Assessing Stakeholder Salience through the View of Lean Enterprise Transformation

by

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Abstract

Aerospace enterprises tend to take a strategic approach to managing their enterprise. This thesis posits that stakeholder theory presents another way of looking at the enterprise, as it incorporates elements of both structure and behavior. Using a Lean enterprise thinking framework, this thesis employs stakeholder theory to explain enterprise dynamics and decision making. The thesis uses Enterprise Architecture (EA) theory, developed at MIT's Lean Advancement Initiative (LAI), for the Lean thinking enterprise framework.

The thesis proposes that an enterprise's core ideology drives its business model and enterprise architecture spaces, which in turn drives stakeholder networks. Stakeholder saliency and identification is based on the relevance of their values exchanges to the enterprise business model and capabilities contributed to the EA. Finally, this system evolves over Epochs, which are a function of time. These ideas are applied to architecting future states of an enterprise.

Quantitative models of stakeholder saliency, stakeholder network control structures, Design Structure Matrix, ESAT, and system dynamics are investigated. The thesis finds that stakeholder networks are context dependent with enterprise Epochs. Enterprise core ideology and leadership saliency are the only constants in the system.

The thesis adds to insights on stakeholder salience, in a Lean enterprise context, that may be generalized to the aerospace and defense industry. The findings are significant to the aerospace industry's ability to optimize value creation.

Thesis Supervisor: Deborah Nightingale Title: Professor of the Practice, Aeronautics and Astronautics and Engineering Systems Division

Dedication

I dedicate this thesis to my Daughter, Gwendolyn, for always being empathetic and humbling me with her admiration.

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Chapter 1. Introduction

1.0 Introduction

At times, decisions are made in the aerospace industry for political and cultural reasons. Especially in this industry, there is a tendency to acknowledge the strategic aspects of decision making over the political and cultural motivations driving outcomes and behaviors in an enterprise. From my professional experience in the aerospace industry, because of the highly technical nature of the business, it is easier for management to talk in terms of strategy. In reality, these cultural and political aspects permeate the enterprise through stakeholder interests.

The significance of strategy, cultural, and political motivations in enterprise dynamics can e understood through stakeholder theory in an enterprise thinking context. Stakeholder theory posits that both structure and behavioral views are important. It posits that, indeed, the management prioritizes stakeholders interests in accordance with their saliency to the enterprise. Stakeholders, the groups or organizations that have interests or "stakes" in the enterprise, exchange value with the enterprise and hence influence enterprise dynamics. Meanwhile, Lean enterprise research has presented a framework for holistically analyzing aerospace enterprise. Research shows that highly value creating Lean Thinking enterprises use a stakeholder perspective (Nightingale & Srivanasan 2008). However, there is a gap in Lean enterprise research on this subject.

1.1 Motivations

The goal of this thesis is to add to the body of Lean thinking enterprise research on stakeholders. The author aspires elucidate connections between stakeholder salience and Enterprise Architecture (EA). The thesis uses the LAI framework to describe the Risto enterprise architecture, stakeholders and their value delivery to Risto, and transformation to a Lean future state. This includes applying the LAI definition of enterprise architecture that an enterprise's design or architecture can be better understood through 8 EA views or lens, those being: Strategy, knowledge, information flow, processes, product, services, policy, and organization (Nightingale 2009). Through this LAI lens, the researcher collects data on stakeholder salience from the perception of Risto.

This thesis aspires to fill gaps in Lean Thinking Enterprise Literature on the role of stakeholders by asking:

How do the most salient enterprise stakeholders affect the Enterprise's Architecture? How do these stakeholder relationships change as the enterprise transforms?

This thesis takes an endogenous look at stakeholders. Instead of defining the architecture around the stakeholder, the set of stakeholders are defined by the architecture. Stakeholders are linked to the enterprise by their delivery of value to the enterprise from the perception of the enterprise's leadership.

1.2 Approach

The aerospace industry presents an interesting set of circumstances: it is caught between being craft work and mass production. It produces high quality, specialized products requiring highly skilled and specialized workers. Some of its high-tech products are manufactured with artisanal skill work such as hand benching airfoils or laying strain gages. At times, products cannot be interchanged between end customers. For example, one would not expect Boeing and Airbus to have common fuselages; in contrast, many car manufacturers use the same vendors for anything ranging from radiators to windshields. The product volume of aerospace enterprises is not high enough to be mass produced, and the products are not general enough to be sold to many different industries or markets.

This set of circumstances leads to interesting questions on how stakeholder salience evolves with enterprise dynamics. It is necessary to study this further, empirically, through a case study. For the purpose of mapping multiple data points, an enterprise with a fast clock speed and in its infancy stages is chosen to be studied.

The Risto Sports enterprise presents an analogous case to the aerospace industry's challenges. Like aerospace corporations, Risto Sports manufactures high quality, specialized, craft work products. Risto's goal is to be a Lean thinking enterprise while serving the weightlifting community with a high quality and socially conscious product. As Risto caters to the weightlifting community for political and cultural lens reasons, the US aerospace industry is often locked into certain geo-political regions due to political policy.

For example, the US defense policymaker's decision not to select EADS's KC-X tanker offering was influenced by the fact that EADS is not an American company (Reuters 2009). In conclusion, Risto Sports offers an enterprise case study which faces similar issues to the aerospace industry.

Further, Risto proffers a highly beneficial set of circumstances that will permit the researcher to complete a full case study in a constrained amount of time with greater freedom in publishing data. Risto, due to its product and service markets, has a faster clock speed than most US defense contractors. Additionally, Risto is in its infancy stages and is expected to go through different enterprise states over the length of time it is studied for this thesis. Finally, Risto, unlike most defense contractors in the aerospace industry, will be able to share data with greater freedom.

1.3 Proposed hypotheses

Stakeholder's are tied to the enterprise's EA and business model spaces through their value exchanges. An enterprise's core ideology will drive the enterprise's EA and business model. The EA and business model, in turn, drive stakeholder selection. Further, the EA and business model will change as external context and enterprise needs evolve overtime.

