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An analysis of the restrictions on the competitive readiness of Australian businesses due to their lack of formal quality management systems

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Publication Details

This conference paper was originally published as Styger, LEJ, An analysis of the restrictions on competitive readiness of Australian businesses due to their lack of formal quality management systems, Toulon-Verona Conference, "Excellence in Services." QSS International Conference, Quality and Services Science, Alicante, Spain, 1-3 September 2011.

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An analysis of the restrictions on the competitive readiness of Australian businesses due to their lack of formal quality management systems

Abstract
Small to medium sized enterprises (SME) employ 95% of the Australian workforce. Most of the organisations, employing most of the workforce, do not have any formal quality management systems. As such, Australian businesses, particularly SME's, have remained somewhat isolated in terms of operational and competitive readiness compared to their peers in other countries. Based on research conducted in 2010, using a series of structured focus groups of logistics and supply chain professionals from a diverse spectrum of industries across a pan-Australian base, it has been determined that over 85% of the participants in the focus groups had no formal quality management systems within their own organisations or indeed within their immediate supply networks. Interestingly, most of the participants of the focus groups indicated that they thought formal quality systems would have a limiting factor on their operations. Further investigation into organisations who were outsourcing products and services from Australian companies indicated that, post the Global Financial Crisis, there has typically been a change in policy, and most organisations are now precluding once qualified local suppliers because of their lack of formal quality systems. This decision is typically based around issues such as risk mitigation and further moves into more comprehensive corporate social responsibility. This paper discusses this recent research and the implications of the widening gap in Australian supply and demand based on the lack of formal quality systems in a significant percentage of the supply base.

Disciplines
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An Analysis of the Restrictions on the Competitive Readiness of Australian Businesses Due to Their Lack of Formal Quality Management Systems

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Small to medium sized enterprises (SME) employ 95% of the Australian workforce. Most of the organisations, employing most of the workforce, do not have any formal quality management systems. As such, Australian businesses, particularly SME's, have remained somewhat isolated in terms of operational and competitive readiness compared to their peers in other countries.

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This paper discusses this recent research and the implications of the widening gap in Australian supply and demand based on the lack of formal quality systems in a significant percentage of the supply base.

1.0 Introduction

To quote the Australian vernacular, it has always been said that "She'll be right" if you own a coal mine, an iron ore mine or if you are part of a narrow band of industries supplying into the Australian commodities sector.

In common with most other suppliers into the commodities sector, in most other regions of the world, those businesses involved directly in commodities production in Australia typically possess world class quality management systems, however, this is not typically the case outside of the Australian commodities sector and a hand full of typically regulated

industries. It is the lack of good quality management systems that has contributed greatly to significant gaps and risk in Australian supply networks.

Competitiveness and business sustainability is based around an oganisation possessing a robust supply network that is encompassed by a formal quality management framework. The supply network will now have a mature view of project management, encourage and embrace innovation and value and develop knowledge capital. Alongside being customer centric, the quality management framework of competitive organisations must now incorporate triple bottom line principles (Carter & Rogers 2008) and consensus within the supply network (Styger 2009a).

Whereas many companies globally appear to be using a formal quality management framework to maintain competitiveness and indeed build a sustainable future, there is evidence to suggest that this is not a prevalent strategy within many Australian grass roots suppliers.

2.0 Contextual Framework of Australian SME's

Definitions of an SME vary greatly from country to country and sometimes from support agencies within a country. Within the Australian context, an SME is defined as an organisation employing less than 50 people (Anon 2008). Remarkably, 85% of all Australian non agricultural business (i.e. four out of five businesses) are classified as microbusinesses (i.e. employing less than five people) which generates significantly more risk and also diversity into a supply network (ABS 1998 and Dawson, Breen and Satyen 2002).

The geography and demographic of Australia is such that traditionally, Australian markets and therefore companies have typically operated within a small, local radius. Local operation has been due to Australia having a land mass comparable to that of Europe with a population comparable to London. Historically, there has not been a sufficiently large market to attract global players en-mass, who in turn inject competition and choice into the marker. The larger players who have become established in Australia over time have typically developed an imperialistic presence in the market. As such, Australia has evolved a unique "small town large country attitude" that is has sufficed well until recent times.

3.0 Background to the Work

The core data for this paper was derived from three programs of work, these were:

1. Initial pilot studies
2. A series of focus groups
3. Field observations and interviews

3.1 Initial Pilot Studies

The initial pilot studies that triggered this work consisted of a series of focus groups conducted as a part of local area industrial support groups who were tasked with improving the international competitiveness of Australian SME's. During the focus groups, two relevant discussion points were tabled to the focus groups, these were:

1. What is quality?
2. Why do you not have formal quality management systems?

3.1.1 What is Quality? - The Perception of Quality in Australian SME's

The responses to the question "What is quality" delivered a series of subset responses from the focus groups that may be summarised as:

- Material performance
- Standardisation of product
- Robust product manifestation
- Customer satisfaction
- Cost efficiency
- Brand image
- Product specification

Whereas any or indeed all of these tag responses were somewhat predictable, it became apparent that few participants had any formal methodologies for measuring, reporting and improving these elements of their businesses.

