way, the co-op's role as a social enterprise and its capacity to sustain its business model over the longer term is likely to be contingent also on its ability to build a non-economic foundation within its relationship with members.

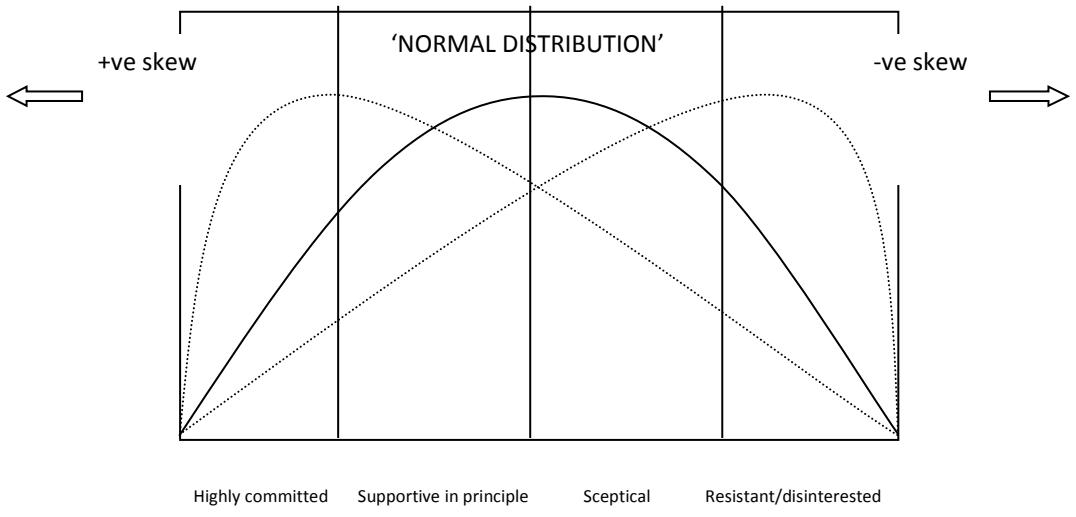

FIGURE 2: DISTRIBUTION OF MEMBER COMMITMENT

Clearly, member commitment can vary. Research has shown that we can assume a normal distribution here, with some highly committed, some supportive in principle but passive in practice, some sceptical but compliant, and others resistant or disinterested. Changing the 'skewness' of these normal distributions is generally a key task in making more participatory approaches work (Birchall and Simmons 2010). Figure 2 illustrates this concept.

MEMBER AS COMMUNITY MEMBER

Community support is a valuable systemic resource for many co-operatives (e.g. Sevarlic, Nikolic and Simmons 2010), and a special feature of co-ops is their ability to be embedded in their local community (Levi and Pellegrin-Rescia 1997). The member's role as a social actor and member of their community is a feature that should not be ignored. Congruence between the goals of the community and the goals of the co-operative can result in a virtuous circle and reciprocal loyalty. Hence, where the level of congruence is high, reinforcement of the member identity can also serve to strengthen the wider community identity and vice versa. Investment in this relationship can also be important for the co-op to reinforce to the member its co-operative principles as a mechanism for building social entrepreneurship and innovation within the enterprise (Novkovic 2008).

CO-OPERATIVE ENTERPRISE LEVEL ANALYSIS

At this level the key point of focus is the co-operative enterprise as a business model. The Business Model framework that has been developed for this study (Mazzarol, Mamouni Limnios and Reboud 2011), and comprises several key elements that generate a member value proposition (MVP) that impacts directly on the member's willingness to engage with the co-op. Each of these elements is discussed below:

PURPOSE AND MEMBER VALUE PROPOSITION

Within a conventional business model the focus is typically on the firm's product and how it might be configured to offer a superior customer value proposition (CVP) (Chesborough and Rosenbloom 2002; Osterwalder, Pigneur and Tucci 2005; Johnson, Christensen and Kagermann 2008; Teece 2010). However, in the co-op the purpose for which the enterprise was created is central to what keeps its members involved (Shah 1996).

In a study of agricultural producer co-ops Krivokapic-Skoko (2002) found that members derived at least five main benefits from their membership:

1. Market access and market risk reduction
2. Financial benefits from enhanced pricing
3. Improved productivity from the pooling of resources and bulk purchasing
4. Access to resources such as information, knowledge and technology, and
5. Community building opportunities.

It is evident that a co-operative can build its MVP around both economic benefits and social benefits. Some of these will be measured in direct and tangible items (e.g. pricing and patronage rebates), while others will be indirect. This role of the co-op as having the ability to deliver more than a financial or economic benefit to members needs to be better understood and also better measured and communicated to members. This is what Nha (2006) refers to as "cooperative value" or the set of benefits that members expect to co-op to provide that cannot be obtained from alternative forms of enterprise.

While things that members value tend to fall into three categories (services, outcomes, and trust) member value also addresses issues such as equity, ethos and accountability. Hence, as Kelly and Muers (2002 p:4) point out:

> *"Value and values are closely linked. Inappropriate values may lead to the destruction of [member] value. Current practice sometimes fails to consider, understand or manage this full range of factors".*

According to Austin, Stevenson and Wei-Skillem (2006) the social enterprise deploys its resources in a different way to that of conventional IOF entities. They propose a conceptual framework that draws together people and capital to exploit an opportunity (purpose) thereby creating a social value proposition (SVP). This occurs within the wider context of the political, economic and social environment in which the enterprise is operating.

Streeck and Schmitter (1985: 129) point to the way in which the self-interested collective action commonly associated with member-based organisations may:

> *"Strive for a 'categoric good' which is partially compatible or identical with a 'collective good' for the society as a whole".*

This becomes a question of the extent to which the assumed 'collective self-interest' of organisational members (where the sense of belonging is assumed to be atrophied) overlaps with the assumed 'collective interest' of members of the public, or of the community, or of social categories (where the sense of belonging is assumed to be higher) (Simmons and Birchall 2009). While an overlap between member value and wider social value may often be beneficial, this is not a guaranteed outcome. Neither, so it has been argued, should this necessarily be an explicit organizational goal (Birchall and Simmons 2009):

> *"We have to distinguish between the primary aims of the co-operative, which are to meet the members' economic needs, by-products such as improved nutrition and increased capabilities, and aggregate effects in the wider society such as lower mortality rates or higher employment levels".*

It should be noted that while social enterprises are created primarily for social purposes and IOF primarily for economic purposes, the co-operative sits in the middle as a hybrid form that seeks to achieve both economic and social purposes. However, this hybridity of purpose should not be seen as a compromise: the co-operative business model has established its utility on the basis of a robust combination of characteristics that contribute to its potential for 'co-operative advantage' (Spear 2000). A clear sense of role is therefore essential. Key questions that should be asked in relation to the co-op purpose as a business model are:

- How does the co-op deliver value for members?
- What are the best mechanisms to assemble the co-op's resources to deliver this value?
- How might this be sustained so as to ensure that members do not drift away or seek to secure such benefits from other business forms?

PROFIT FORMULA

The profit formula element of the business model refers to the way in which the entity makes money and distributes returns to shareholders. It encompasses how it will charge for its products and services, where it will incur costs and how it will seek to make a profit margin on its transactions along with the size of these

margins. The cycle of business activity including the cash cycle, time to break-even and the cost-profit-volume analysis that underlies the economics of the business model are examined in this area.

For co-ops the **revenue model** may be determined by analysis of the price x volume and might impact on the MVP in terms of its ability to keep costs of supplies, handling and storage down for members through the collective effort, or offer members high prices for their products. The co-op's **cost structure** is also part of this analysis and will examine how costs are allocated including fixed and variable costs and the effect of economies of scale. The **margin model** examines the profit that can be generated by the co-op as it engages in its transactions.

The co-operative enterprise can be a superior business model to the IOF under certain circumstances (Rhodes 1983). However, there is a tendency for many co-ops to maintain unprofitable products or services in order to satisfy member demands (Garoyan 1983).

An aspect of co-ops that may not normally apply to IOF entities is the need to examine not only the cost-profit-volume issues associated with the entity, but how their operations impact on the cost-profit-volume attributes of members. This ability to see the member as an integral part of the co-op's business model is an important difference between the co-operative organisation and the IOF. Whereas an IOF seeks to maximize profits, a co-operative aims to optimise entity and member-patron profit making. Compared to IOF entities the co-operative is considered to be less predictable in how it approaches profit taking as its strategy is often determined by the interplay between the interests of its members (Royer 2004).

However, the co-operative can be financially competitive against IOF firms (Sisk 1982). Some evidence has suggested that the co-op can even offer superior performance against IOF entities under certain conditions. This is because if both firms have similar cost structures, the co-op will pay patronage dividends and the market price per unit to its members, while the IOF will pay dividends out of profits. Members who can secure competitive prices and patronage rebates will find the co-op more attractive than the IOF. The co-op may also be less concerned over lower profit margins than the IOF so long as its members are satisfied (Rhodes 1983).

KEY RESOURCES

Key resources refer to the people, equipment and other assets that the entity needs in order to fulfil the mission or purpose and deliver the MVP. There are several important categories (e.g. Churchill and Lewis 1983):

(i) Financial resources (cash, borrowing power)

(ii) Personnel resources (numbers, depth, quality of people)

(iii) Systems resources (degree of sophistication: IT, planning and control systems)

(iv) Business resources (customer relations, market share, supplier relations, manufacturing/distribution processes, technology, reputation).

Resources can therefore encompass the coop's' "core competencies" or the skills and knowledge that are required to compete at the required level. It can also encompass its organisational structure, governance and team composition, plus the physical facilities that will be needed to house the operations. Another important part of the resource set is the partnerships and strategic alliances that are going to be needed for the entity to fulfil its purpose.

The resource profile in co-operatives may differ from IOFs in similar business sectors, both positively and negatively. For a co-op key resources may be physical facilities and the financial assets required to acquire and maintain them. It will also include the structure of the Co-op Board and the size, quality and composition of the senior management team. Intangible assets such as the co-op's reputation, brand names and culture may be important, plus any formally registered intellectual property (IP) that might be required to fulfil the MVP.

KEY PROCESSES

Key processes refer to the things that the entity needs to do with its resources in order to deliver its product or purpose and achieve its profit formula. These processes are embedded in the operational and human resource management practices of the organisation, and they are controlled by its rules, policies, metrics (KPI) and guided by the organisational culture.

For a co-op the focus should be on how it will engage with its members and the nature of the relationship it will have with them. Where there are different types of member with different needs processes will need to be adjusted to ensure that the MVP is achieved.

Such processes importantly include organizational democracy. While members enjoy rights to participate in organizational decision-making processes, two types of responsibility might also be identified:

1. **Active Voice** – giving the time energy and thought to contribute to good decisions, committing to attend meetings, gathering information and investigating alternatives; and

2. **Responsible Voice** – where other people's expertise is recognised and it is clear to all concerned who makes the final call, who provides input and who receives information after the fact (Ownership Associates 1998).

For Clegg et al (2006: 338), the demands of organizational democracy are therefore often best met by a system of 'polyarchy', whereby 'some take care of the strategic agenda, while others contribute to the 'local rules of the game' that influence their personal fate'.

An important question for the co-op is how it can ensure that it is able to constantly deliver value to its members? This will typically involve an examination of the dynamics of each point at which the co-op has contact with its members and how these contact or engagement points can result in value being delivered. Both 'hard' issues (such as strategies, structures and systems) and 'softer' issues (such as skills, behaviours, attitudes and leadership style) need to be addressed to ensure ongoing congruence between the goals and needs of the members and the activities, projects and initiatives of the organization. Attention should be subsequently given to configuration of the co-op's HRM systems, culture, operations management, rules, policies and metrics to ensure that it is able to deliver on the MVP in a sustainable way.