The values that stakeholders contribute to the enterprise are context dependent. Overtime, or throughout different enterprise epoch's, the value the enterprise seeks from stakeholders (and vice versa) will change with the enterprise's business model. Additionally, the performance

of stakeholders through each of these states will determine their saliency to the enterprise and presence in the EA. Stakeholders deliver value in the EA

With respect to the enterprise's stakeholder network, an enterprise can be divided into core and extended sets of stakeholders. The core set of stakeholders are most salient and are present in every view of the enterprise. They define the enterprise mission and perform to the enterprise values; the enterprise exists because of this core set. Core stakeholders utilize network centrality to control the stakeholder network.

Stakeholders in the extended enterprise may not be salient in every view. Stakeholders are added to the enterprise, by the enterprise's management, to fill capability gaps in the EA. Hence, it is more likely that a non-core stakeholder does not need to interact with all 8 EA views. Densely networked stakeholders in the extended enterprise tend to exhibit emergent behavior; this can improve information flow yet strain management's ability to steer the enterprise.

Further, salience in a few versus many views of the enterprise is not important. The stakeholder's degree of saliency and the performance of value delivery to enterprise is what matters.

1.4 Thesis structure

This thesis is organized into 9 chapters: Introduction, Literature Review, Method, Analysis Chapters, and Conclusion. Chapter 2, the literature review, overviews relevant literature; it

presents a thematic analysis from a multidisciplinary body of literature. Chapter 3 presents the enterprise background and case study as well as the EA method . Chapters 4 through 8 are the analysis sections. Each analysis section concludes with an implications section. Finally, the thesis ends with a conclusion chapter which highlights insights from the implications sections and synthesizes closing thoughts.

Chapter 2. Literature Review

The nature of this work is inherently multi-disciplinary. The following table describes the research areas and relevance to the thesis goal

Research Question	Relevant Body of work	Rationale
How do the most salient enterprise stakeholders affect the Enterprise's Architecture (EA)?	LAI Research Enterprise thinking and industry challenges Stakeholder Theory Enterprise Core Ideology	Provides EA framework Context for research motivations Provides stakeholder framework Connects EA and Stakeholders
How do these stakeholder relationships change as the enterprise transforms?	Stakeholder Theory	Provides stakeholder framework
	Stakeholder behavior and decision making	Provides theory for Stakeholder relationships
	Stakeholders and Corporate Social Responsibility	Connects stakeholder dynamics to enterprise dynamics
	Enterprise Core Ideology	Connects stakeholder dynamics to enterprise dynamics

 Table 2.0 Research questions and Literature Review

This chapter is arranged into 6 subheading (2.1 through 2.6) arranged by the bodies of work listed Table 2.0. The bodies of work are thematically arranged and include papers from different disciplines.

2.1 Introduction to LAI research

For over 17 years, the Lean Advancement Initiative (LAI) at MIT has codified Lean, the modern miracle of industrial manufacturing. LAI research has shown that Lean improvements on the shop floor level lose significance with out senior level support. Rather,

Lean thinking must permeate the enterprise in order for any Lean improvements to incrementally add to positive change.

Research has shown that Lean Thinking enterprises are able to sustain success. Lean has enabled ailing enterprises to transform themselves into high performing, valuecreating ones (Womack & Jones 2003). A Lean Enterprise is defined as "An integrated entity that efficiently and effectively creates value for its multiple stakeholders by employing lean principles and practices"(Nightingale 2009)

Further, LAI identified 7 principles that are intrinsic to "Lean Thinking Enterprises", they are:



Figure 2.0: The 7 Principles of a Lean Thinking Enterprise (Nightingale 2009)

Enterprise, such as Risto, that seek to transform themselves must be able to internalize these 7 principles in order to be successful on their transformation journey.

With respect to research motivations, Principle 2, Identify Relevant Stakeholders and Determine their Value Propositions, is of particular interest. It articulates the fact that enterprise success is dependent upon understanding the role of different parties with interests both in and outside of the enterprise. It highlights that enterprises must identify their stakeholders and their respective value propositions (Nightingale 2009).

Further, the enterprise must understand how it is performing in delivering value to its stakeholders and how the stakeholders deliver value to the enterprise. The enterprise does not have to prioritize the stakeholders equally or deliver equal amounts of value to each stakeholder. Finally, it is key to note that LAI stresses stakeholder values over looking purely at shareholder value or purely at customer value. It acknowledges that the enterprises serves more than just the customer or shareholder and cannot thrive by serving these two alone (Murman , etal 2002).

Enterprise Architecture Framework

LAI introduced a framework for understanding how the enterprise is architected or constructed. LAI's Enterprise Architecture or "EA" provides the ability to study the enterprise from a systems perspective.

LAI also introduces a systems perspective of the enterprise and addresses the inadequacy of looking at the enterprise in a one dimensional or pairwise view. Through research, LAI codified the enterprise into 8 views; these are defined in Table 2.1.

Strategy	Strategic goals, vision and direction of the enterprise including the business model; enterprise metrics and objectives
Policy/External Environment	The external regulatory, political and societal environments in which the enterprise operates
Process	Core leadership, lifecycle and enabling processes by which the enterprise creates value for its stakeholders
Organization	The organizational structure of the enterprise as well as relationships, culture, behaviors and boundaries between individuals, teams and organizations
Knowledge	The implicit and tacit knowledge, capabilities, and intellectual property resident in the enterprise
Information	Information needs of the enterprise, including flows of information as well as the systems and technologies needed to ensure information availability
Product	Product(s) developed by the enterprise; key platforms; modular vs. integral architectures, etc.
Services	Services(s) delivered and or supplied by the enterprise, including in support of products

 Table 2.1: Enterprise Architecture View Descriptions (Nightingale 2009)

These 8 views compuse the framework of Enterprise Architecture (EA). The views are interrelated whereby the architecture of one view may drive the architecture of another, as illustrated by Figure 2.1.

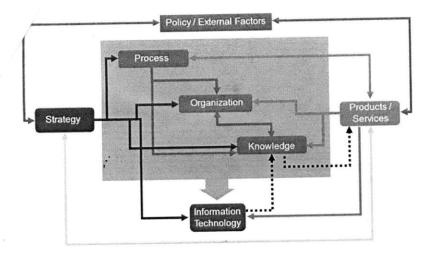


Figure 2.1. EA view interrelationships (Nightingale 2009)

The EA framework is proven to be a useful structure for understanding synergies and interrelationships across views and is applicable to both current and future state architecting.