3.1.2 "Why Do You Not Have Formal Quality Management Systems?" - Resistance to Formal Quality Management Systems In Australian SME's

On the basis that formal quality systems would help them manage key aspect of their business, the focus groups were then asked to explain why they did not have formal quality management systems in their organisations. A process of MindMapping (Buzan 2005), was conduced to understand the interrelated complexities of the responses from the participants (see Figure1.0).

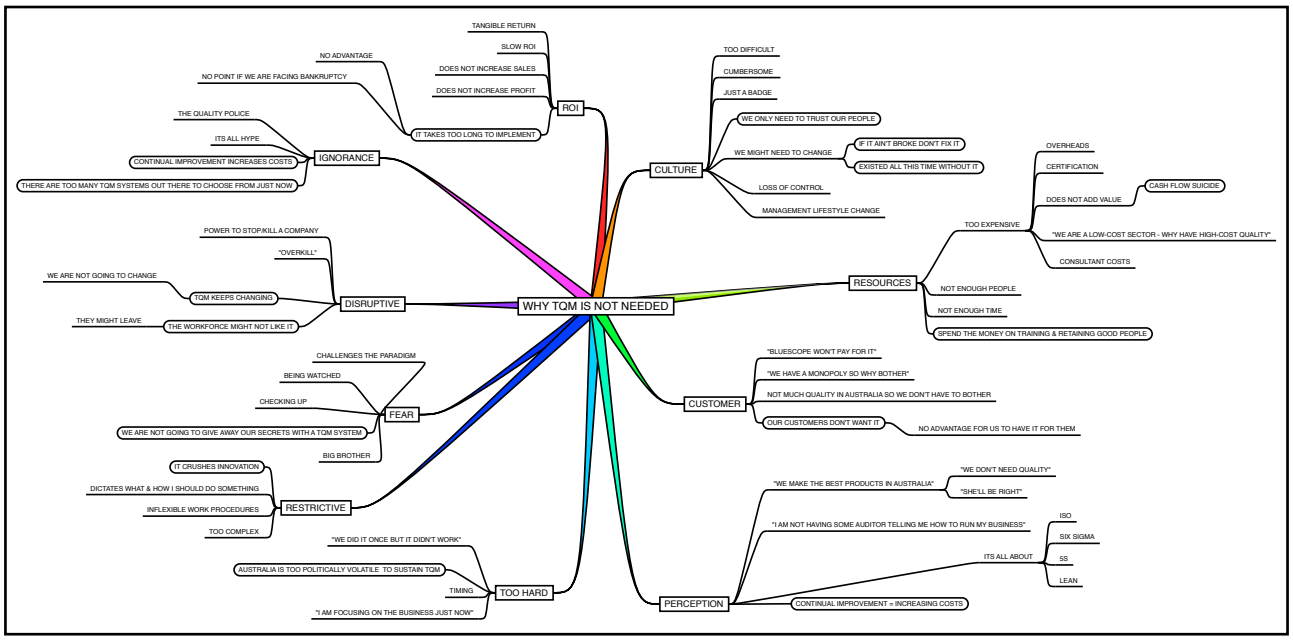

Figure 1.0 - MindMap of the Responses from the Focus Groups Regarding the Questions "Why Do You Not Have Formal Quality Management Systems"

Fundamentally, ten key response subsets were identified within the focus group participants, these are:

1. ***Culture*** - Participants genuinely felt that they had significant knowledge about their business, their employees and suppliers and therefore did not need to formalise

processes. Furthermore, longevity and control were key players in individual management identity that were thought to be at risk of being surrendered if formal quality systems were employed.