An important aspect of the key processes undertaken by many co-ops is that of a supply chain. This is particularly the case for producer-owned co-ops. Their ability to manage supply chain relationships and offer attractive terms of trade and related services is a key benefit to members (Goddard, Boxall and Lerohl 2002). Co-ops have been found to create stronger supply chain linkages that IOF entities and this has been identified as enhancing their survival rate and helping to bring members into the co-op's ownership structure (Nunez-Nickel and Moyano-Fuentes 2004).

SUPPLY CHAIN RELATIONSHIPS WITHIN THE CO-OP

A supply chain is a network of organisations engaged in a series of upstream and downstream linkages involving different processes and activities designed to produce value in the form of products and services

(Christopher 1992). Effective supply chains must possess a common purpose amongst all members as well as willingness for participants to be flexible in order to enhance the effectiveness of the entire supply chain. A supply chain also needs to focus on the market demand rather than just the volume of supply, something that is usually the responsibility of the focal firm within the supply chain (e.g. usually the co-op). Information should flow easily up and down the supply chain to ensure that all participants are aware of the chain's dynamics and can make sound decisions in relation to planning. Cost controls, logistics management and the outsourcing of non-essential activities to other within the supply chain are also features of effective systems (Chandra and Kumar 2000).

A co-op can play the role of a 'focal firm' within a supply chain. The performance of a co-op led supply chain is contingent on the way in which it establishes and manages the network structure associated with the supply chain and how well it coordinates the network, makes key investments in common user infrastructure and facilitates communication up and down the chain (Garcia-Perez and Garcia-Martinez 2007).

According to Palmer (2002) the most important factor in the organisational effectiveness of co-operative supply chains is the quality of their corporate governance, the strength of member commitment and the diversity of membership. Good leadership and governance can engender trust within the co-op supply chain and help to unify member commitment. This can also contribute to the long-term advantage of members, whereby the co-operative can help to smooth out spikes and troughs in market prices.

SHARE STRUCTURE

Research undertaken by Lerman and Parliament (1990, 1991, 1993), Parliament and Lerman (1993) and Parliament, Fulton and Lerman (1989) has investigated the nature of equity structures and performance within co-operatives. They did not find significant differences between co-ops and IOF in terms of profitability (Lerman and Parliament 1990; 1991). They also found no support for the view that the co-op is 'equity bound' or constrained in its ability to raise funds. However, their longitudinal analysis of US agricultural co-operatives found that the ratio of equity to total assets within these businesses was affected by the nature of the commodities they were trading and their approach to business risk.

While no significant differences were found between IOF and co-op entities in terms of financial performance, the co-ops were more likely to hold back retained earnings for future investment than the IOF. The latter being more inclined to payout profits as dividends to shareholders. For the co-op these retained earnings were more likely to be deferred patronage dividends to members than true profits. They formed a useful pool of capital that the co-op could use as part of its equity structure (Parliament and Lerman 1993).

The share structure and its relationship to ownership rights has been mapped by Chaddad and Cook (2004) forming a useful taxonomy of co-operatives. This model divides the co-ops into those with open or closed memberships, then whether the share capital is redeemable, transferable and convertible into publicly tradable stock. It then examines whether the share capital is linked to patronage and whether it is held internally or externally. The level of voting rights that accompany this share ownership is also examined. There are seven types of co-op structure identified in this taxonomy commencing with the traditional co-op and moving to the IOF with the New Generation Co-operative (NGC) in the middle.

GOVERNANCE

The governance of the co-operative enterprise is one of the most important aspects of its success or failure as a business model. According to Prakash (2003) the co-op governance model operates within four main spheres

comprising: i) the membership of the co-op; ii) the organisational structure of the co-op; iii) the community in which the co-op exists; and iv) the co-op board and executive team.

Simmons et al (2007) suggest a governance scheme that brings together the relationships between the three spheres that are 'internal' to co-operatives. Figure 3 illustrates this concept.

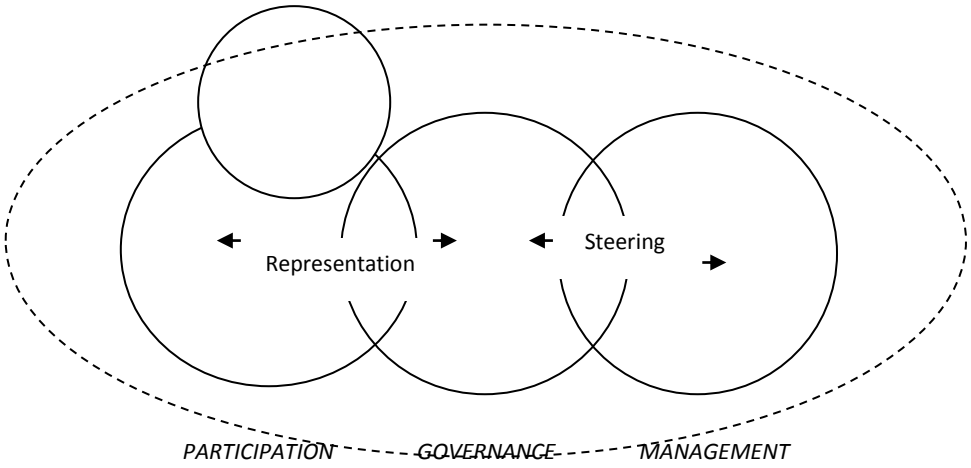

FIGURE 3: OVERLAPS BETWEEN PARTICIPATION, GOVERNANCE AND EXECUTIVE MANAGEMENT

First, the sphere of member participation links up to the sphere of corporate governance (i.e. the committee or Board structure). Here the responsibilities of members for 'active voice' lead them to represent their needs to their elected committee members through the opportunities provided for democratic participation. Second, the sphere of corporate governance links up to the sphere of operational management. Here it is the role of elected committee representatives to take the views of the wider membership into account in giving a steer to executives. Corporate governance structures in co-operatives should therefore not be considered in isolation from more inclusive processes of participation, nor from the operational life of the organisation.

STRATEGIC NETWORK THEORY AND CO-OPERATIVE GOVERNANCE

Network perspectives provide an important frame of reference for co-operatives. For example, Pollet and Develtere (2003: 53) observe that co-operative networks develop on a number of levels:

First, at the 'primary network level', the very nature of co-operatives as economic associations emphasises the 'connectedness' between co-operatives and their members. A co-operative can therefore provide a hub for organising particular local economic interests and/or for protecting common pool resources (Simmons and Birchall 2008).

Second, at the 'secondary network level', the established principle of 'co-operation amongst co-operatives' provides the means for these interests to 'scale up' by building more extensive networks; the Mondragon system in Spain, and clusters of small manufacturing co-ops in North Italy are good examples.

The common practice of federation also provides a means by which networks of co-operative organisations can be established and their interests represented collectively. For instance, consumer co-operative sectors have almost always formed strong federal bodies at national level, both to enable them to do better business further up the distribution chain (Co-operative wholesale societies being the classic example) and in order to defend their interests politically (through national federations) (Simmons and Birchall 2008). Finally, at the 'tertiary network level', these networks create openings towards other actors in the country and abroad**.**

Emelianoff (1942) suggested that the co-operative should not be viewed as a firm in the conventional sense but as a coalition of members with different interests. This raises the issue of looking at the governance of a co-op through the lens of strategic network theory in relation to corporate governance. As noted above, the co-op – at least producer owned co-ops – can be viewed as a supply chains in which the overall effectiveness is determined by the quality of their governance.

Jarillo (1993) has proposed that the basis for understanding why firms collaborate is the inter-section of two dimensions: i) ownership and ii) co-operation. The theory suggests that if they can do everything themselves without the need for outside help the majority of businesses will chose to do so. However, where the business cannot appropriate all the resources it requires it will collaborate and accept common ownership of resources.

According to Jarillo (1993) cooperation between different businesses is determined by the relationship between the external price (EP) that must be paid to undertake a process, the relative internal cost (IC) of doing the process alone, and the transaction cost (TC) associated with engaging in a collaborative exchange (e.g. outsourcing). A business should seek to undertake a process internally where the external price and the transaction cost are greater than the cost of doing it in-house (e.g. where EP + TC > IC). However, a strategic network relationship becomes appropriate where the external price is lower than the internal cost, but the transaction costs can be lowered by the activities of a specific network actor so as to achieve enhanced relationships (e.g. EP < IC, and TC is selectively low).

It is this latter scenario that makes the formation of a co-operative business model appropriate for small firms and producers. Holmlund and Tornroos (1997) suggest that the strength of a strategic alliance is determined by the interplay between four key factors. The first is '**mutuality**', which is the extent to which independent firms find that there are mutual benefits from developing collaborative relationships with each other. For co-ops this is usually due to all members being weak and in need of each other, or that they find complementary outcomes by collaboration. The second factor is the '**long-term character**' of the collaborative relationship. There must be a relationship between the firms that is based on trust, empathy and understanding. The third factor is the '**process nature**' of the relationship, which deals with how the different firms interact with each other and how dynamic that interaction is. Finally, the fourth factor is that of '**context dependence**', which encompasses the economic, social, cultural, technological and political environment that surrounds the firms.

Miles and Snow (1992) identify at least three primary strategic network forms. The first of these is the '**stable network**' in which there is a core or 'focal firm' that holds the network together within a well-defined and stable market. The second type is that of the '**internal network**', which is commonly found within major corporations that have independent business units that collaborate within an umbrella group of companies. The third type is the '**dynamic network**', which is comprised of independent firms that collaborate for short-term production of a particular product or service. A co-op is likely to lie somewhere between the stable and the dynamic network. How durable its business model proves to be is likely to depend on how well it manages to develop the co-op into a strong focal firm.

According to Miles and Snow (1992) the causes of failure in strategic networks are due to the way in which the focal firm manages the network. If it seeks to appropriate all the resources or attempts to diminish network

democracy via a process of trying to dominate the network in its management problems can arise. Another potential cause of network failure is where the growth rates of member firms become uneven or unbalance. Those members who feel that they are not benefiting from their participation or fast growing firms that feel the network is holding them back will seek to pull out. The focal firm also needs to take care not to allow members to become so overspecialised that they are too dependent on the network for their survival. It is in the interests of the network for the core or focal firm (e.g. co-op) to disseminate knowledge and build up the competence levels of its network members to help strengthen the entire network.

A study by Desrochers and Fisher (2005) identified three generic types of network that are likely to apply to co-operatives which they describe as 'atomised systems', 'consensual networks' and 'strategic networks'. The first is a weak association of informal links, the second and alliance driven by a desire to lower costs via economies of scale, and the last a more formal alliance involving pooled resources and central management decision making. This study suggests that enhanced network performance is an outcome of lower transaction costs. Further, more formality in the network can reduce the likelihood that there is variability in performance.

STRATEGIC MANAGEMENT THEORIES AND CO-OPERATIVE GOVERNANCE

Cornforth (2004) has proposed that the role of members as owners who then comprise the co-op board of directors has significant impacts on the overall governance of the entity. At least six different models of corporate governance emerge depending on the level of ownership rights and their exercise by members. These were defined as the compliance, partnership, democratic, stakeholder, co-optation and 'rubber stamp' models.