Enterprise Strategic Analysis for Transformation (ESAT)

ESAT is a tool developed by LAI for understanding the enterprise (ESAT 2010). Below shows the process "ESAT focuses on enterprise-wide processes and considers the needs and values of all stakeholders" (Nightingale 2009).

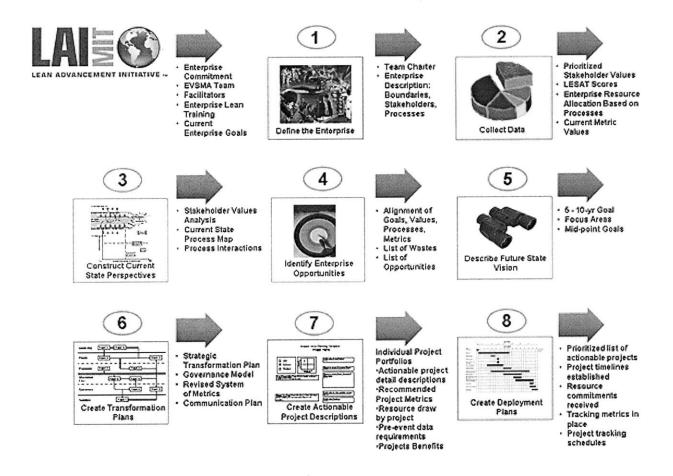


Figure 2.2. LAI ESAT operational process map for Lean Enterprise Transformation (Nightingale 2009)

Step 2 provides a framework to assess and prioritize stakeholders values. Here the value exchanges- what the stakeholder offers to the enterprise and what the enterprise offers to the stakeholders- are codified. This will be employed later in Chapter 3, the Method Chapter, of this thesis.

Enterprise Epochs-Eras

Rhodes, Ross, and Nightingale (2009) addresses the need to treat "temporality" of EA with Epoch-Era Analysis. Epoch-Era Analysis is "a new approach that addresses the need to

consider systems (and their delivery of value to stakeholders) in context of a changing world" (Rhodes, etal 2009).. Epoch-Era Analysis enables the researcher to understand the enterprise system over a lifespan on a "natural" time scale. The lifespan of the enterprise is "divided into a series of epochs". An epoch is defined as a time period when "significant needs and context are fixed". These needs and context are exogenous to the enterprise architecture design activity. Further, several consecutive epochs form an Era; era's provide a longer term view of the changing system needs and context (Rhodes, etal 2009).

The concept of enterprise epochs is utilized in the Method ad Analysis sections (Chapters 3 through 6). Epochs present a method of understanding the context dependency of stakeholder salience; especially, as this thesis will analyze the Risto Sports EA over four epochs (Chapter 4, section 4.0).

2.2 Enterprise thinking and industry challenges

Often, enterprises, looking to reap similar performance benefits, strive to implement Lean. Still, with a plethora of readily available industry information on Lean, many enterprises remain unsuccessful with harnessing the full benefits of this system (Womack and Jones 2003).

Key to a successful Lean transformation is the realization that Lean is more than just a set of tools and strategies. Often, enterprises mistake Lean for just structures, processes, and tools developed by Toyota—while ignoring the associated values and political aspects (Beer 2005). In effect, successful implementation of Lean requires a holistic systems thinking that

fully integrates the enterprise's intangible values and assumptions while providing the tools, and structures to succeed. Hence, of great interest is further understanding the contexts and conditions for successful Lean implementation: how can Lean be applied so successfully at Toyota and unsuccessfully at other firms?

Rather, Lean enterprise thinking can be further understood when analyzed with respect to Three Lenses(Carroll 2002). The Three Lenses capture the strategic, cultural and political aspects of an organization. To review, Carroll's (2002) Three lenses are referred to in this paper in the following understanding :

- Strategic Design lens: organizations are designed or engineered to achieve agreed-upon goals by carrying out tasks; alignment and strategy are emphasized
- Cultural Lens: "people take action as a function of the meanings they assign to situations"; symbols, myths, values, assumptions are shared between members
- Political Lens: organizations are a struggle for power between stakeholders with different goals and underlying interests

Looking at the enterprise through each of the Three Lens, the intangible aspects of successful Lean Thinking enterprises are elucidated.

The contrast between pure strategic approaches to Lean and more holistic approaches is best illustrated by Dyer and Hatch's work on Toyota suppliers. Dyer and Hatch's (2004) work on

elaborates Toyota's success in helping suppliers to become Lean. Toyota's US suppliers who are members of Toyota Supplier Support Center (TSSC) are engaged in a knowledge sharing network. Interestingly, TSSC suppliers who manufacture both Toyota and "Big Three" (GM, Ford, and Chrysler) products have significantly productivity their Toyota product lines (Dyer & Hatch 2004). Specifically, on average, the TSSC suppliers achieved inventory reductions for Toyota products by 35% versus 6% for Big Three, increased labor productivity by 36% for Toyota lines versus 1% for a Big Three customer, and reduced defects by 84% for Toyota versus 46% for Big Three customer (Dyer & Hatch 2004). Through the TSSC, the suppliers had the tools and explicit knowledge to apply Lean to both Toyota and Big Three products.

Because Toyota, unlike the Big Three, supported suppliers by forming the TSSC community, tacit knowledge was able to diffuse. Toyota consultants would visit TSSC supplier plants, to effectively transfer tacit knowledge, and the supplier was allowed to keep any immediate product cost savings associated with this service. As a result, suppliers would feel indebted to Toyota (Dyer & Hatch 2004). On the other hand, suppliers did not welcome visits from GM consultants whereas GM would request immediate price decreases after consulting a supplier's plant (Dyer & Hatch 2004). In effect, supplier successes were achieved through the transfer of Toyota's tools and "explicit knowledge" as well as the transfer of tacit knowledge relied on a close and benevolent relationship between Toyota and the suppliers.

George Roth's (2006) work on distributed Leadership furthers Dyer and Hatch's insights on the non-explicit aspects of the enterprise. Roth finds that beneath the artifacts, the "stories people tell, visible organizational behavior, processes, and structure", are a supporting structure of values, "strategies, goals, philosophies", and basic assumptions, "unconscious beliefs, habits, perceptions, thoughts, and feelings" (Roth 2006). Roth explains that "common values were the glue that binds" learning efforts between occupational communities, that these communities really became 'communities of commitment" (Roth 2006). This echoes Dyer and Hatch's writing on the TSSC; in both cases, a sense of commitment was required for tacit knowledge to diffuse (Dyer & Hatch 2004). In addition, both Roth and Dyer and Hatch understand learning to be the means by which enterprises can transform and achieve improved performance.