2. ***Resources*** - Quality was seen by most participants as a high cost exercise that could impact adversely on their profitability. It is important to remember that most businesses were owner operated and profit equated to pay for many of the participants. Furthermore, the diversion of already stretched human resources was perceived to be one more obstruction to the task of making money.
3. ***Customers*** - One interesting observation by some participants who were focused solely on one customer, was that that customer would not pay for the introduction of formal quality management systems. In effect, there was a suggestion that a subservient feudal system operated within the supply network. This was backed up by an argument based on customers actively discouraging the SME from having quality systems, because the SME might then be able to find new customers.
4. ***Perception*** - There was a genuine pride by the focus group participants in their business and the output of their business. Whereas this is an admirable trait, it did present a barrier in terms of the perceived interference form external parties (i.e. consultants and quality auditors), and a perception that continual improvement would equate to continual cost increases. One pointer in the responses was a belief by many participants that they made the best products in Australia, suggesting that many participants might be in denial concerning the impact of overseas products in their marketplace.
5. ***Too Hard*** - There was an underlying message that many businesses had attempted to introduce formal quality systems at some point, but the process became too cumbersome and/or the timing of the introduction was wrong. Importantly, one point to be raised by the participants was that Australia is too politically volatile to support and sustain formal quality management ethos within the grass roots businesses of the Country. On further investigation, it became apparent that there was genuine concern in the focus group participants regarding short-term views and political agendas within the Country that significantly impacted on longer range investments by the business owners (i.e. true investment for true business sustainability was "hampered by political rhetoric and saber rattling" of the Australian political system).
6. ***Restrictive*** - Australian businesses have traditionally been good at innovating to survive. This has been driven by the geographical remoteness of the country, regions and indeed markets they have served. There was a genuine concern by the focus group participants that formal quality systems would restrict agility and innovation capability within the businesses.
7. ***Fear*** - The latent and kinetic innovation capability within Australian SME's is based on a fine mix of tacit and intellectual knowledge capital. From the focus groups responses, it would appear that there is a cultural axiom that is centred around formalising knowledge systems that records ("tangibalises") the process and therefore enables knowledge theft. Effectively it would appear that many Australian SME's have evolved a modern equivalent to European medieval liveried guilds to protect their ability to trade (i.e. knowledge openness provides a method of knowledge wastage).
8. ***Disruptive*** - Formal quality systems were viewed as disruptive to the work force, because quality systems and requirements keep changing (regardless if this is customer led), and the changes in the systems might upset the workforce causing them to move on. As such, quality systems were typically viewed as a business killer.
9. ***Ignorance*** - Participants viewed formal quality systems with suspicion, they believed that their own business was different and any formal system would not fit their

business model. Importantly, they also believed that there were too many formal systems "in the market" to choose from and the "Quality Systems Market would rationalise over time and the cost would come down" effectively allowing them to choose a cheaper quality management system at that point.

10. ***Return on Investment*** - It was argued by the participants that formal quality systems were slow to implement, did not increase sales and had no commercial advantage in the current business environment, however, this is perhaps where the greatest single disconnect occurs in the strategic direction for many Australian SME's (see section 3.3 below).

The four key quotes for the focus groups epitomize the axiom of reasoning against formal quality systems, these are:

- "We don't need formal TQM, because it will conflict with our internal systems"
- "I am going to do it my way" (or as it became known in the research teams vernacular "Franks's song")
- "Quality is not an imperative, but rather a consideration for success"
- "All we need is strategic commonsense"

3.2 Structured Focus Groups

The initial work indicated that there was a significant disconnect between the ethos of modern quality management and the perception of quality management in Australian SME's.

In an attempt to generate qualitative data around the initial focus group responses, a series of focus groups was conducted with a wider group of participants. The program was promoted using a series of databases and advertisements in the public electronic and print media. Participants were asked to pre-register for one of a series of regional focus groups. As such, the sample set can be determined to be a random (or as near as is possible) representation of Australian business (Gill & Johnson 2010). It should be noted that each business had their own supply base and was involved in at least one traditional customer supply network, as such had a business (quality) system, and were therefore qualified to take part in the study (Bryman & Bell 2007) . Furthermore, all participants were senior officers within their organisations and as such were involved in the strategic aspects of their business, including quality management responsibility.

A series of three clustered diagnostic exercises were included in a program of work and were designed to generate data specifically focused on quality management principles. The diagnostics were:

1. Customer focus and product realisation
2. Continual improvement
3. The use of performance matrices

3.2.1 Customer Focus and Product Realisation - Transaction and Interaction Capability within the Supply Network

Two diagnostics exercises were used to map how the participants believed they were communicating and transacting within their networks and how well their suppliers were communicating and transacting with them (i.e. customer focus, product realisation). This exercise appeared to be challenging for many participants because they wanted to be

removed from the process of sales (customer interface), somehow believing that is was "dirty".

- 84% of participants were rated as being poor at corporate communications between themselves, customer and suppliers
- 13% of participants were good at communications and selling
- 16% of participants believed that their suppliers were good at communicating and selling to them

3.2.2 Continual Improvement - Developing LEAN Principles

LEAN principles (i.e. continual improvement) were discussed within the study, the findings are shown below:

- 90% of participants thought the concept of LEAN would be useful in their organisations
- 10% of participants thought they could actually introduce LEAN principles into their organisation, the main barrier to introduction being internal cultural axioms
- 12% of participants were using some aspects of LEAN
- 11% of participants recognised that they were operating within a formal quality management system
- 6% of participants were operating within a formal, externally audited, quality management system

3.2.3 The Use of Performance Matrices

Two further diagnostics were offered to the participants in order to establish how they were currently performing within their supply network and what they needed to do to improve and sustain performance. Fundamentally, these two diagnostics were an extension of developing LEAN principles and a quality focus. The findings are shown below:

- 12% of participants attempted both performance matrices exercises
- 50% were able to collate an answer regarding basic supply chain management performance measures
- Of the 50% who attempted the exercise, the average performance rating was 40%

Overall, it was established that whereas business data was collected in all participants, analysis of much of the data was superficial and did not trigger improvement within the business.