In understanding the forces that create these six different governance models Cornforth (2004) points to a series of underlying and interrelated theories. The first of these is '**Agency Theory**' in which the interests of the shareholder-owner and those of the executive manager 'agent' may not be aligned due to asymmetrical information. The second is 'Stewardship Theory' that suggests executive managers will act in good faith and the interests of the shareholders. The quality and strategic capacity of the executive team is stressed as the co-op board is often comprised of members who lack the necessary strategic and managerial skills to make significant decisions, resulting in many co-ops being 'management driven' (Silvertsen 1996).

A third theory is that of '**Resource Dependency**' (Pfeffer and Salancik 1978). This suggests that the organisation is forced to adapt its external environment and configure its resources to meet challenges and how well it can employ its resources will determine its success. Quality boards are therefore a critical element to success in organisations. A major weakness of co-ops is the relative lack of expertise on their boards and a resistance to the appointment of non-members to the board (Cornforth 2004).

The '**Stakeholder Theory**' of Freeman (1986) is a fourth element for examining the governance of co-ops. This theory recognises that while the board has to represent the interests of the members it also has responsibilities to other stakeholders such as employees, third party investors if they exist, the community and the co-op itself. Where a co-op has a single purpose and a highly homogeneous membership such stakeholder management problems are likely to be low. However, where the membership base is heterogeneous and the co-op has multiple purposes the stakeholder management issues become more complex (Cornforth 2004).

Finally, there is the theory of '**Managerial Hegemony**' that suggests real power lies not with the members or shareholders but with the senior executives and possibly the board (Berle and Means 1932). The situation for many large co-ops is much the same as for large IOF, namely that the real power is concentrated into relatively few hands with senior managers wielding much of the power and members being little more than a rubber stamp (Cornforth 2004; Itkonen 1996).

Attention needs to be given to the quality of the co-op board and their level of training (Campbell 2004); and adherence to legislative and accounting regulations (Jenkins 2008; Campbell 2003). As well as their ability to take care of the interests of both the members and the co-op's other stakeholders (Cross and Buccola 2004).

SYSTEMS LEVEL ANALYSIS

There are different routes to the achievement of effective co-ordination. Systems level analysis turns the focus of analysis to the links between systemic factors and the real-world experiences of co-operative organisations. Classical system-theoretic concepts structurally determine complexity by investigating emergence and interconnectedness in the possible and realised relationships of the elements (Simon 1978; Weaver 1978; Luhmann 1984).

The system is emergent if, after a critical mass has been exceeded, the behaviour of the system can no longer adequately be conceived as an aggregation of its parts (Garciá-Olivarez, 1993). Under dynamic relational conditions, a complex systems perspective can help to explain individual, group and organisational behaviour. Systems theory offers a conceptual lens to analyse and understand both societal and governance complexity.

There are specific patterns, dynamics, and mechanisms that drive change in societal systems (De Haan 2006). Actors involved in governance processes co-evolve with these broader societal system dynamics. These actors create formal and informal networks because they have partially overlapping interests and/or resource dependencies (Jessop 1997; Klijn and Koppenjan 2000). Within such networks, decisions and strategies are developed; negotiated and implemented that can lead to changes in the political economy and governance of co-operatives.

Building a systems perspective allows us to consider persistent problems that are unstructured and highly complex because they are rooted in different societal domains, occur on varying levels, and involve various actors with dissimilar perspectives, norms, and values (Loorbach, 2010). For co-operatives it is useful to identify the relevant external environmental factors in seeking greater congruence and complementarities and reduced conflict and incompatibilities between technologies, institutions and individuals.

At the macro or 'systems' level the key areas of analysis are the three input environmental antecedents of: i) government role; ii) industry structure; iii) social cooperation; plus the two output factors generated by the co-operative enterprise: i) economic capital and ii) social capital. Each of these is discussed in the following subsections.

GOVERNMENT ROLE IN THE ECONOMY

The government plays a key role in the regulation of the economy and the setting of the legislative and policy environments in which the co-op must operate. Government interest in the development of the co-operatives sector varies from country to country and across time periods. However, any analysis of the co-operative enterprise must take into account government activity.

Key areas of government involvement that can impact on the co-op are legislative frameworks that influence incorporation and governance structures for co-ops. Also of importance is the level of taxation relief that co-ops can enjoy. Finally, there is the action taken by government to maintain competition with the economy, plus the support they give to the enhancement of the social economy (Spear and Bidet 2003; Ingram and McEvily 2007).

INDUSTRY STRUCTURE

A co-operative enterprise exists within its industry context and as such is not immune from the forces that drive and shape the industry. Porter (1979; 1980; 1981) has drawn upon industrial economic theories to build a widely used framework for understanding the nature of industry structures known as the "5-Forces" model. This considers: i) level of industry rivalry; ii) threats of entry; iii) supplier power; iv) buyer power; and v) threats of substitution. The ability of an industry to generate attractive and sustainable profits will be contingent upon the nature of these factors (Peters 1993).

LEVEL OF INDUSTRY RIVALRY

At the centre of this model is the level of industry rivalry as measured by the number of firms that compete within the sector, and whether there is a trend from perfect competition to that of a monopoly. The nature of the industry environment can be an important determinant of the need for a co-operative business model. For example, within conditions of perfect competition there are no barriers to market entry or exit and many small, undifferentiated players. However, such conditions make it difficult to secure premium pricing and force all market players into a price taking position. There is usually little long-run profit or incentives for innovation. The formation of a co-operative amongst small producers can assist in reshaping the market dynamics in favour of these smaller players.

THREATS OF NEW ENTRANTS

There are many factors that can create barriers to new market entrants. These can include such things as economies of scale, product differentiation, capital investment requirements, and economies of scope, access to distribution channels and government policies and regulations (Porter 1979). The history of co-operatives shows that collaborative behaviour amongst small producers or the wider community can overcome many of these barriers and allow them to set up credit unions, building societies, marketing and processing facilities and bulk purchase schemes.

In some cases the formation of co-operatives and mutual enterprises has been blocked by the erection of artificial barriers. This was the case in the United States where attempts to establish health co-operatives in the 1930s were blocked in many states by lobbying action from the American Medical Association (AMA) (Birchall 2011).

SUPPLIER AND BUYER POWER

Depending on the market structure the buyers (customers) and suppliers have relative levels of power in their negotiating position with firms within the sector. For example, dairy farmers generally have limited bargaining power with major milk processers. The industrial production of milk and cheese requires a high level of capital investment and whole milk is a commodity that does not permit differentiated pricing in a sustainable manner. The formation of a co-op allows dairy farmers to enhance their bargaining power and gain enhanced prices at the farm gate. This process can also work for the small retailer who can strengthen their otherwise limited buying power by collaborating through a co-op business model.

THREATS OF SUBSTITUTIONS

A final factor that must be considered is the threat of substitution. One of the main sources of substitution threat is technology, which can bring to market new products or processes that serve to replace or compete with established ones. Market deregulation can also lead to threats of substitution. This can be seen in the introduction of road versus rail for passenger and freight transportation. Substitution threats can also pose a problem for co-operatives if alternatives can be found to erode the factors that justified the reason for membership. An example of this is the trend in Australia towards new technologies that allow farmers to store

grain on their own properties rather than delivering it directly to bulk storage and handling sites controlled by the co-op. This technology is attractive to some larger producers (SDD 2008).

SOCIAL COOPERATION CONDITIONS

In addition to the role of government and the structure of the industry sector another important influencing factor is that of the social cooperation conditions that exist within the society that surrounds the co-op. Birchall (2011) notes that there is a positive correlation between the formation of co-ops and mutual businesses, and the existence of high levels of social capital within the communities that spawn them.

According to Peredo and Chrisman (2006) the "theory of community-based enterprise" suggests that for a community enterprise to emerge there must be strong social capital upon which it can draw. At least three conditions need to exist within the community to allow it to form. First, there must be a foundation of community skills that will allow it to build its business. For example, dairy producers, cheese makers, furniture crafts, wine makers. Second, there needs to be a 'multiplicity of goals' that include not only economic self-interest but also social, cultural and potentially environment aims that can draw together the wider community to the enterprise. Finally, there needs to be a willingness and ability for the community to participate in the enterprise. Only if the community are prepared to take the time and effort to make the enterprise work can there be any success.

In a similar manner, Birchall and Simmons (2004) "social cooperation theory" suggests that collaboration between people will occur where there is a sense of common or shared goals, common or shared values, and a sense of community whereby they identify with each other and show mutual care and respect for each other. Three key elements need to be present to ensure the formation of this level of social cooperation in what they refer to as the "participation chain". These three elements are:

1. **Resources** – the assets, capabilities, time, money and skills of the participants going into the future collaboration;

2. **Mobilisation** – the factors driving cooperation, such as mutual needs, opportunities and recruitment efforts; and

3. **Motivations** – the forces driving collaboration and sustaining cooperative activity.

These three elements are potentially measureable units of analysis to determine how much social cooperation may exist within the community that supports the co-op.

NATURAL ENVIRONMENT

The importance of the natural environment is increasingly recognized and integrated in strategic decision making. The distinction between ethical and utilitarian arguments for doing so is unclear, as altruistic and self-interested motives are commonly mixed (Stark 1993). Corporate environmentalism is driven by regulatory forces, public concern, competitive advantage and top management commitment, while industry type in terms of sector environmental impact has been found to moderate these relationships (Banerjee, Iyer and Kashyap 2003).

UNCERTAINTY

Our changing climate, polluted natural resources, loss of biodiversity and fragile ecosystems, all impose a higher level of uncertainty as well as raise ethical considerations for todays' business. Three types of ecology-induced uncertainties have been identified as follows: i) environmental state uncertainty, which refers to

uncertain future industry and market conditions; ii) organizational effect uncertainty, which relates to the inability to predict the impact of environmental change on individual firms; and iii) decision response uncertainty, which relates to lack of knowledge in terms of impact and suitability of response options (Busch and Hoffmann 2009). Environmental uncertainty therefore impacts on managerial decisions as it influences managers' ability to effectively assess the changing business environment and the likely outcomes of potential responses (López-Gamero, Molina-Azorín and Claver-Cortés 2011). Primary industries are greatly impacted, as environmental change and uncertainty directly affect production volumes, costs and quality. Agricultural co-operatives are typical examples of enterprises where the natural environment can be a determining factor of the viability of their business model.

Organizational response can range from conformance to regulations and standard industry practices to proactive environmental strategies with a strong voluntary component. The choice of strategy is found to be dependent upon managerial interpretation of environmental challenges as threats or opportunities (Sharma 2000). Proactive environmental strategies with both an internal and external focus (corporate and marketing strategies) have gradually evolved and have been supported by large, international organizations, however practitioners are finding that some of these strategies may perpetuate, even increase environmental problems, or have no clear payoffs (Aragon-Correa and Rubio-Lopez 2007). In light of increasing frequency of extreme weather events and their impacts on socio-economic systems, some researchers advocate the need to broaden current organizational adaptation approaches to new conceptual and practical approaches that can develop organizational resilience, enabling firms to reorganize in smaller scales and reduce the risk of organizational collapse (Vogus and Sutcliffe 2007, Linnenluecke and Griffiths 2010, Mamouni Limnios and Mazzarol 2011).

COMPETITIVENESS

According to the resource-based view of the firm, environmental strategies can be viewed as a resource that has the capacity to influence firms' capabilities. Early statistical research indicates that the benefits of improved corporate environmental behaviour exceed its costs (Russo and Fouts 1997), and that integration of environmental concerns in strategic planning may yield competitive advantages in the market place, in line with the natural resource-based perspective (Judge and Douglas 1998). However, research evidence is mixed as the relationship between social, environmental and economic performance is very complex and not linearly expressed. An Australian study of 140 manufacturing firms finds for example natural environmental orientation to be positively related to profit after tax and market share, and negatively related to sales growth (Menguc and Ozanne 2005). A contingent resource-based view of corporate environmental strategy has emerged, advocating that the uncertainty, complexity and munificence of the business environment will moderate the dynamic capability and competitive advantage of a proactive environmental strategy (Aragon-Correa and Sharma 2003).