Roth also introduces the concept of "network Leaders" (Roth 2006). Network leaders facilitate enterprise wide learning by bridging the culture gap between different organizations (Roth 2006). Because network leaders are able to translate and share common vision between organizations, they are effective in coordinating different and, otherwise, not directly connected organizations in an enterprise.

The network leaders concept is grounded in Ed Schein's (1996) prior works on the "three cultures of management". Schein defines the three cultures of management as the operators, the engineers, and the executives (Schein 1996). There is a built in conflict between the three: engineers want to engineer people out of "solutions" whenever possible, and executives, like engineers, prefer solutions without people as people are hard to control

(Schein 1996). On the other hand, operators feel threatened by an engineered people-less solution (which threatens to eliminate their job), and operators feel undermined by executives who thwart operator's attempts to obtain the time and resources to improve enterprise effectiveness by building learning capacity (Schein 1996). The executives disallow the proposed operator activities on the grounds that the financial returns do not justify it. (Schein 1996). In effect, network leaders are key to reconciling these "taken for granted assumptions" and cultural differences (Schein 1996). Although many companies make use of Lean tools, these should not be mistaken for the "deeper changes that Lean implies" (Roth 2006).

Similarly, in Beer's paper on Economic and Organizational theories (E theory and O theory) of enterprise transformations, it is posited that often the structural, strategic aspects of change are wrongly seen as an opposing change theory to organizationally focused change. Beer (2005) defines the two change theories as:

> Theory E is about economic value creation. Leaders who employ this theory, assume that the firm's value creation potential can be enhanced dramatically and quickly through restructuring. People are laid off, facilities closed and the portfolio of businesses is reshuffled through spin offs and acquisitions. CEOs who employ Theory O, developing organization capabilities and culture, assume that focusing on capabilities and culture will ultimately produce sustained high performance. This strategy is necessarily a longer-term one.

Beer (2005), examining both E and O Theory enterprises, concludes that enterprises that integrate both the E and O theories are more successful. Whereas, his study of Asda, a UK supermarket chain, shows that, " integrated E and O transformation at Asda led to a fundamental transformation in organizational capabilities and economic value" (Beer 2005).

Even so, as noted in the Roth and Dyer and Hatch papers, enterprises tend to cling to E theory. The fact that E theory transformations lead to immediate— but often short term— shareholder gains, gives enterprises ample reason to ignore the O-side of transformation. Additionally, the market and financial community responds positively to E transformations providing further incentive (Beer 2005). Addressing the O-side of transformation requires dedication of resources over time; hence, E theory enterprises, that delivered short-term shareholder results, may have difficulty justifying expenditure on O theory transformation efforts. Additionally, in the current industry context, it is easier to describe and codify the E theory levers of "reshuffling portfolios" and "spinning-off businesses" (Beer 2005), than it is to have a dialog on enterprise culture.

Another explanation for the tendency for enterprises to cling to the strategic Lens and E theory is Daniels' concept of "invisible work" (Daniels 1987). Daniels illuminates societal under-valuation of unpaid work; specifically, work that falls under the political lens – influencing, building networks and relationships— and is not easily described in strategic or process terms. Specifically, Daniels (1987) describes undervalued political volunteer work as being essential to coordinating New England town democracies. Successful political campaigns relied on skills " in making decisions and judgments, sizing up prospects, and

knowing how to influence and persuade", and this expertise was possessed by the volunteer workers(Daniels 1987). For example, a female volunteer would send prominent townsmen to lobby the town council on particular issues; though the townsmen actually performed the lobbying, the volunteers selected the issues and provided guidance on the issue positions (Daniels 1987). None of the tangible actions carried out by the politicians or townsmen would occur without the unseen or invisible actions of the volunteers.

Another aspect of invisible work is the ability to "create and shape a sense of community" (Daniels 1987). Specifically, volunteers " organize networks, plan events, get people together to formulate a way-through an organization, a campaign, a social service-to meet hitherto unmet needs in the locality" (Daniels 1987). Through these activities, people "develop[ed] a sense of commitment to one another, to the purpose of their efforts, and to the community for which the organization or service is constructed" (Daniels 1987). Although, invisible work is essential for carrying out strategic design lens work and to meet otherwise "unmet needs", it is almost never acknowledged or monetarily rewarded; it "remain[s] invisible" and undervalued (Daniels 1987).

The above insights can be understood in terms of Lean Enterprise research. Daniels "sense of community" is parallel to O-theory in Beer's work, the development of the TSSC learning community in Dyer and Hatch, or Roth's discussion of shared values and assumptions to sustain organizational learning and change. MIT's Lean Advancement Initiative (LAI) research has shown that the development of community is essential for learning. For example, studies of Rockwell Collins showed that human interaction with communities of

practice or online knowledge sharing communities were essential for sustained learning and sustained enterprise performance (Nightingale & Srinvansan 2008). Hence, Daniels' assertion of "sense of community" bears significance to organizational learning. Ignoring this assertion is like equipping employees with the tools and "buzzwords" of Lean, but not the supportive learning structures.

Daniel's political volunteers coordinating the movements of key town figures is analogous to an enterprise aligning and maneuvering stakeholder relationships. Like town council members, stakeholders also have relationships that must be managed through negotiation, persuasion, and influenced by a "sense of community" (Daniels 1987) or mutual indebtedness (Dyer & Hatch 2004). Again, the above is essential to Lean enterprise transformation; yet, enterprises, like the town political systems, place less value on work that cannot be easily described in structural, tangible terms. The invisible work of the political lens is ignored to the detriment of the enterprise.

The political gap: Relating back to the three lenses

Clearly, invisible work, when considered with respect to the Three Lens, addresses the Political lens. In contrast, the other works reviewed emphasize the Strategic Design and Cultural Lens; these works only allude to the Political Lens. It is important to note that Daniel's work is written in the context of gender roles and explores gender politics, and the other works are written in an enterprise change or business management context. These differing contexts, likely, accounts for the Lens focus.