3.3 Barriers to Competitiveness - Field Observations and Interviews Following on from the Focus Group Activities

Post the focus group element of the work, a series of interviews were conducted with senior managers in traditional OEM's with a view of understanding the implications of the focus group findings on the OEM (typically end customer) businesses.

Most of the interviewees indicated that their organisations had been experiencing an increase in "negative contribution" within "invisible sections or lower level, smaller and typically insignificant, suppliers" (i.e. typically SME's, the focus of this work, were not contributing to the overall wellbeing of the end customer).

A consistent pattern of future supplier engagement was also forthcoming during the interviews. The pattern consisted of four key points, these were:

1. ***Move to Larger Lower Risk Suppliers*** - the interviewees stated that they were now seeking larger organisations to supply to them because they were perceived to present less risk within the supply network
2. ***Need for Transparency*** - transparency and traceability within the supply network was considered to be a significant issue for companies seeking sustainable supply
3. ***Need for Systems*** - because of the need for transparency, traceability and also consistency, interviewees stated that they now required formal business and quality management systems to be embedded within their supply networks
4. ***Need for Continuation of Supply*** - one of the key drivers was continuity of supply, typically summarised as "right - on time - every time"

4.0 Moving From Quality Product into Quality Thinking

There is no evidence to suggest that there is typically anything amiss with the specification and manifestation of Australian products. Australian products are typically fit for purpose (within their market landscape) and delivered to specification. However, culturally, many Australian SME's appear not to have moved their perception of quality from a standards and operational rulebook into a customer focused philosophy. Indeed when presented with a foundation business model such as the "Quality Triangle" (Styger 2009b) many leaders of Australian SME's appear unable to quantify their customer base first, and then work around the triangle to develop robust customer centric solutions to fundamental customer needs (see Figure 2.0).

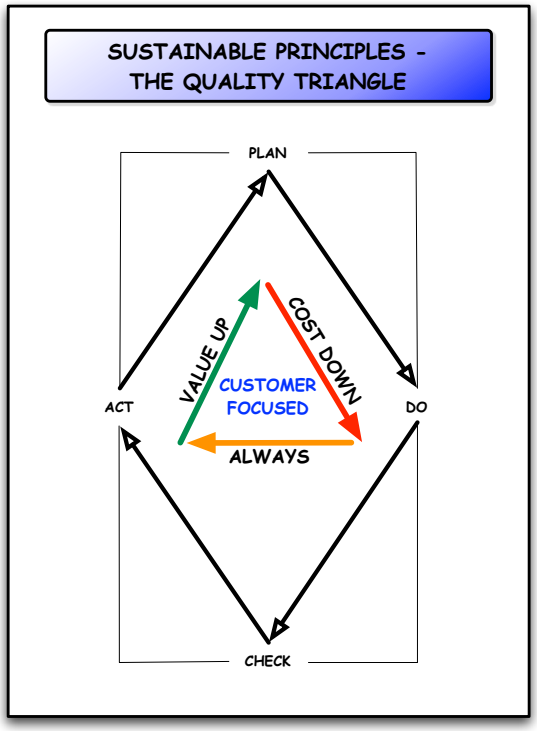

Figure 2.0 - A Foundation Business Model, the Quality Triangle

By maintaining an old world axiom of quality, many Australian SME's appear to be more product centric than they are customer centric. This creates a misalignment with the customer and a "Product Driven vs Customer Driven Forcefield" (see Figure 3.0) is often generated that forces customers to seek new suppliers.

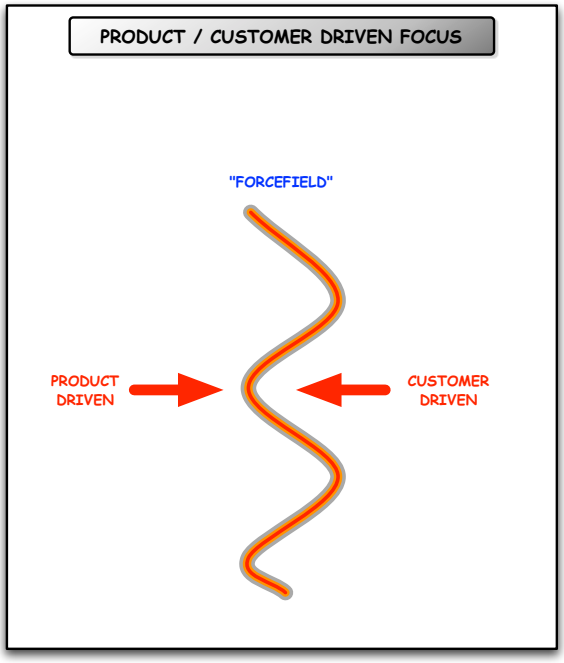

Figure 3.0 - Product / Customer Driven Forcefield

"No one pays for knowledge", as illustrated in Figure 4.0, there needs to be a tangible product and transaction of tangible goods or services with in business (i.e. any business model must be able to satisfy the Five Basic Laws of Supply). As a principle, tangible exchange has been well recognised within many traditional Australian business sectors, who, even during the height of the .coms, and www. connectivity booms, have remained