The consideration of a co-operative's industry environment is critical in identifying the most appropriate environmental strategy to ensure the resilience of the organization, as well as competitiveness in the market place.

ECONOMIC CAPITAL CREATION

In addition to the four influencing factors that have just been discussed the conceptual framework also examines two key outcomes or outputs from the co-operative enterprise into the wider community and economic system. The first of these is the co-op's ability to create economic capital.

The measurement of economic capital by co-ops is a potentially complex issue due to the way in which share capital is not openly traded, profits are often reinvested and not paid as dividends to shareholders (Nembhard

2002). This can be of particular concern when applied to more traditional, non-distributing co-ops which are either tax exempt or enjoy tax benefits. In this case the wealth generated by the co-op may be dispersed across the membership base and even to non-members.

Conventional forms of economic wealth creation can be measured using simple measures such as wealth creation for both the co-operatives members and the wider community, employment creation that can be attributed to the co-op, and the development of assets in the form of hard and soft infrastructure.

In terms of wealth creation, Ward and McKillop (1997) found that co-ops and credit unions were more likely to focus on promoting savings amongst members. Krivokapic-Skoko (2002) also suggests that producer co-ops can provide enhanced financial benefits to farmers due to their ability to offer better farm gate prices or discounts on farm supplies through collective purchasing.

In terms of job creation, Bartlett et al (1992) suggest that co-operatives can have higher productivity levels, better industrial relations track records and fewer dichotomies between the remuneration of employees and the senior management. Further, co-ops are more likely to employ within the local community and seek to offer opportunities to unemployed.

In terms of asset formation there are many examples of co-ops that have created valuable infrastructure that would not have existed had it not been for the co-operative (Birchall 2011). This includes the formation of electricity generating and distribution co-ops in the United States (Heriot and Campbell 2006).

SOCIAL CAPITAL CREATION

Social capital is a complex and ill-defined construct that encompasses a range of disciplines (Fine 2001). It has been defined as incorporating information, trust and norms of reciprocity that occur within a social network (Woolcock 1998). It is often viewed as an asset that is inherent in social relations and networks (Burt 1997; Leana and Van Buren 1999).

According to Birch and Whittam (2008) there are four key types of social capital that potentially relate to the 'third sector' or social economy. These are:

- **Norms** – which are intra-community ties or bonds between individuals;
- **Networks** – which relate to the extra-community ties that help to bind the society;
- **Links** – which is the difference between communities that might otherwise be diverse;
- **Holders** – who are change agents or 'bridge builders' able to draw the communities together.

Birch and Whittam (2008) suggest that social enterprise has the potential to bridge diverse groups and assist in the development of social capital. This is done by binding actors together and spanning social, economic and political boundaries in doing so. At the centre of the social capital construct is the '**structural hole theory**' which suggests that social capital is a function of brokerage opportunities within a network (Burt 1997).

The idea of structural hole theory is that while in a perfect market one price clears the market because all participants have perfect information, this is not the case in reality. In most markets there are imperfections with some people unable to take advantage of the benefits available due to a lack of information or access. Interpersonal connections link people together and those who possess strong networks own a degree of social capital that allows them to bridge the gaps or 'holes' in the market. As Burt (1997: 340) explains:

> *"The structural hole argument defines social capital in terms of the information and control advantages of being the broker in relations between people otherwise disconnected in social structure. The disconnected people stand on opposite sides of a hole in social structure. The structural hole is an opportunity to broker the flow of information between people and control the form of projects that bring together people from opposite sides of the hole."*

One of the key benefits of co-ops for members is their ability to provide access to information (e.g. about prices) and to link the member to markets and knowledge that can enable them to overcome these structural holes. The membership of a co-op provides the member with access to resources that would otherwise be difficult or impossible for them to access alone (Leana and Van Buren 1999).

THE NEED TO BUILD SOCIAL CAPITAL

Social capital is an essential element in the formation and sustainability of the co-operative enterprise. As noted by Peredo and Chrismann (2006) it is important for social enterprises to draw upon the trust, norms and networks associated with social capital in order to facilitate their activities. The key components therefore are Trust, Reciprocity and Networks. As they note:

> *"The elements typically identified in the notion of social capital include densely interlocked networks of voluntary relationships, a high degree of reciprocity in which short-term sacrifices are made with the implicit understanding that they will be repaid over time, trust, or a willingness to take risks with the conviction that others will respond cooperatively, and a broad agreement on social norms"* (Paredo and Chrismann 2006: 314).

Without sufficient social capital the ability of social enterprises to form and flourish is likely to be limited. Social capital takes two forms: i) bonding – the interconnection between people of a like kind within the immediate community; and ii) bridging – the connection with people from outside the immediate community who are not alike. Birchall (2011) notes that both kinds are necessary to ensure the best outcomes and where communities possess high levels of social capital co-operatives tend to flourish, but where social capital is low they do not.

TRUST

Trust is an important element within the formation of social capital. Members of a social or economic network are unlikely to commit to a strong and productive relationship if they do not trust each other (Knight 2000). Trust can emerge in three forms. The first is 'characteristic based trust', which is associated with the characteristics of the members who are engaged in the relationship. The second is 'process based trust', or that which is an outcome of the history of how members have engaged with each other in the past. Finally, there is 'institutional based trust', which is determined by the conventions or rules that control and govern the group within their relationship (Zucker 1986).

As a construct trust is a complex variable and much depends upon the perspective that is taken (e.g. who trusts who and within what context). Mayer, Davis and Schoorman (1995) proposed a relationship trust model that identified three factors of perceived trustworthiness: i) ability, ii) integrity; and iii) benevolence. Ability relates to the skills, expertise, strength and capacity of an individual or organisation to do something competently within a certain domain. Integrity relates to the trustee's ability to adhere to a set of principles that are acceptable to the trustor, but there is clearly a two-way relationship of mutual integrity that must work here. Finally, benevolence is a belief that both parties will engage in the relationship for reasons other than a self-interested profit motive.

RECIPROCITY

As noted above, reciprocity is a key element in maintaining cooperation between individuals. This is due to the potential for 'tat-for-tat' responses from others if individuals engage in cheating, free riding or some other form of misbehaviour when engaged in social networks (Axelrod and Dion 1988; Axelrod 2000).

Reciprocity has also been recognised as an important element in motivating the participation of individuals in co-operative enterprises (McCain 2008). This 'tit-for-tat' response to negative behaviour can also be reward for positive behaviour, and one that has been identified as 'reciprocal altruism' in which giving to a network will eventually be returned over time (Trivers 1971; Killingback and Doebeli 2002).

Birchall and Simmons (2004) propose a '**mutual incentives theory**' to help explain why people engage in co-ops. This draws together individualism and collectivism, the first from 'social exchange theory' and the second from theories of social cooperation. Social exchange theory (Homans 1973; Blau 1964) proposes that people are motivated to engage with other out of self-interest. Social exchange leads to rewards and benefits, although it can be mitigated by negative issues such as rejection and the opportunity cost of not engaging elsewhere. However, social exchange theory is limited in its highly individualistic focus and has been criticised for being too narrow and rationalist (Miller 2005).

By comparison social cooperation is associated with an individual's desire to communicate and develop a sense of social identity. It assumes that an individual has both an economic and social life (Sorokin 1954). Individuals are therefore not only driven by economic self-determination but also by more collectivistic factors such as common or shared values, mutual goals and a sense of community identity (Birchall and Simmons 2004).

At least three types of reciprocity can be identified. The first is '**direct reciprocity**' where by the individual receives a direct reward or punishment for their behaviour. This is akin to the "Pavlov" strategy of stimulus response learning (Nowak and Sigmund 2000). The second type is '**indirect reciprocity**', which occurs where the individual is unable to receive direct rewards, but gain enhanced reputation or 'good standing' within their community for their actions (Leimar and Hammerstein 2001). Finally, the third type is '**spatial reciprocity**', where the individual is often free from any 'tit-for-tat' response by their ability to keep mobile and move from one social network to another. Communities that are stable over time and have durable memberships are generally more able to develop cooperative behaviour than those with highly transient populations and unstable communities (Nowak and Sigmund 2000).

NETWORKS

Society has been described by some as a 'series of connected or tied nodes' (Narayan and Pritchett 1999). Anderson and Jack (2002) describe social capital as glue that bonds entrepreneurial networks together and provides them with structure, while also serving as a lubricant that facilitates interactions within relationships. Networks between individuals are a key measure of social capital formation within the community. As noted above, other important elements include the existence of structural holes, trust, strong ties and shared codes and language (De Carolis and Saparito 2006). Granovetter's (1973; 1983) theory of the 'strength of weak ties' and its ability to form the foundation of economic networks between individuals and organisations in which they are embedded is a key element in this network theory (Granovetter 1985).

From a business perspective networks can be viewed within three interconnected layers (Holmund and Tornroos 1997). The first of these is the '**production network layer**' which is comprised of the individual firms that operate in a conventional supply chain relationship. For a co-operative enterprise this can include the co-op as the focal firm and small producers or retailers as participants in the supply chain production network.

The second layer is that of the '**resource network**'. This is comprised of those complementary actors that can provide external support to the network. Typically the key actors in the resource network are banks, government agencies, universities and business or trades associations. The third layer is the '**social network**', which comprises the human actors who interact with each other via formal and informal social exchange arenas.

THE NEED TO BUILD IDENTITY & COMMITMENT

One of the factors that clearly differentiate the co-operative enterprise from other forms of business model is its ability to bridge the gap between economic and social objectives. Novkovic (2008) highlights this as an important distinction for co-ops and suggests that the co-operative principles provide a foundation upon which a co-op can build member commitment beyond mere economic self-interest. As she notes:

> *"We wish to make a case that, if adhered to, co-operative principles can be seen to play an economic, managerial and social function"* (Novkovic 2008: 2171).

Birchall (2011) also notes that co-ops are likely to build a more sustainable business if they can actively promote "the idea of membership", or a membership strategy that promotes not only individual self-interest, but a "*self-interest collectively expressed"*. Fulton (1999) suggests that member commitment is a critical element that may assist the co-op to perform competitively against the IOF. As he notes:

> *"Member commitment is a preference by members for something that is offered by the co-operative and not by an IOF. Historically, the source of member commitment can be linked to co-operative ideology, or the preference that some farmers had for doing business with organizations they owned and controlled. Member commitment was vital to the formation of co-operatives – without member commitment; the threat of predatory pricing by IOFs would have made co-operative formation totally ineffective"* (Fulton 1999: 434).

This is an important need within the co-operative enterprise and one that is too quickly ignored by managers and those who wish to focus solely on the economic benefits of membership. As with any business the key to building long-term customer commitment and loyalty is to develop a strong brand identity. Co-operatives must build their member commitment around trust and recognition of perceived value in membership that leads to the member identifying with the co-op as a collective organisation (Ole Borgen 2001).

Members must identify with the co-op's vision, mission and values in the same way that consumers engage with a brand and its underlying values. The co-op must therefore develop its reputation for effectively acting in the best interests of its members and delivering consistently on its member value proposition (MVP) (Fulton and Giannakas 2001). Member identification with the co-op's mission can enhance trust and commitment, but care must be taken to ensure that member independence is recognised or this can risk breaching trust and eroding commitment (McClintock-Stoel and Sternquist 2004). Managers of co-ops must foster "a sense of family, good feelings and *camaraderie*" in order to engender trust and achieve member satisfaction, loyalty and commitment (Morrow et al 2004).