Looking back at Beer's (2005) work, with respect to the Three Lenses, neither E or O theory addresses all Three lenses. E theory enterprises tend to view the world through the Strategic Design Lens. Although E enterprises may use the tools or artifacts of Lean, which pertain to the Cultural Lens, they ignore the deeper cultural assumptions and values associated with these tools. In contrast, the O theory enterprise, by definition, is viewing the world through the Cultural Lens: as Beer notes, "O transformations motivate primarily through the creation of meaning, involvement in the task and participation in decisions" (Beer 2005). Still, neither E or O directly address the Political Lens. Even in Beer's definitions and examples of E and O, Political Lens activities are not directly acknowledged.

To a greater extent, Dyer and Hatch and Roth allude to the influencing and power aspects of the Political Lens. Dyer and Hatch, in discussing TSSC, touch on the political Lens in mentioning the sense of indebtedness that suppliers felt towards Toyota, leading to more effective tacit knowledge transfer (Dyer & Hatch 2004). Yet, they do not develop this idea further, rather the focus of the paper is the Cultural Lens: the importance of sharing common values, assumptions, and artifacts. Roth addresses the Political lens with network leaders who translate between and build relationships with the three cultures of management defined in Schein's work (Roth 2006). In effect, unlike Daniels' work, none of the enterprise works directly place value on the Political Lens work, rather the Political Lens aspects are mentioned more as an afterthought.

In summary, the works on enterprises acknowledge that enterprises that incorporate both the structural and organizational aspects of Lean have more successful performance. They

acknowledge that Lean encompasses more than tangible strategies and cultural artifacts. However, there is a clear gap in enterprise research with respect to the "invisible work" of the Political Lens.

2.3 Stakeholder Theory

The political gap, mentioned in the last section, relates back to Lean Thinking Enterprise Principle 2: addressing one's stakeholders and their values (Nightingale 2009). In other words, invisible work is really stakeholder management.

As we will see in this next section, stakeholder theory addresses all three lens described in the prior section. Stakeholder theory presents a clear way to understand the interests of different groups and its implications on the strategies, decisions, and behaviors that the enterprise carries out. Freeman best defines it with: "Stakeholder theory, ... is not about markets and how they work ...it's not a theory of the firm.' Rather it is a very simple idea about how people create value for each other." (Agle, etal 2008).

Definitions

A stakeholder is defined by Freeman (1984) as ," any group or individual who can affect or is affected by the achievement of the organization's objectives". Freeman uses a broad definition; he does not limit stakeholders, for example, to an enterprises contractual relationships. The enterprise's management determines and prioritizes groups as stakeholders. Stakeholder theorists refer to this as a "normative theory" where the stakeholders are an "ends" to a means (Agle, etal 2008).

Stakeholder Saliency

In order to understand how stakeholders create value for each other, Mitchell's 1997 work on stakeholders introduces a theory for stakeholder identification and classification. Specifically, he introduces a theory of "stakeholder salience", "the degree to which managers give priority to competing stakeholder claims" (Mitchell 1997).

Stakeholder salience is a landmark theory that provides the enterprise a method for understanding how stakeholders influence the enterprise's decisions and behaviors. Mitchell classifies stakeholders as having three components of saliency: (1) power, (2) legitimacy, and (3) urgency. In detail, they are defined as:

Power- A stakeholder has power " to the extent it has or can gain access to coercive, utilitarian, or normative means, to impose its will in the relationship" (Mitchell 1997). Power is transitory in nature.

Urgency - Urgency relates to a stakeholder having a claim which is either time sensitive or critical. Stakeholders can gain prioritization due to their claim's time sensitivity, whereas "delay in attending to the claim or relation- ship is unacceptable to the stakeholder". Criticality, refers to the importance of the relationship or claim to the enterprise(Mitchell 1997). In other words, a stakeholder's claim may require immediate attention, and the enterprise may ignore it if the stakeholder relationship is not important.

Legitimacy- A stakeholder is legitimate if a "generalized perception or assumption" exists "that the actions of [the stakeholder] are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Mitchell 1997). Typically, a stakeholder with a property right or a moral right on the firm would be deemed a legitimate stakeholder. Persuant with the definition, a stakeholder that does not act in a socially acceptable manner will appear less legitimate to the firm. Ultimately, a stakeholder also requires power or urgency components of saliency, in combination with legitimacy, to enforce claims.

Mitchell's definitions mirror the 3 lens, in that it points to the significance of values outside simply strategic needs. In other words, there are multi-dimensional needs that each stakeholder insists on being addressed. Like Freeman, Mitchell accentuates that a narrow view of stakeholders inhibits our ability to understand them.

Stakeholder Determination - manager cognition

The enterprise's management determines whether a group is a stakeholder and its degree of saliency. In other words, the degree to which each saliency attribute present in a stakeholder is relative to the manager's perception of the stakeholder to the firm.

Via organizational theory and social cognition theory, Agle (1999) validates the basis of using manager perception as the measure of stakeholder saliency. Social cognition theorists hold that social salience is determined by selectivity and the "intensity" of a perception. A subject, or stakeholder, must garner the attention of the perceiver (in this case the enterprise's managers. "Intensity" refers to the extent of mental effort devoted to the subject, and "selectivity" is the dominance, differentiation, or novelty of the subject of attention or its context (Agle 1999). Therefore, when applying a general social cognition model to stakeholders, it is "expected that stakeholder salience is highest when both selectivity and intensity were high". The accumulation of both intensity and selectivity of a stakeholder in a manager's mind leads to the perception that the stakeholder is salient.

Perception-- theoretical basis for power, legitimacy, and urgency

Agle provides theoretical basis for how managers are perceive power, legitimacy and urgency. With respect to power, Agle explains that control of critical resources, resource dependency theory, accrues power. Those dependent on critical resources will attend to those possessing them. To determine a stakeholder's legitimacy, a manager must make "contextualized comparison[s]", which engages the "cognitively based selectivity processes"(Agle 1999). In other words, determining legitimacy is a matter of the manager's perception; it is a comparison of the stakeholder's cultural norms and behavior to the manager's view of acceptable cultural norms and behavior. In providing theoretical basis to urgency, Agle explains that urgency is the same as what organizational theorists, Cyert and March, call "aspiration". Most organizational objectives are at an aspirational level, and 'high-aspiration" stakeholders figure greatly into the immediate context of selectivity and intensity in the mind of managers. Hence, urgency is based on the manager's perception that a stakeholder is highly aspirational.