firmly focused on “delivering the goods”. This stalwart approach has had two interesting effects with the external perception of Australian SME’s, these are:

1. Claims that Australian SME’s lag behind other SME’s globally in their take up and exploitation of technology (regardless of any measure of need and/or effectiveness of technology with the business context)
2. The devaluing and almost outlawing of many knowledge centric SME’s (i.e. specialist consultancies, coaching services etc.), resulting in a business regeneration and innovation gap in Australian businesses that is present now and likely to remain so into the future

The combination of the above two points has, even in strong financial times, limited the supply of investment into entrepreneurial businesses, because they have been perceived as too traditional or too abstract in their market positioning.

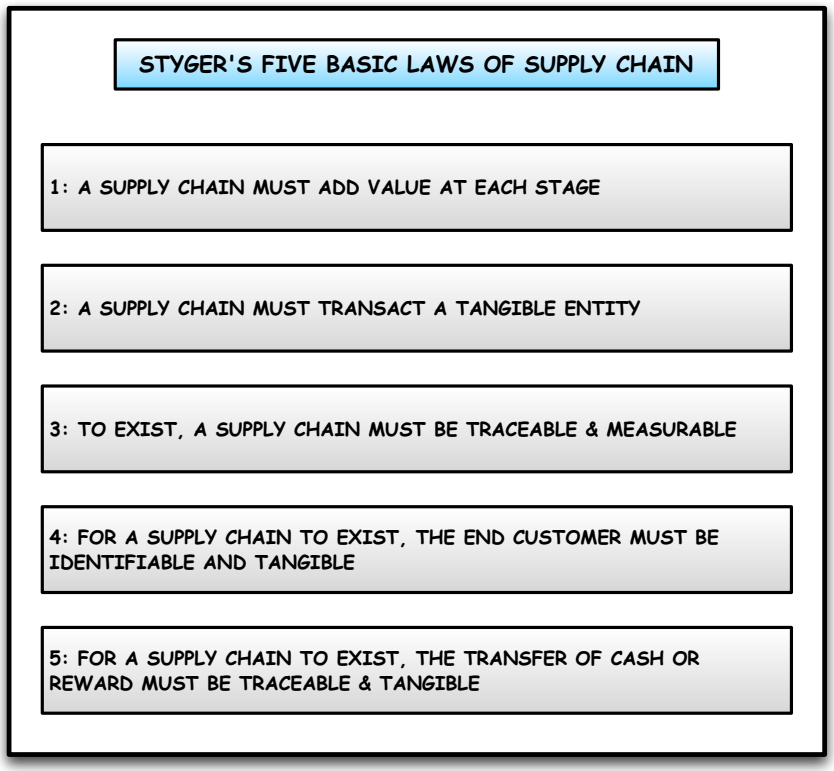

Figure 4.0 - The Five Basic Laws of Supply

Fundamentally, because of Australian business dynamics (i.e. small local supply and operation separated by large expanses of geography), Australian SME’s have typically evolved away from traditional structures. Even business structures within larger SME’s remain sufficiently flat and “close enough to the money” (end customer) that even when operational silos exist, corporate knowledge is more openly shared and accessed regularly (see Figure 5.0).