As shown in the conceptual framework the building of identity in the co-op is a process that involves at least five stages. These are drawn from marketing theory and are discussed in the following sub-sections. Customer loyalty results from a consumer's attitude towards a product or service provider and their repeat patronage behaviour, while social norms and situational factors may serve as mediators to these relationships (Dick and Basu, 1994). According to Oliver (1999), customer loyalty is related to customer satisfaction that is frequent or cumulative. Consumer loyalty moves through phases: cognitive, affective, conative and action.

SERVICE QUALITY

The perceived quality of a product or service has been studied in detail within the marketing discipline. While quality remains a complex construct, the assessment of the quality of tangible goods is generally easier for customers than it is for intangibles such as services. Conceptually, the perception of quality is closely linked to perception of value. Zeithaml (1988) notes that a customer's perception of quality is influenced by the intrinsic attributes of the product or service (e.g. the things that can be seen and touched), as well as the extrinsic attributes, which include the reputation of the product (e.g. brand name and level of advertising). Also of importance is the price that is being placed on the product or service. This has two levels, the objective price and the perceived monetary price. The first is the actual price paid, but the second is the relative sense of whether the price is expensive or cheap to the eye of the consumer. The price paid is a sacrifice that the customer must make and depending on the other elements (e.g. brand image or features) the customer may be willing to sacrifice more to purchase a product of perceived higher quality.

Within a service environment the measurement of quality is difficult due to the intangible nature of services. Parasuraman, Zeithaml and Berry (1985; 1988; 1994) developed a service quality framework (SERVQUAL) comprising five dimensions that are measured using a 22-item scale. The key elements that comprise this are:

1. Empathy – ease of access, good communications and customer understanding;
2. Responsiveness – promptness and helpfulness;
3. Reliability – dependability, accuracy of performance;
4. Assurance – competence, courtesy, credibility and security;
5. Tangibles – appearance of physical elements (e.g. uniforms, vehicles, buildings).

Also of importance within this perceived quality is the element of '**credence qualities'** which are the elements that consumers use to assess quality in a service based on the perceived credibility of the service provider (Zeithaml 1991; Hill and Neeley 1988).

As noted above, the co-op is essentially a service organisation and therefore much of its perceived quality will relate to how well it provides its services. Within many co-ops the key measure for members is the price they receive or pay for their patronage. While this is an important element in the quality measurement process, it should not be the only measure. It is important for the co-op to develop its processes to provide superior benefits in the way it manages the supply chain so as to offer superior services.

MEMBER SATISFACTION

A member's satisfaction with the co-op is likely to be determined by the same factors that are known to influence a consumer in a wider business context. Gronroos (1978; 1990) points to the role played by technical quality and functional quality, as well as expected and perceived service levels in determining customer satisfaction. Technical quality is a measure of what is done (e.g. the service received such as a meal in a restaurant). Function quality is a measure of how the service is performed (e.g. whether the meal is served professionally or not). Customer satisfaction will depend on their expectations for the service or product delivered and how this meets their perceptions of its ability to meet or exceed these expectations. Where they have high expectations that are not matched by the perceived reality they will be unsatisfied. However, where their expectations are exceeded by the perceived reality they will be satisfied.

Customer satisfaction is determined by this combination of functional and technical quality, which leads to affective commitment and a willingness to make high-sacrifice commitments to the brand, typically resulting in repeat purchase and positive word of mouth (WOM) referral to others (Sweeney, Soutar and Mazzarol 2011).

Measures are available for assessing functional and technical quality as well as satisfaction, affective commitment and high sacrifice commitment.

PERCEIVED VALUE

Perceived value has been measured as a multidimensional construct that is determined by factors such as quality, price, emotional rewards and social acceptance (Sweeney and Soutar, 2001). Customer value perception is essentially an assessment of the trade-off between the benefits received for the sacrifices (e.g. money or opportunity cost) made (Zeithaml et al 1990). Sanchez-Fernandez and Iniesta-Bonillo (2009) propose a model of perceived value leading to customer satisfaction that involves the construct of 'economic value' that is in-turn the outcome of 'efficiency' (price-time trade-off), and 'excellence' (service quality). However, there is question as to whether such measures are appropriate for co-ops, where customers are also owners and, in some cases, are also suppliers.

The perceived value can be measured using a PERVAL scale (Sweeney and Soutar 2001) that has four major dimensions:

1. **Emotional value** – the utility derived from the feelings or affective states that a product or service generates;
2. **Social value** – the utility derived from the product's ability to enhance social self-concept;
3. **Functional value** – the utility derived from the product due to the reduction of its perceived short term and longer term costs;
4. **Functional value** – the utility derived from the perceived quality and expected performance of the product.

These involve a measure of quality, a measure of emotional commitment, a measure social acceptance and a measure of price. They can provide a useful foundation with which to measure member perceived value within co-ops.

As some co-ops operate as part of a business-to-business (B2B) supply-chain, there is also a need to understand how perceived value is generated in such markets. Evans and Berman (2001) point to the need for attention to be given to the "total delivered product" in analysing the business value chain. Initially identified by Kotler (2000), this represents the difference between the total customer value and total customer costs. They propose a check list for guiding B2B marketing strategy within supply-chains.

MEMBER LOYALTY

Assuming that members perceive quality in the services provided by the co-op and are therefore satisfied they will perceive value in their membership. This should result in loyalty which can be measured by repeat patronage, frequency of patronage and their commitment to the brand or identity of the co-op. Of importance is the need to fully understand the value perceptions of customers and match these against competitors counter offers. Where superior value is identified it should be communicated to all key stakeholders including customers, suppliers and employees across the value chain to build trust and loyalty (Evans and Berman 2001). It is also evident that within B2B markets there are added layers of complexity when compared to consumer or B2C markets (Ulaga and Chacour 2001).

Hansen et al (2008) suggest that customer perceived value in B2B markets is influenced by information sharing (e.g. keeping customers well informed of changes); flexibility (e.g. to customer needs); and corporate

reputation, which has the greatest impact. Perceived value then results in positive word of mouth by customers. One antecedent that they originally tested but removed from their model was 'distributive fairness', which is a measure of the customer's perception as to whether gains and losses within the relationship are fairly distributed. It would be interesting to see if such a measure was found to be of more importance within a co-op supply-chain relationship.

THE NEED TO BUILD SUSTAINABILITY

The long-term sustainability of the co-operative enterprise lies at the heart of this research framework. Although many co-ops are amongst the most enduring business enterprises, many have failed to survive and there is a continuous loss of co-ops around the world (Birchall 2011). The conceptual framework examines this via two elements; the first is the '**generic problems**' that have been identified as a major source of failure in co-operative enterprises. The second is the '**co-operative lifecycle theory**' (Cook 1995). These two elements are discussed in the following sub-sections.

GENERIC PROBLEMS OF THE CO-OPERATIVE ENTERPRISE

The ownership structure of the co-op imposes several 'generic' problems that pose strategic challenges to its business model (Cook and Iliopoulos 1999). First, there is the problem of 'free riding' in which some members engage more actively in patronage than others who still gain similar benefits from their membership. It is compounded within the traditional co-op by an inability for ownership rights to be traded and for members to hold equal voting rights regardless of their patronage (Cook 1995). The presence of a co-op in a market brings the price of competing brands down (Haller 1992), and may set a floor price or benchmark within commodity markets.

A second issue is the 'horizon problem', where a member's residual claims over the assets of the co-op are shorter than the life of the asset. This reduces members' incentive to invest in the co-op as they cannot realise the full value of their share capital upon departure (Novkovic 2008). The third is the portfolio problem, which is caused by the lack of transferability and liquidity of member equity, which is tied to the patronage decision. Members are therefore unable to adjust their holding to their personal level of risk (Cook 1995).

A fourth issue is the control problem which arises from a divergence of interests between members and the co-op's management. This is due to the need to simultaneously maintain the co-op's dual functions of delivering benefits to members while running a sustainable and profitable business. Finally, there is the influence cost problem, which is cause by the co-op's strategic focus becoming fuzzy as it seeks to balance the returns to the enterprise and the members.

Addressing these five 'generic' problems is the key challenge facing the managers of co-ops. In addition to running a sustainable business and delivering benefits to members, the co-op is also expected to make a significant contribution to its local community (Skurnik 2002).

CO-OPERATIVE LIFECYCLE THEORY

Cook (1995) proposed a five-stage lifecycle model for the co-operative enterprise that sees the entity formed for a given purpose, then move through to a period of strategic uncertainty that either leads to its abandonment, demutualisation or restructure into a new generation co-op (NGC) form. These stages are summarised as follows:

1. The co-op forms usually as a response to market failure and is largely defensive in nature with respect to its corporate strategy, focused on internal issues.

2. The co-op provides net benefits to members through its ability to market producer goods or offer services on better terms than IOF or other ventures.

3. The co-op experiences changes within its markets the ability to offer members benefits that are sufficiently differentiated from IOF competitors becomes problematic. The six generic problems that beset the co-op also play their part in weakening the entity.

4. The co-op faces significant strategic challenges with difficulties in governance leading to the board having to make decisions about whether to exit, continue or transition to new ownership.

5. The co-op board seeks to implement a new strategy to deal with the crisis. This can take the form of exit by liquidation, merger or conversion to IOF. It can also see the co-op seek to continue but to try to attract new equity without a complete restructure and this may involve changes to ownership and equity structures and distribution of dividends. The transition to an NGC is a route taken by some agricultural co-ops in the USA. On balance the co-op's strategy in this final stage is more offensive than defensive.

This lifecycle theory has been used to analyse the historical track records of producer co-ops (Brewin, Bielik and Oleson 2008; Dong, Marsh and Stiegert 2005). These studies have provided support for the lifecycle theory outside the USA. Although it is a linear model the theoretical foundation of the lifecycle theory provides a useful tool for examining co-op sustainability.

RESILIENCE ARCHITECTURE AS AN ANALYSIS TOOL

Following the seminal work of Gunderson and Holling (2001; Holling 2001) a new body of research on socio-ecologic systems resilience has evolved. Scholars recognize the emerging resilience theory and its potential in increasing our understanding of complex systems interactions (Anderies, Walker and Kinzig 2006; Folke 2006). Despite recent advancements in the area of complex systems resilience, little theoretical and empirical work has been done on the integration of resilience within corporate strategy. Corporate resilience has been inadequately theorized and it often appears not as a component of corporate strategy, but rather as a "residual to explain instances when an organization unexpectedly survives or thrives" (Sutcliffe and Vogus 2003: 99).

Resilience is defined as the "magnitude of disturbance the system can tolerate and still persist" (Gunderson and Holling 2001). As such it is a concept of importance for any enterprise, but even more so for co-operative firms as they are inherently complex in nature, and with multiple factors – whose interactions are not well understood– seem to influence the structure, competitiveness and long-term persistence of their business model. The Resilience Architecture (RA) framework (Mamouni Limnios and Mazzarol 2011) is a first attempt to develop an organizational classification based on the type and level of resilience, allowing for the integration of theoretical aspects from divergent research streams such as organizational rigidity, dynamic capabilities and organizational ambidexterity.

The RA framework is built on the premise that resilience is not always a desirable system characteristic, as some underperforming systems can be highly resilient, able to resist change and persist for long periods of time (Mamouni Limnios and Mazzarol 2011; Carpenter et al 2001). RA introduces a four-type organizational classification based on the level of organizational resilience and the desirability of system state, the latter referring to the level of satisfaction of multiple (and often competing) stakeholder needs and wants. The RA classification can be used to study co-operative firms' transformations, identify resilience determinants and

thus seek to inform and guide strategic action. The four-quadrant RA organizational typology is discussed below in the context of a co-operative enterprise.