Empirical validity of stakeholder attributes

Agle's 1999 work on CEO values also empirically shows that it is accurate to express stakeholder saliency as management's perception of stakeholders in terms of power, legitimacy and urgency. Agle's performed a statistical design of experiments on CEO's of corporations; results showed positive relationship between the stakeholder attributes (power, legitimacy, and urgency) and salience.

The researcher accepts Mitchell and Agle's assertion that salience is determined by the perceptions of the enterprise's management. Per section 2.1, to understand value propositions of stakeholder's, the enterprise leadership must ask what is important to itself and determine whether what stakeholders offer is of value to itself in comparison to its current context. This is consistent with Section 2.2, that highlighted the importance of shared assumptions and values between enterprise groups or organizations; ultimately, it is the social cognition aspects of the enterprise that determine whether the groups and individuals work efficiently and effectively to the strategic objectives laid out for them.

This is significant to the thesis, whereby the researcher will employ this definition of management perception to collect data and measure saliency. Stakeholder saliency, quantification from the managements' perception, is analyzed in Chapter 4.

Measuring Saliency

Grossi, 2003, presents an analytical method for measuring stakeholder saliency. If a notional radar plot was created of saliency versus urgency (Grossi uses Criticality) versus legitimacy, a triangular area would be created between the three points (Figure 2.3):

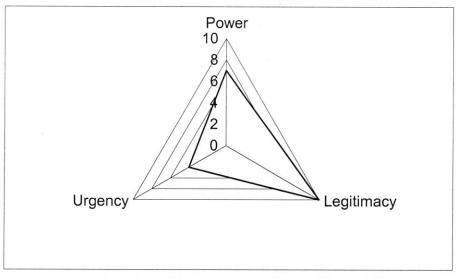


Figure 2.3. Radar plot of 3 saliency attributes (Grossi 2003)

Grossi proposes that the area of the triangle defined by the level of each of three attributes is the stakeholder saliency, or what he calls the Stakeholder Salience Index (SSI). The SSI is representative of the relative importance of the stakeholder in the enterprise network. This can be normalized to account for the maximum salience value as (Grossi 2003):

NSSI = 1/3(Power X Legitimacy + Power X Criticality + Legitimacy X Criticality) Hence, NSSI is the normalized stakeholder saliency index.

This will be employed in the Method and Analysis sections of this thesis (Chapter 3, Chapters 4-6).

The Power, Legitimacy, and Criticality values are calculated by a leadership score card of the enterprise's stakeholders which Grossi developed. Grossi's scorecard is meant to be from a holistic, integrated enterprise perspective and less "firm-centric". The researcher employs NSSI and Grossi's scorecard later in this thesis.

However, the researcher rejects replacing urgency with criticality as criticality is a subcomponent of urgency. It is important not to undermine the power of time-sensitivity. An impending deadline is a very powerful thing; it will impose on the enterprise to either definitively answer the stakeholder's claim or definitively ignore it. As we have seen with social cognition theory, any source of novelty to the current context will garner management's attention to the stakeholder, hence giving the stakeholder some saliency, even if it is transient.

The researcher also differs with Grossi's distinguishing of firm-centric versus "more integrative or holistic definitions". As LAI research professes, an enterprise is a broad definition, which includes and goes beyond the definition of a firm. This researcher finds that Mitchell's definitions in the context of a firm, hence, are generalizable to the enterprise level. Enterprises are often thought of as having a core and extended enterprise. The core enterprise is, perhaps, more similar to the firm centric jargon. Enterprise Architecture is, on one hand, a very integral thinking discipline within the scope of the enterprise. Yet, as stakeholders are seen as endogenous to the enterprise, the process of determining stakeholder saliency is an almost egocentric process -- egocentric to the enterprise's core management who have the ultimate decision of the enterprise's objectives.

Stakeholder and Context

As alluded to prior, stakeholder relationships are context dependent. Jawahar (2001) further expands on this notion. He asserts that stakeholders should also be viewed in a long term perspective as they will change over time. Jawahar points out that literature, prior to his work, focused exclusively mature organizations, and it is necessary to look at all stages of the organization or enterprise.

Stakeholder importance is dependent on the context of an organization's stage. Jawahar defines 4 stages of enterprise growth - Start-up Stage, Emerging Growth Stage, Mature stage, and Decline/Transition stage. Jawahar asserts that stakeholders with access to critical resources get more attention firm the enterprise as they make the organization more likely to survive. Hence, stakeholders with access to vital resources have higher saliency. Overtime, access to resources and importance of theses resources change, hence, so does saliency. It is important to note that Jawahar takes a resource dependency view on the organization or enterprise.

With respect to LAI's ESAT in section 2.1, the enterprise must understand how stakeholder relationships change from current to future states. In it's transformation plan, the enterprise must plan for changes in stakeholder relationships as well as resources dependency. Accordingly to Jawahar's work, an enterprise should periodically reflect on stakeholder relationships in comparison to the established transformations plan.

These concepts are employed in Analysis Chapters 4-6, where the researcher studies stakeholder saliency with respect to enterprise context.

2.4 Stakeholders behavior and decision making

Resource dependency and institutional theory

Jawahar's discussion of resource dependency builds off of Oliver's, 1991, work on institutional and resource dependence perspectives. She details that, from an institutional theory perspective, stakeholders can exert "external pressures" on an organization, or enterprise, through "institutional rules and beliefs versus those who control scarce resources" (Oliver 1991). On the other hand, she asserts that stakeholders can also control the enterprise via resource dependency. From a resource dependency perspective, stakeholders can control an enterprise by actively manipulating access to resources on which an enterprise is dependent.

With respect to Institutional theory, the stakeholder will conform to institutional norms of another stakeholder under certain circumstances. For example, an organization will be more likely to conform to institutional norms of a stakeholder that is perceived to be more legitimate when uncertainty exists. Secondly, in the context of a highly interconnected grouping of stakeholders, once again the organization is more likely to conform to institutional norms. Likewise, if an enterprise relies on stakeholder for survival, then the enterprise may passively conform to the stakeholders social norms.