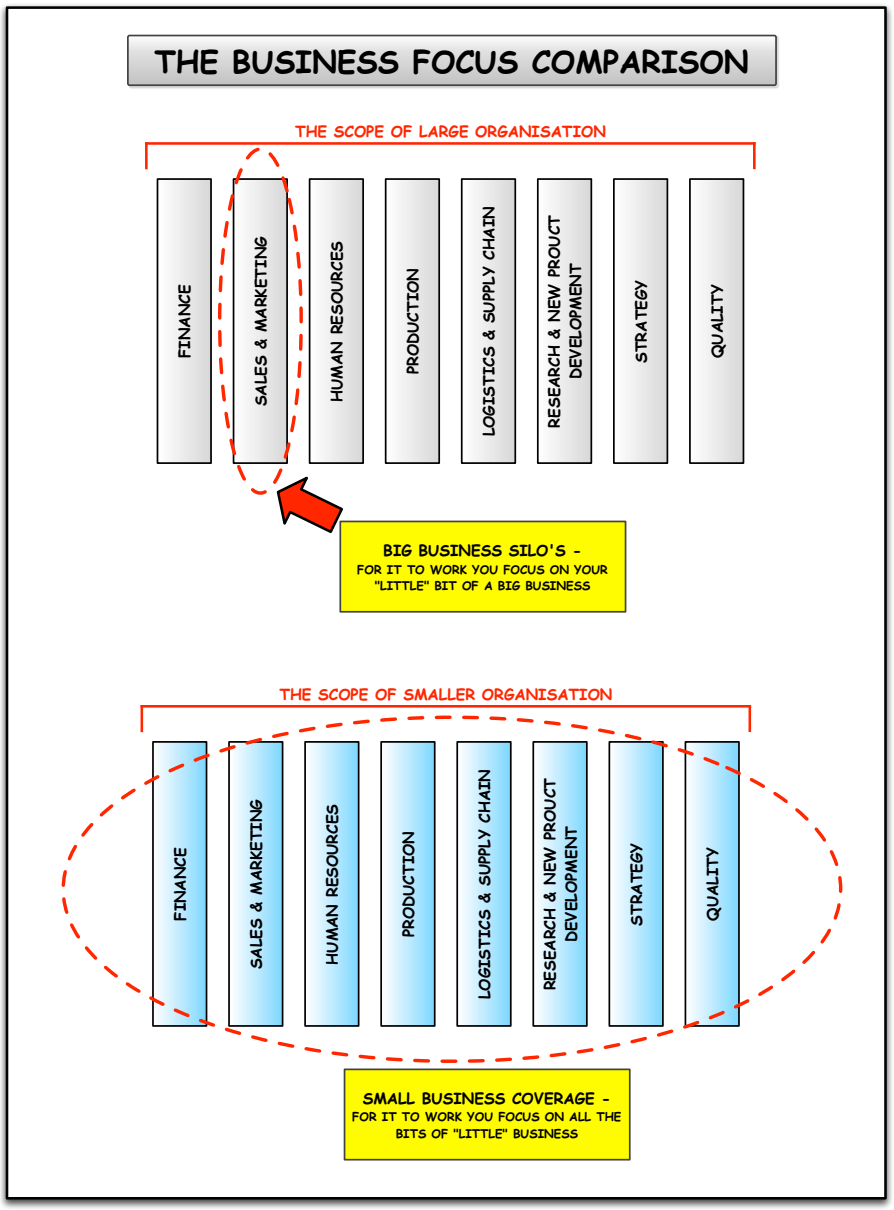

Figure 5.0 - A Comparison of Operational Focus Between Large and Small Business

One of the greatest knowledge depositories currently is held within Australian SME's. Currently the challenge is to establish how to operate outside of traditional silos and structures and into holistic enterprises that in turn generate great wisdom. However, accessing and capitalising on the wisdom inherent in the grass roots of business is somewhat fragmented at best, however it is this holistic knowledge that delivers competitive wisdom (see Figure 6.0).