TRANSIENCE

Co-operatives in the transience quadrant experience a highly uncertain future, exhibiting a combination of low resilience and low desirability of system state. This may occur:

- In the early years of the co-operative's life-cycle, when the organization has not developed neither a strong member base (member satisfaction), nor the resources, systems and processes that are required to support a resilient business model.
- While undergoing a substantial restructure, either operational or structural in nature, should the reorganization be characterised by high risk of failure and low member trust.
- When a co-operative is failing to deliver satisfactory value to both member-patrons and member-investors, thus underperforming and gradually degenerating as a business.

RIGIDITY

Co-operatives in the rigidity quadrant experience a combination of high resilience and low desirability of system state. Such co-ops are not satisfying the need of a significant portion of their stakeholders, commonly expressed through patronage decline, low member loyalty, operational inefficiencies, increased employee turnover, public perception decline. Despite obvious signs of decline, management remains in denial, or is unable to enter a phase of change. The co-operative may survive in this state for shorter or longer periods of time, either because it has developed defensive mechanisms to resist change or because it does not have the sufficient capital to instigate a restructure. Resilience in this case assumes a defensive character, as the co-operative is able to tolerate disturbance and persist through high levels of resistance to change, as opposed to remaining responsive and adaptive to its environment. Co-ops operating in this state are of particular interest as they can be useful in studying:

> *Whether resilience in these cases can be an undesirable characteristic, as it has been suggested that prolonged survival in a rigid state of "dysfunctional momentum" (Miller and Friesen 1980) can decrease the chances of successful transformation upon unexpected disturbance* (Holling 2001).

The internal or external drivers of regime shifts that can force a co-op to operate in the rigidity quadrant. It has been suggested for example that adaptive organizations can fall in the rigidity trap by continuously reinforcing successful strategies of the past, a phenomenon known as the Icarus paradox (Miller 1990), and that operation in the rigidity quadrant is further associated with the concepts of routine rigidity (Gilbert 2005) and path dependency (Teece, Pisano and Shuen 1997).

ADAPTABILITY

Co-operatives in the adaptability quadrant operate in a highly desirable system state, while exhibiting high levels of resilience in the form of adaptive capacity. These enterprises have developed appropriate structures and processes that enable them to assess their internal and external environment and successfully innovate and adapt through a balance of exploitation of existing competencies and exploration of new capabilities, achieving what Miller and Friesen (1980) describe as "functional momentum". Their business model satisfies the majority of stakeholder needs (both members and non-members), through the establishment of win-win

relationships and ownership right and governance structures that streamline stakeholder interests and co-operative purpose.

The study of systems in this quadrant can focus on identifying the dynamic processes and organizational characteristics that position and maintain co-ops in the adaptability quadrant. It has been suggested that the theories of dynamic capabilities (Teece, Pisano and Shuen 1997) and organizational ambidexterity (Tushman and O'Reilly 1996) can inform further investigations and theory building in this area (Mamouni Limnios and Mazzarol 2011).

VULNERABILITY

Systems in the vulnerability quadrant experience a combination of high desirability of system state, however low levels of resilience as they achieve stakeholder satisfaction, but only under specific conditions, which make them vulnerable to change. Their situational dependence on internal or external conditions can be temporarily concealed, until a sudden disturbance reveals the inherent limitation of their business model (Mamouni Limnios and Mazzarol 2011).

A relevant example in the study of co-operative enterprises is the gradual deregulation that has taken place at a global scale over the last decades, commonly impacting on the resilience of the co-operative business model by opening markets to competition which can counter market failures that co-operatives were formed to address.

A study of co-operatives that have operated in this quadrant would inform:

- The drivers of co-operative business model vulnerability. Examples of parameters that should be examined include the impact of socio-cultural, intergenerational change and the level of social capital within local communities.
- The likely responses of co-operatives in the face of threats to the existing business model
- The structures and processes that can assist in effectively exiting the vulnerability quadrant

CONCLUSIONS AND FURTHER ACTION

The co-operative enterprise is a complex human system that must be understood on several levels. Its dual role as a venture with social and economic outputs is a defining characteristic as is its collective ownership. Due to its characteristics the co-op requires a multi-disciplinary approach in seeking to research the dynamics of its business model.

The conceptual framework outlined here recognises the need for attention to be given to the interplay between the member, the enterprise and the wider social and economic system in which these two actors exist. It also recognises the need to consider key units of analysis when examining co-operatives, plus the likely influences that these have on the co-op and its members.

It is our contention that the primary goals for a co-operative enterprise should be to build member identity and commitment, build social capital and build sustainability. To achieve these outcomes the co-op will need to be both a strong economic business and a strong social venture. Our conceptual framework provides some suggested analysis units for understanding each of these elements, which have been drawn from existing theory.

We propose this conceptual framework as a mechanism for academic researchers seeking to understand the behaviour of co-operatives in case studies. It also can potentially form the basis of a framework to assist executive managers of co-operatives who need to recognise (or be reminded of) the complexity and unique character of their business venture.

REFERENCES

Anderies, J.M., Walker, B.H. & Kinzig, A.P. (2006). "Fifteen weddings and a funeral: case studies and resilience-based management." *Ecology and Society* **11**(1): 21-33.

Anderson, A. R., & Jack, S.L. (2002). "The Articulation of Social Capital in Entrepreneurial Networks: A Glue or Lubricant?" *Entrepreneurship and Regional Development* **14**(3): 193-210.

Aragon-Correa, J.A., & Rubio-Lopez, E.A. (2007) "Proactive Corporate Environmental Strategies: Myths and Misunderstandings" *Long Range Planning* **40** (2007): 357-381.

Aragon-Correa, J.A., & Sharma, S. (2003) "A Contingent Resource-Based View of Proactive Corporate Environmental Strategy" *The Academy of Management Review* **28** (1): 71-88.

Austin, J., Stevenson, H., & Wei-Skillem, J. (2006). "Social and Commercial Entrepreneurship: Same, Different or Both?" *Entrepreneurship Theory & Practice* **31**(1): 1-22.

Axelrod, R. (2000). "On Six Advances in Cooperation Theory." *Analyse & Kritik* **22**(July): 130-151.

Axelrod, R., & Dion, D. (1988). "The Further Evolution of Cooperation." *Science* **242**(4884): 1385-1390.

Banerjee, S.B., Iyer, E.S., & Kashyap, R.K. (2003). "Corporate Environmentalism: Antecedents and Influence of Industry Type" *The Journal of Marketing* **67** (2): 106-122.

Bartlett, W., Cable, J., Estrin, S., Jones, D.C., & Smith, S.C. (1992). "Labor-Managed Cooperatives and Private Firms in North Central Italy: An Empirical Comparison." *Industrial and Labor Relations Review* **46**(1): 103-118.

Berle, A.A., & Means, G.C. (1932) *The Modern Corporation and Private Property*, New York, Macmillan.

Birch, K., & Whittam, G. (2008). "The Third Sector and the Regional Development of Social Capital." *Regional Studies* **42**(3): 437-450.

Birchall, J. (2011). *People-Centred Businesses: Co-operatives, Mutuals and the Idea of Membership.* London, New York, Palgrave MacMillan.

Birchall, J., & Simmons, R. (2004). "What Motivates Members to Participate in Co-operative and Mutual Businesses?" *Annals of Public & Cooperative Economics* **75**(3): 465-495

Birchall, J., & Simmons, R. (2009) *Co-operatives and Poverty Reduction: Evidence from Sri Lanka and Tanzania*, Oldham, Co-operative College.

Birchall, J., & Simmons, R. (2010) "The Co-operative Reform Process in Tanzania and Sri Lanka", *Annals of Public and Cooperative Economics*, **81**(3): 467-500.

Blau, P. M. (1964). *Exchange and Power in Social Life*. New York, J. Wiley.

Brewin, D., Bielik, M., & Oleson, B. (2008). "“The Evolution of Grain Trading Organizations in Australia: Applying the Cooperative Life Cycle”, Current Agriculture, Food & Resource Issues." *Journal of the Canadian Agricultural Economics Society* **9**(2008): 9-17.

Burt, R.S. (1997) “The Contingent Value of Social Capital”, *Administrative Science Quarterly*, **42**(2): 339-365.

Busch, T., & Hoffmann, V.H. (2009) “Ecology-Driven Real Options: An Investment Framework for Incorporating Uncertainties in the Context of the Natural Environment” *Journal of Business Ethics* **90**:295–310.

Campbell, D. (2003). "Congressional Hearing Focuses on Possible Need for More Flexible Co-op Business Model." *Rural Cooperatives* **70**(6): 9-13.

Campbell, D. (2004). "Innovative practices focus of Missouri co-op conference." *Rural Cooperatives* **71**(4): 44-45.

Carpenter, S., Walker, B., Anderies, J.M., & Abel, N. (2001) “From Metaphor to Measurement: Resilience of What to What?” *Ecosystems*, **4**(8): 765-781.

Chaddad, F. H., & Cook, M. L. (2004). "Understanding New Cooperative Models: An Ownership–Control Rights Typology." *Review of Agricultural Economics* **26**(3): 348-360.

Chandra, C., & Kumar, S. (2000). "Supply Chain Management in Theory and Practice: A passing fad or a fundamental change?" *Industrial Management + Data* **100**(3): 100-114.

Chesbrough, H. W., & Rosenbloom, R.S. (2002). "The Role of the Business Model in Capturing Value from Innovation: Evidence from Xerox Corporation's Technology Spin-off Companies." *Industrial & Corporate Change* **11**(3): 529-555.

Christopher, M. (1992). *Logistics: The Strategic Issues*. London, Chapman & Hall.

Churchill, N., & Lewis, V. (1983). "The Five Stages of Small Business Growth." *Harvard Business Review* **61**(3): 30-50.

Clegg, S.R., Courpasson, D., & Philips, N. (2006) *Power and Organizations,* London, Sage.

Cook, M. (1995). "The Future of U.S. Agricultural Cooperatives: A Neo-Institutional Approach." *American Journal of Agricultural Economics* **77**(December): 1153-1159.

Cook, M. L., & Iliopoulos, C. (1999). "Beginning to Inform the Theory of the Cooperative Firm: Emergence of the New Generation Cooperative." *Finnish Journal of Business Economics* **4**(99): 525-535.

Cornforth, C. (2004). "The Governance of cooperatives and mutual associations: a paradox perspective." *Annals of Public & Cooperative Economics* **75**(1): 11-32.

Cross, R., & Buccola, S. (2004). "Adapting Cooperative Structure to the New Global Environment." *American Journal of Agricultural Economics* **86**(5): 1254-1261.

D'Amboise, G., & Muldowney, M. (1988). "Management Theory for Small Business: Attempts and Requirements." *The Academy of Management Review* **13**(2): 226-240.

De Carolis, D. M., & Saparito, P. (2006). "Social Capital, Cognition, and Entrepreneurial Opportunities: A Theoretical Framework " *Entrepreneurship Theory and Practice* **30**(1): 41-56.

de Haan, J. (2006) 'How emergence arises', *Ecological Complexity* **3**(4): 293-30.1

Desrochers, M., & Fischer, K. P. (2005). "The Power of Networks: Integration and Financial Cooperative Performance." *Annals of Public & Cooperative Economics* **76**(3): 307-354.