Oliver outlines a matrix of predicted stakeholder (organizational) strategic responses such as avoidance, acquiesce, compromise, avoid, defy, and manipulate to the different predictive factors such as context. Although these are descried as external pressures, for example, in the enterprise context these would be endogenous to the system if the pressure came from an enterprise stakeholder.

Overall, Oliver shows the importance of Institutional theories ability to handle "variety of strategic responses to the institutional environment". Institutional theory is analogous to power and legitimacy attributes of saliency. While resource dependency is more analogous to urgency and power attributes. Hence, her work supports stakeholder theorists use of Power, Legitimacy, and Urgency, as well as the importance of the invisible factors of the enterprise that play into enterprise management.

Chapter 4 of the Analysis employs Oliver's concepts to explain shifts in stakeholder salience over enterprise epochs.

Network stakeholders

Rowley, 1997, provides a network view of stakeholders. Rowley argues that prior theorists provided dyadic views of stakeholder behavior, only analyzing behavior on a two by two basis versus across a network.

Rowley's biggest contributions are his assertions on network density and centrality. Density is the degree to which a network is not sparse; in a dense network, stakeholders will share many common connections. Centrality describes a stakeholders " number of direct ties to other actors, independent access to others, and control over other actors, respectively" (Rowley 1997).

With respect to centrality, Rowley proposes sparse networks are more easily controlled by a central organization. On the other hand, dense networks can more effectively band together and pressure a central organization. However, betweenness centrality is "the extent to which an actor has control over other actors' access to various regions of the network". So, an actor can control sparse network with high centrality; however, there can exist actors with high betweeness centrality that can mitigate the central actor's control. In effect, Rowley provides interesting insights on how stakeholders command, compromise, subordinate or become solitary to each other in a network setting.

Chapter 5 of the Analysis studies the enterprise stakeholder network. Rowley's concepts of centrality, density, and network control are applied to understand the network dynamics.

Quantifying stakeholder network dynamics

Grossi, 2003, proposes using Dependency Structure Matrix (DSM) to analyze stakeholder networks. Grossi draws from Eppinger's works (1994). He details the construction of a DSM for a stakeholder network. The DSM is used to identify stakeholder clusters in the network. It also shows stakeholders that act as links between clusters across networks. The

DSM method is employed in the Analysis chapters(Chapter 5). Hosseini and Brenner, 1992, describe more complex analytical methods for understanding stakeholder networks. It is anticipated that the current network structure of Risto Sports, the case study enterprise, is sparse and, hence, is effectively analyzed using DSM and sociomatrix methods (Beum & Brundage 1950).

DSM and sociomatrix algorithms are employed in Chapter 5 of the analysis. These methods are used to process the data, and, coupled with Rowley's work, the stakeholder network behavior is understood.

2.5 Stakeholders and corporate social responsibility

Stakeholder normative theory implies that there is an underlying set of "moral principles that should drive stakeholder relations" (Jawahar 2001). In effect, it is paramount enterprises understand how it does and ought to interact with its stakeholders, and how value is maximized for the Lean Lean Thinking Enterprise operating in the framework of Corporate Social Responsibility (CSR).

Definition of CSR

Harvard Kennedy School defines Corporate Social Responsibility (CSR) as "encompasses not only what companies do with their profits, but also how they make them. It goes beyond philanthropy and compliance and addresses how companies manage their economic, social, and environmental impacts, as well as their relationships in all key spheres of influence: the workplace, the marketplace, the supply chain, the community, and the public policy realm" (CSRI 2010).

Relevance of CSR to stakeholder theory

Stakeholder theory addresses how actors create value for eachother. It does not explicitly address wastes of these value transactions- pollution, laying off workers—nor how these wastes can or should be addressed. Theorists, however, tend to take an optimistic approach for stakeholder theory create more value for society versus other theories. Agle describes I best with, "Stakeholder theory offers a different set of metaphors and ideas, with hope that we can make capitalism work better for us" (Agle, etal 2008).

Stakeholder theorists assert that all institutions internalize norms and rules.Likewise, firms exist to serve the needs of society and this cannot be ignored (Agle, etal 2008). Capitalism may be "the most efficient way we know of to organize an economy, but free markets, without any government intervention or countervailing powers, are *not* the most *effective* way to achieve societal goals" (Agle, etal 2008). Hence, enterprises cannot simply ignore waste as an externality to be managed.

Interestingly, CSR is, indirectly, a byproduct of stakeholder theory. First, it is important to note that CSR is not meant to be a substitute for government, that ultimately the government must enforce contracts or legal claims in a society. However, when "governments fail to create the legal and normative infrastructure that balances property rights with other stakeholder rights", businesses will seek to stabilize an otherwise chaotic environment with

CSR (Agle, etal 2008). In other words, for legitimate businesses to operate efficiently and effectively, long term, it is in their interest to have a set of ground rules by which all stakeholders abide. Stakeholder theory and corporate social responsibility compliment each other with respect to social controls that better society.

Shareholders versus stakeholders and CSR

Followers of Milton Friedman have often posited that the firm exists to create value to the shareholder and, effectively, undermine the role of CSR and stakeholder theory. Freeman, along with other stakeholder theorist, posits that the firm, ultimately, cannot rule out society in its operations, that the firm needs to address both. If a firm is to maximize profits and address how your actions affect society –as part of set of rules of government and social responsibility- then, fundamentally, all firms must apply a form of stakeholder theory (Agle, etal 2008).

Freeman goes on to state that Friedman was a stakeholder thinker because Friedman acknowledges firms have a role in society. The researcher disagrees in part with Freeman's deeming Friedman a stakeholder thinker as Friedman's view is too 1-Dimensional. Friedman's landmark work, Capitalism and Freedom (1962), tends to speak in 1dimensional, structural lens terms-- each thought purely rationalized from strategy and structure. For example, he does mention that a corporation may want to provide benefits to its community to extract some other value from its citizens, or that the government should provide services to the mentally ill as they cannot fend for themselves, yet all is rationalized as a structural argument that will benefit the economic markets. Time and again, we see that stakeholder theory presents an multi-dimensional argument-- such as Agle and Mitchell

referencing social cognition (Agle 1999). The voice in which Friedman writes is only one small layer of how stakeholders trade value with each other. He tends to dismiss the cultural norms and political motives that continually permeate business transactions, unless there is a tangible effect in the market where the firm acts. So, perhaps, Friedman is a stakeholder thinker in that he asserts that business people may attend to the different interests that trade value with the firm; however, this is only a small aspect of what stakeholder theory encompasses.