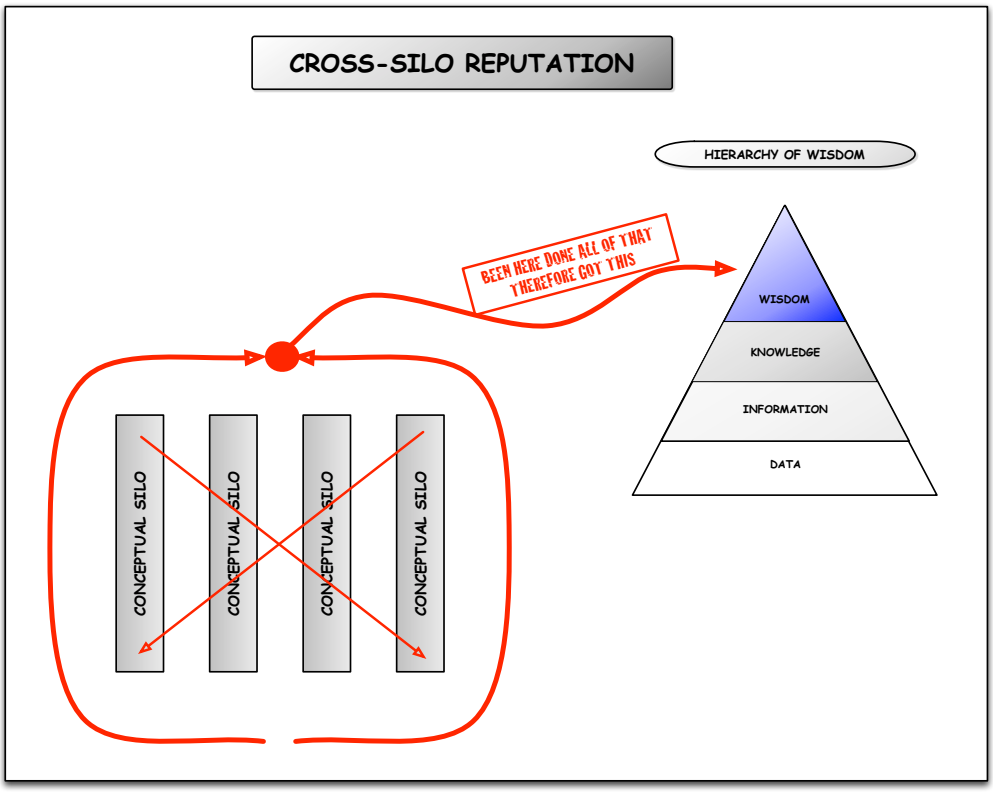

Figure 6.0 - Cross Silo Reputation Delivers Competitive Wisdom

5.0 Extending Sustainability to Include a Quality Management Framework

There has been significant interest in the concept of sustainability within business for some time. The work of Carter and Rogers (2008) has been seminal in focusing the minds of the business community outside of simple "green wash" and into a state where real and lasting business models can exist within a socially responsible context. However, Carter and Rogers have effectively missed a trick with their triple bottom line accounting model by not including consensus (i.e. organisational and enterprise wide agreement on the methods of execution of the framework) (Styger 2009a) .

Furthermore, the concept of customer lead sustainability fits well within a quality management strategy and a cost down value up ethos that benefits both the customer and the organisation equally. As such, sustainability modelling into the future should include an element of customer centric thinking. It is reasonable to suggest that the combination of all three elements (i.e. triple bottom line accounting, quality triangle and consensus) (see Figure 7.0) should be combined to form a more applicable model of Customer Lead Sustainability (see Figure 8.0).