Dick, A. S., & Basu, K. (1994). "Customer Loyalty: Toward and Integrated Conceptual Framework." *Journal of the Academy of Marketing Science* **22**(2): 99-113.

Dong, F., Marsh, T.L., & Stiegert, K.W. (2005). *State Trading Enterprises in a Differentiated Product Environment: The Case of Global Malting Barley Markets.* University of Wisconsin-Madison, USA, Food System Research Group: Working Paper Series FSWP2005-1.

Drake, L., & Llewellyn, D. (2001) "The Economics of Mutuality: A Perspective on UK Building Societies", in J. Birchall (Ed) *The New Mutualism in Public Policy*, London-New York, Routledge, pp: 14-40.

Emelianoff, I. V. (1942). *Economic Theory of Cooperation: Economic Structure of Cooperative Organizations.* Washington DC, University of Michigan.

Evans, J. R., & Berman, B. (2001). "Conceptualizing and Operationalizing the Business-to-Business Value Chain." *Industrial Marketing Management* **30**(2): 135-146.

Fairbairn, B. (1994). *The Meaning of Rochdale: The Rochdale Pioneers and the Co-operative Principles. Centre for the Study of Co-operatives*, University of Saskatchewan.

Fehr, E., & Schmidt, K.M. (1999). "A Theory of Fairness, Competition and Cooperation." *The Quarterly Journal of Economics* **114**(3): 817-868.

Fine, B. (2001) *Social Capital versus Social Theory*, Routledge, London.

Folger, R. (1996). 'Distributive and procedural justice: Multi-faceted meanings and interrelations', Social *Justice Research*, **9**: 395-416.

Folger, R., & Cropanzano, R. (2001). 'Fairness theory: Justice as accountability', In J. Greenberg & R. Cropanzano (Eds.), *Advances in Organizational Justice* (pp. 1-55). Stanford: Stanford University Press.

Folke, C. (2006). "Resilience: The emergence of a perspective for social–ecological systems analyses". *Global Environmental Change* **16**(3): 253–267.

Freeman, E.R. (1986) *Strategic Management: A Stakeholder Approach*, Boston, Pitman.

Fulton, M. (1999). "Cooperatives and Member Commitment." *The Finnish Journal of Business Economics* **4**(99): 418-437.

Fulton, M., & Giannakas, K. (2001). "Organizational Commitment in a Mixed Oligopoly: Agricultural Cooperatives and Investor-Owned Firms." *American Journal of Agricultural Economics* **83**(5): 1258-1265.

Garciá-Olivares, A. (1993) 'Self-organization and intermittency in social systems: towards a science of complexity'. *Kybernetes* **22**: 9-19

Garcia-Perez, A. M., & Garcia-Martinez, M. (2007). "The agrifood cooperative netchain. A theoretical framework to study its configuration." *Acta Agriculturae Scandinavica: Section C - Food Economics* **4**(1): 31-39.

Garoyan, L. (1983). "Developments in the Theory of Farmer Cooperatives: Discussion." *American Journal of Agricultural Economics* **65**(5): 1096-1098.

Gilbert, C. G. (2005). "Unbundling the structure of inertia: Resources versus routine rigidity", *Academy of Management Journal*, **48**(5): 741-763.

Goddard, E., Boxall, P., & Lerohl, M. (2002). "Cooperatives and the Commodity Political Agenda: A Political Economy Approach." *Canadian Journal of Agricultural Economics/Revue canadienne d'agroeconomie* **50**(4): 511-526.

Granovetter, M. (1973). "The Strength of Weak Ties." *American Journal of Sociology* **78**(6): 1360-1380.

Granovetter, M. (1983). "The Strength of Weak Ties: A Network Theory Revisited." *Sociological Theory* **1**: 203-233.

Granovetter, M. (1985). "Economic Action and Social Structure : The Problem of Embeddedness." *American Journal of Sociology* **91**(3): 481-510.

Gronroos, C. (1978). "A Service-Oriented Approach to Marketing of Services." *European Journal of Marketing* **12**(8): 588-601.

Gronroos, C. (1990). *Service Management and Marketing: Managing the moment of truth in service competition.* Lexington, Lexington Books.

Gunderson, L.H., & Holling, C.S. (eds). (2001). *Panarchy: understanding transformations in human and natural systems*, Island Press, Washington, DC.

Haldane, A. (2009) *Rethinking the Financial Network*, speech delivered at the Financial Student Association, Amsterdam, April [available online] www.finextra.com

Haller, L.E. (1992) *Branded product marketing strategies in the Cottage cheese market: Co-operative versus proprietary firms*, Food Marketing Policy Centre, Department of Agricultural and Resource Economics, The University of Connecticut.

Hansen, H., Samuelsen, B., & Silseth, P. (2008). "Customer Perceived Value in B-t-B Service Relationships: Investigating the Importance of Corporate Reputation." *Industrial Marketing Management* **37**(2): 206-217.

Hansmann, H. (1996) *The Ownership of Enterprise*, Boston, Harvard University Press.

Heriot, K. C., & Campbell, N.D. (2006). "Searching for Wortman's Rural Economic Development Zones: A Case Study of Three Rural Electric Cooperatives." *Journal of Developmental Entrepreneurship* **11**(3): 233-253.

Hill, C. J., & Neeley, S.E. (1988). "Differences in the Consumer Decision Process for Professional Vs. Generic Services." *The Journal of Services Marketing* **2**(1): 17-23.

Holling, C.S. (2001). "Understanding the Complexity of Economic, Ecological, and Social Systems", *Ecosystems,* **4**(5): 390-405.

Holmlund, M., & Tornroos, J-A. (1997). "What Are Relationships in Business Networks?" *Management Decision* **35**(4): 304-309.

Homans, G. C. (1974). *Social Behavior: its elementary forms.* New York, Harcourt Brace Jovanovich.

Ingram, P., & McEvily, B. (2007). *Sharper in Relief: Opposition, Identity and the Maintenance of Social Movement Organizations*, mitsloan.mit.edu.

Itkonnen, R. (1996). "My Views on Cooperative Corporate Governance." *Review of International Co-operation* **89**(4): 20-24.

James, H. S., & Sykuta, M.E. (2005). "Property Right and Organizational Characteristics of Producer-owned Firms and Organizational Trust." *Annals of Public & Cooperative Economics* **76**(4): 545-580.

Jarillo, J. C. (1993). *Strategic Networks: Creating the Borderless Organization*. Oxford, Butterworth-Heinemann.

Jenkins, J. (2008). N*CBA's Annual Conference to Focus on Cooperatives as the Better Business Model During Cooperative Week*. Washington D.C., US Federal News Service.

Jessop, B. (1997) "The Entrepreneurial City: Re-Imaging Localities, Redesigning Economic Governance, or Restructuring Capital?" in N. Jewson and S. MacGregor (Eds), Transforming *Cities*, London, Routledge, pp: 25-38.

Johnson, M. W., Christensen, C.M., & Kagermann, H. (2008). "Reinventing Your Business Model." *Harvard Business Review* **86**(12): 50-59.

Judge, W.Q., & Douglas, T.J. (1998) "Performance implications of incorporating natural environmental issues into the strategic planning process: an empirical assessment" *Journal of Management Studies* **35** (2): 241-262.

Kelly, G. & Muers, S. (2002) *Creating Public Value: An Analytical Framework for Public Service Reform,* Strategy Unit, Cabinet Office [available online] www.strategy.gov.uk

Killingback, T., & Doebeli, M. (2002). "The Continuous Prisoner's Dilemma and the Evolution of Cooperation through Reciprocal Altruism with Variable Investment." *The American Naturalist* **160**(4): 421-438.

Klijn, E., & Koppenjan, J. (2000) "Public Management and Policy Networks: Foundations of a Network Approach to Governance", *Public Management*, **2**(1): 135-158.

Knight, L. A. (2000). "Learning to Collaborate: A Study of Individual and Organizational Learning, and Interorganizational Relationships." *Journal of Strategic Marketing* **8**(2): 121-138.

Kotler, P. (2000) *Marketing Management*, Tenth Edition, Prentice Hall, Upper Saddle River, NJ.

Krivokapic-Skoko, B. (2002). *The Concept and Classifications of Agricultural Co-operatives ACCORD Paper No. 8.* Bathurst, Australian Centre for Co-operative Research & Development, Charles Sturt University.

Leana, C.R., & Van Buren, H.J. (1999) "Organisational Social Capital and Employment Practices", *Academy of Management Review*, **24**(3): 538-554.

Leimar, O., & Hammerstein, P. (2001). "Evolution of Cooperation through Indirect Reciprocity." *Biological Sciences* **268**(1468): 745-753.

Lerman, Z., & Parliament, C. (1990). "Comparative Performance of Cooperatives and Investor-Owned Firms in US Food Industries." *Agribusiness* **6**(6): 527-540.

Lerman, Z., & Parliament, C. (1991). "Size and industry effects in the performance of agricultural cooperatives." *Agricultural Economics* **6**(1): 15-29.

Lerman, Z., & Parliament, C. (1993). "Financing Growth in Agricultural Cooperatives." *Review of Agricultural Economics* **15**(3): 431-441.

Levi, Y., & Davis, P. (2008). "Cooperatives as the "enfants terribles" of economics: Some implications for the social economy." *Journal of Socio-Economics* **37**(6): 2178-2188.

Levi, Y., & Pellegrin-Rescia, M.L. (1997). "A New Look at the Embeddedness/Disembeddedness Issue: Cooperatives as terms of reference." *Journal of Socio-Economics* **26**(2): 159-179.

Linnenluecke, M., & Griffiths, A. (2010) "Beyond Adaptation: Resilience for Business in Light of Climate Change and Weather Extremes" *Business Society* **49**: 477-511.

Loorbach, D. (2010) "Transition Management for Sustainable Development: A Prescriptive, Complexity-Based Governance Framework", *Governance*, **23**(1): 161-183.

López-Gamero, M.D., Molina-Azorín, J.F., & Claver-Cortés, E. (2011) "Environmental uncertainty and environmental management perception: A multiple case study" *Journal of Business Research* **64** (2011): 427–435

Luhmann, N. (1984) "Die Theorie der Ordung und die naturlichen Rechte", *Rechtshistoriesches Journal*, **3**: 133-149.

Mamouni Limnios, E., & Mazzarol, T. (2011) *Resilient organizations: Offense versus Defense*, paper submitted for the Australia and New Zealand Academy of Management (ANZAM) Annual Conference, Wellington 7-9 December.

Mayer, R. C., Davis, J.H., & Schoorman, F.D. (1995). "An Integrative Model of Organizational Trust." *The Academy of Management Review* **20**(3): 709-734.

Mazzarol, T., Mamouni-Limnios, E., & Reboud, S. (2011) *Co-operative Enterprise: A Unique Business Model?*, paper submitted for the Australia and New Zealand Academy of Management (ANZAM) Annual Conference, Wellington 7-9 December.

McCain, R. (2008). "Cooperative Games and Cooperative Organizations." *Journal of Socio-Economics* **37**(6): 2155-2167.

McClintock-Stoel, L., & Sternquist, B. (2004). "Group Identification: The Influence of Group Membership on Retail Hardware Cooperative Members' Perceptions." *Journal of Small Business Management* **42**(2): 155-173.

McMillan, D.W., and Chavis, D.M. (1986) "Sense of Community: A Definition and Theory", *Journal of Community Psychology*, **14**(1): 6-23.

Menguc, B. & Ozanne, L.K. (2005) "Challenges of the ''green imperative'': a natural resource-based approach to the environmental orientation–business performance relationship" *Journal of Business Research* **58** (2005): 430– 438.

Miles, R. E., & Snow, C.C. (1992). "Causes of Failure in Network Organizations." *California Management Review* **34**(4): 53-60.

Miller, D. (1990). *The Icarus paradox: how exceptional companies bring about their own downfall: new lessons in the dynamics of corporate success, decline, and renewal*, Harper Business, New York.

Miller, K. (2005) *Communication Theories*, New York, McGraw-Hill.

Morrow, J. L., Hansen, M. H., & Pearson, A. W. (2004). "The Cognitive and Affective Antecedents of General Trust Within Cooperative Organizations." *Journal of Managerial Issues* **16**(1): 48-64.

Narayan, D. & Pritchett, L. (1999) "Cents and Sociability", *Economic Development and Cultural Change*, **47**(4): 871-889.

Nembhard, J. G. (2002). "Cooperatives and Wealth Accumulation: Preliminary Analysis." *American Economic Review* **92**(2): 325-329.

Nha, N. (2006). "The Perceived Image of Service Cooperatives: An Investigation in Canada and Mexico." *Corporate Reputation Review* **19**(1): 62-78.

Nilsson, J. (1999). "Co-operative Organisational Models as Reflections of the Business Environments." *The Finnish Journal of Business Economics* **4**(99): 449-470.

Nilsson, J. (2001). "Organisational Principles for Co-operative Firms." *Scandinavian Journal of Management* **17**(3): 329-356.

Novkovic, S. (2008). "Defining the Co-operative Difference." *Journal of Socio-Economics* **37**(6): 2168-2177.

Nowak, M. A., & Sigmund, K. (2000). "Cooperation versus Competition." *Financial Analysts Journal* **56**(4): 13-22.

Nunez-Nickel, M., & Moyano-Fuentes, J. (2004). "Ownership Structure of Cooperatives as an Environmental Buffer." *Journal of Management Studies* **41**(7): 1131-1152.

Ole Borgen, S. (2001). "Identification as a Trust-Generating Mechanism in Cooperatives " *Annals of Public and Cooperative Economics* **72**(2): 209-228

Oliver, R. L. (1999). "Whence Consumer Loyalty." *Journal of Marketing* **63**(4): 33-44.

Osterwalder, A., Pigneur, Y., & Tucci, C.L. (2005). "Clarifying Business Models: Origins, Present, and Future of the Concept." *Communications of the Association for Information Systems* **2005**(16): 1-25.

Ownership Associates (1998) *Self-Direction and Employee Ownership*, OA Working Paper, 10 July [available online] http://www.ownershipassociates.com/selfdir.shtm

Ownership Associates (2001) *The Ownership Culture Report*, Cambridge MA, Ownership Associates No. 4, [available online] http://www.ownershipassociates.com/ocr4.shtm

Palmer, A. (2002). "Cooperative marketing associations: an investigation into the causes of effectiveness." *Journal of Strategic Marketing* **10**(2): 135-156.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality." *Journal of Retailing* **64**(1): 12-40.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). "Alternative Scales for Measuring Service Quality: A Comparative Assessment Based on Psychometric and Diagnostic Criteria." *Journal of Retailing* **70**(3): 201-230.

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). "A Conceptual Model of Service Quality and Its Implications for Future Research." *The Journal of Marketing* **49**(4): 41-50.

Parliament, C., & Lerman, Z. (1993). "Risk and Equity in Agricultural Cooperatives." *Journal of Agricultural Cooperation* **8**(1993): 1-14.

Parliament, C., Fulton, J., & Lerman, Z. (1989). *Cooperatives and Investor Owned Firms: Do They March to the Same Drummer?* St Paul, Minnesota, Department of Agricultural and Applied Economics, University of Minnesota, Staff Papers.

Peredo, A. M., & Chrisman, J.J. (2006). "Toward a Theory of Community-Based Enterprise." *Academy of Management Review* **31**(2): 309-328.

Peters, J. (1993). "On Competition." *Management Decision* **31**(1): 46-48.

Pfeffer, J., & Salancik, G.R. (1978). *The External Control of Organizations: A Resource Dependence Perspective*. New York, Harper & Row.

Pollet, I., and Develtere, P. (2003) "Cooperatives and Development: Action speaks louder than words", *IRU Courier*, [available online] www.caledonia.org.uk/pollet.htm

Porter, M. E. (1979). "How Competitive Forces Shape Strategy." *Harvard Business Review* **57**(2): 137-145.

Porter, M. E. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors.* Boston, The Free Press.

Porter, M. E. (1981). "The Contributions of Industrial Organization to Strategic Management." *Academy of Management Review* **6**(4): 609-620.

Prakash, D. (2003). *The Principles of Cooperation: A Look at the IGA Cooperative Identity Statement*. New Delhi, Pamda-Network International.

Rawls, J. (1958). "Justice as Fairness." *The Philosophical Review* **67**(2): 164-194.

Rawls, J. (1971). *A Theory of Justice*. Boston, Harvard University Press - Belknap.

Rhodes, V. J. (1983). "The Large Agricultural Cooperative as a Competitor." *American Journal of Agricultural Economics* **65**(5): 1090-1095.

Royer, J. S. (2004). *Cooperative Theory: A Neoclassical Approach*. [Available online] http://agecon.unl.edu/royer/theory.pdf, unpublished lecture, University of Nebraska

Russo, M.V., & Fouts, P.A. (1997) "A resource-based perspective on corporate environmental performance and profitability" *Academy of Management Journal* **40**(3): 534-559.

Sanchez-Fernandez, R., & Iniesta-Bonillo, M.A. (2009). "Efficiency and Quality as Economic Dimensions of Perceived Value: Conceptualization, Measurement and Effect on Satisfaction." *Journal of Retailing and Consumer Services* **16**(6): 425-433.

SDD (2008). *Grain Supply Chain Pilot Study: Stage One Final Report - National Transport Commission*. Epping NSW, Strategic Design & Development.

Sevarlic, M., Nikolic, M., & Simmons, R. (2010) "Agricultural Cooperatives and their Membership in Cooperative Unions in Serbia," *APSTRACT: Applied Studies in Agribusiness and Commerce*, AGRIMBA, vol. 4.

Shar, T. (1996). *Catalysing Co-operation: Design of Self-Governing Organisations*. New Delhi, Sage.

Sharma, S. (2000) "Managerial interpretations and organizational context as predictors of corporate choice of environmental strategy" *Academy of Management Journal* **43** (4): 681-697.

Silversten, S. (1996). "Governance Issues seen from a Management Perspective." *Review of International Co-operation* **89**(4): 34-36.

Simmons, R., & Birchall, J. (2008) "The Role of Co-operatives in Poverty Reduction: Network Perspectives", *Journal of Socio-Economics*, **37**(6): 2131-2140.

Simmons, R., & Birchall, J. (2009) "The Public Service Consumer as Member", in R. Simmons, M. Powell and I. Greener (Eds) *The Consumer in Public Services: Choice, Values and Difference*, Bristol, The Policy Press, pp: 235-280.

Simon, H.A. (1978) "On how to decide what to do", *Bell Journal of Economics*, **9**(2): 494-507.

Skurnik, S. (2002). "The Role of Cooperative Entrepreneurship and Firms in Organising Economic Activities - Past, Present and Future." *The Finnish Journal of Business Economics* **1**(02): 103-124.

Sorokin, P.A. (1954) *The Ways and Power of Love: Types, Factors and Techniques of Moral Transformation*, New York, Templeton Foundation Press.

Spear, R. (2000) "The Co-operative Advantage", *Annals of Public and Cooperative Economics*, **71**(4): 507-523.

Spear, R., & Bidet, E. (2003). *The Role of Social Enterprise in European Labour Markets*, EMES: European Research Network Working Paper No. 03/10.

Stark, A. (1993) "What's the Matter with Business Ethics" *Harvard Business Review* **71**(3): 38-48.

Streeck, W., & Schmitter, P. (1985) "Community, Market, State – and Associations?" *European Sociological Review*, **1**(2): 119-138.

Sutcliffe, K.M., & Vogus, T.J. (2003). "Organizing for Resilience". in K.S. Cameron, J.E. Dutton, & R.E. Quinn (eds), *Positive organizational scholarship: Foundations of a new discipline*, Berrett-Koehler Publishers, San Francisco, CA, pp.94-110.

Sweeney, J. C., & Soutar, G.N. (2001). "Consumer Perceived Value: The Development of a Multiple Item Scale." *Journal of Retailing* **77**(1): 203-220.

Sweeney, J.C., Soutar, G.N. & Mazzarol, T.W., (2011) "Word of Mouth: Measuring the Power of Individual Messages", *European Journal of Marketing*, (in press).

Tan, J., Fischer, E., Mitchell, R., & Phan, P. (2009). "At the Center of the Action: Innovation and Technology Strategy Research in the Small Business Setting." *Journal of Small Business Management* **47**(3): 233-262.

Teece, D. J. (2010). "Business Models, Business Strategy and Innovation." *Long Range Planning* **43**(2/3): 172-194.

Teece, D. J., Pisano, G. & Shuen, A. (1997). "Dynamic Capabilities and Strategic Management", *Strategic Management Journal*, **18**(7): 509-533.

Tennbakk, B. (2004). "Cooperatives, regulation and competition in Norwegian agriculture." *Acta Agriculturae Scandinavica: Section C - Food Economics* **1**(4): 232-240.

Trivers, R. L. (1971). "The Evolution of Reciprocal Altruism." *Quarterly Review of Biology* **46**(1): 35-57.

Tushman, M. L., & O'Reilly, C. A. (1996). "Ambidextrous organizations: Managing evolutionary and revolutionary change", *California Management Review*, **38**(4): 8–30.

Ulaga, W., & Chacour, S. (2001). "Measuring Customer-Perceived Value in Business Markets: A Prerequisite for Marketing Strategy Development and Implementation." *Industrial Marketing Management* **30**(6): 525-540.

Van Bekkum, O. F., & Bijman, J. (2006). *Innovations in Cooperative Ownership: Converted and Hybrid Listed Cooperatives*. 7th International Conference on Management in AgriFood Chains and Networks, Ede, Netherlands, 31 May to 2 June.

Van Sickle, J. J., & Ladd, G.W. (1983). "A Model of Cooperative Finance." *American Journal of Agricultural Economics* **65**(2): 273-281.

Vogus, T.J., & Sutcliffe, K.M. (2007) "Organizational Resilience: Towards a Theory and Research Agenda", 2007 IEEE International Conference on Systems, Man and Cybernetics: 3418 - 3422

Ward, A. M., & McKillop, D. (1997). *The Relationship between Credit Union Objects and Cooperative Philosophies.* Belfast, Ireland, School of Management and Economics, University of Queens**:** http://www.creditunionresearch.com/uploads/workingpaper1.

Weaver, C. (1978) "Regional Theory and Regionalism: Towards rethinking the regional question", *Geoforum*, **9**(6): 397-413.

Zeithaml, V. A. (1988). "Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence." *Journal of Marketing* **52**(3): 2-22.

Zeithaml, V. A. (1991). How Consumer Evaluation Processes Differ between Goods and Services. *Services Marketing*. C. H. Lovelock. Englewood Cliffs, N.J., Prentice Hall**:** 39-47.

Zeithaml, V.A., Parasuraman, A., & Berry, L.L. (1990) *Delivering Quality Service, Balancing Customer Perceptions and Expectations*, New York, The Free Press.

Zucker, L. (1986) "Production of Trust: Institutional Sources of Economic Structure 1840-1920" in L.L. Cummings and B.M Staw (Eds), *Research in Organisational Behavior*, JAI Press, Greenwich, C.T.