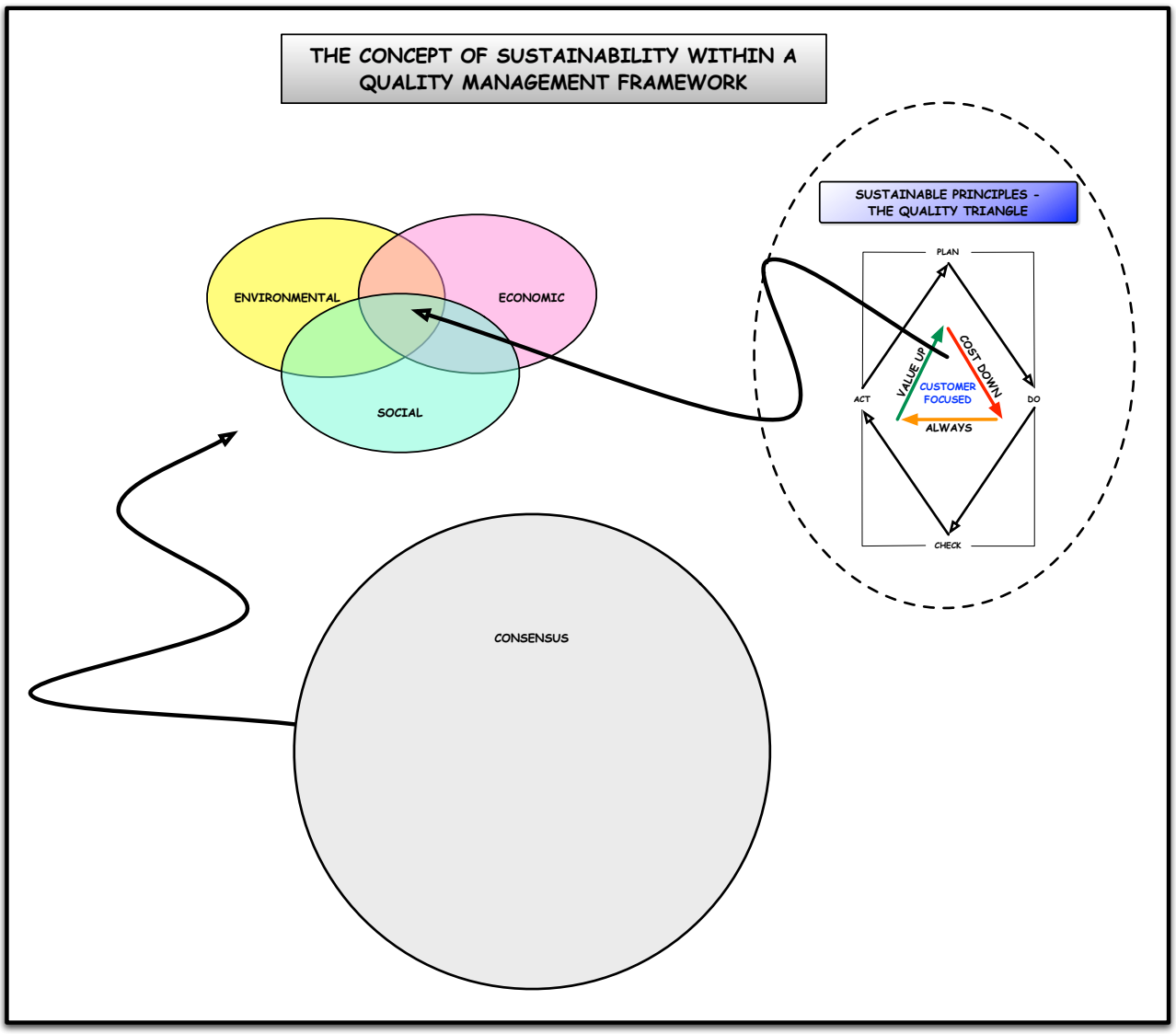

Figure 7.0 - Adapting the Concepts of Sustainability and Quality Management

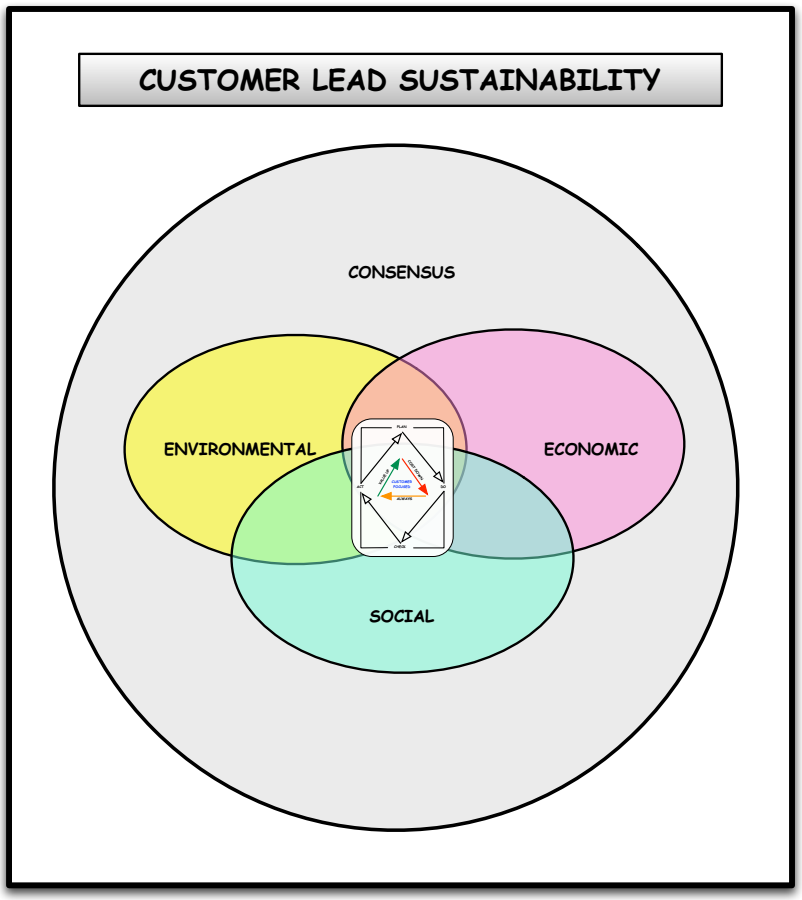

Figure 8.0 - The Customer Lead Sustainability Model

Conclusions

Until recently, unique market and geographic dynamics have protected many Australian SME's well. Formal quality management systems have typically been excluded from Australian SME's, as they have evolved a modern day equivalent to European Medieval liveried companies, that in many ways has encouraged a parallel evolution of business operation and engagement compared to the rest of the world (a not dissimilar scenario to the way in which Australian wildlife has evolved in isolation to the rest of the world). However, more recently, changes in supplier engagement and risk mitigation by OEM's has delivered a significantly different paradigm into the Australian supply base that now places direct demand and engagement thresholds on Australian SME's where the requirement for formal and transparent quality management systems, typically within a sustainable context is central to competitiveness.

It is likely that many Australian SME's will not be able to adapt to the new demands placed upon them by their customers, this is likely to be due to basic business culture, the size and capacity of the the SME to transform whilst still remaining solvent. As such, it is likely that there will be a reduction in the number of suppliers capable of delivering into existing supply networks (which perhaps they once did deliver into) because of the lack of formal quality management systems. OEM's will look elsewhere for competent suppliers who satisfy their needs and critical mass will be lost in local supply clusters, further reducing competitiveness.

Recommendations for Further Work

At first sight, it might be reasoned that, due to the unique contextual dynamics of Australia, that the findings from this work will typically only have impact within that County. However, recent work within the Sustainable Supply Research Group, at the Sydney Business School, has indicated that similar dynamics exist in other Asian countries. As such, it is recommended that further similar studies be conducted to establish if this is an Australian / Asian phenomenon or if lack of formal quality management frameworks are prevalent and impacting on the competitive readiness of other regions.

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