Jensen perhaps elucidates this difference best in his understanding of the role of haman managers in the stakeholder system. He cites research at Harvard's Brain Behavior Initiative showing that human being display systematic non-rational behavior, that humans will act non-rationally around 50% of their lives (Agle, etal 2008). Hence, we cannot expect manager's that make stakeholder decisions to make rational decisions 100% of the time. A deficiency in stakeholder theory, and Friedman's work for that matter, is that it assumes that most decisions will be made rationally and does not account for human selfishness and evil (e.g. stealing, money laundering, etc). For these reasons, government must be endogenous to the system and put controls in place, and nor will CSR solve all evils and non-rational actions. And, even government is vulnerable to corrupt politicians to "rent-out power of that state" to steal from rest of society (Agle, etal 2008).

In summary, Jensen (Agle, etal 2008) highlights the following valid problems with stakeholder theory:

- Stakeholder theory does not hold the firms manager's accountable for their actions
- Stakeholder theory does not prevent the harmful short term value maximization that is destructive to rest of society
- Normative beliefs- for example, promoting a less qualified candidate because they work better in a manager role than as a subordinate versus the qualified candidate who can work well in either role

In other words, stakeholder theory struggles with how does the good manager act. Does the good manager fall back on intrinsic values or societal norms as they make decisions? And what if the manager does not accept societal norms?

These concepts are critical to the Analysis Chapters 6 and 7. In Chapter 6, the enterprise management is faced with enterprise design decisions, which includes treatment of stakeholders. The data in Chapter 7 describes the social impact of the Risto enterprise and feasibility of transforming to a future enterprise design. In effect, both chapters intrinsically address management decisions with respect to CSR.

2.6 Enterprise Core Ideology, creating the good manager

As Jensen provokes us to ask what drives the "good manager's" actions. Collins and Porras's (1996) work on "Building your company's vision" suggests that an enterprises core ideology will drive behavior.

The work studies successful transformations of company's and concludes that their results were due to the fact that a core ideology and a clear, aspirational vision were instilled in employees. Core Ideology is defined as the enterprises purpose or mission and core values (Collins & Porras 1996).

For example, they cite success stories from Beoing, HP, Sony and Nike, to name a few:

Why did Boeing become the dominant commercial aircraft company in the world? Be-cause of its superb engineering and marketing organization, which had the ability to make projects like the 747 a reality.

Nike's people didn't just talk about the idea of crushing Adidas; they went on a crusade to fulfill the dream.

Why did Merck become the preeminent drugmaker in the world? Because Merck's architects built the best pharmaceutical research and development organization in the world.

When asked to name the most important decisions that have contributed to the growth and success of Hewlett-Packard, David Packard answered entirely in terms of decisions to build the strength of the organization and its people. (Collins and Porras 1996)

In other words, on an emergent enterprise level, enterprises can inspire its manager, its people, to live to a core ideology and achieve its objectives. In effect, by demonstrating that companies gained success because of their core ideology and vision, one can assume that the "good manager" will emerge if the corporation intrinsically instills these values.

Core ideology and context

Unlike stakeholder saliency, a companies core values should stay fixed. Collins and Porrasillustrate that companies that enjoy enduring success have core values and a core purpose that remain fixed, even while their business strategies and practices perpetually adapt to the world.

Reflections on CSR and core ideology

In the researcher's opinion, core ideology is needed to have CSR. The desire to perform and live to CSR must be instilled in the managers of the enterprise through the core ideology. This is especially important as the core ideology is one of the few aspects of the enterprise that should stay fixed through out the enterprise's life cycle. We have seen in Collins and Preston's work that high performing companies built a clear vision; they simply achieve what they set out to do, they had a clear mission and values. Hence, if valuing corporate social responsibility is built into an enterprise's ideology, then the "good manager" will emerge.

The concept of core ideology is employed heavily in Chapter 4 of the Analysis. Core Ideology is an essential part of the researchers proposed model of stakeholders and EA in Chapter 4.

2.7 Research questions - Connecting Stakeholders and Lean Enterprise Theory

Overall, stakeholder theorists, like enterprise thinkers, echo the importance of taking a holistic look at stakeholders. The stakeholder has a complex existence in the enterprise. As the value exchanges between stakeholders and the enterprise, ultimately, enable the enterprise to create value, it is paramount to understand stakeholder saliency with respect to the Enterprise's Architecture (EA).

Hence, this thesis seeks to answer the following research questions:

Question: How do the most salient enterprise stakeholders affect the Enterprise's Architecture (EA)?

Hypothesis I: A stakeholder with high saliency will affect all 8 EA views – either through
Power, Legitimacy, or Urgency
Question: How do these stakeholder relationships change as the enterprise transforms?
Hypothesis II: Saliency is context dependent and stakeholder affect on EA views will change

correspondingly.

Chapter 3. Method and Case Study outline

3.0 Introduction

To answer the research questions, a Case Study and ESAT is completed on the enterprise Risto Sports. A revelatory case study research method is employed on with the research unit being the stakeholder (Yin 2003). The ESAT framework is utilized to provide a structure for identifying and analyzing stakeholders.

ESAT steps 1 and 2 are used to identify stakeholders, stakeholder value propositions, and value delivery. Current state stakeholders are interviewed individually. Each stakeholder is given the same set of open ended questions, individually. The stakeholders are mapped to the enterprise architecture Finally, the results are later analyzed using ranking and mapping techniques developed form stakeholder literature and LAI's enterprise architecture work. Specifically, this will answer research question of how do the most salient enterprise stakeholders affect the Enterprise's Architecture (EA).

3.1 Enterprise Background

Risto Sports is an Original Equipment Manufacturer of high quality sports equipment. Risto caters to the Olympic weightlifting market as well as sports and sports enthusiasts using free weights and Olympic weightlifting movements. Risto's goal is to be a Lean Thinking enterprise (Nightingale & Srivanasan 2008) while serving the weightlifting community with a high quality and socially conscious product.

Risto was founded in March 2008 under the trade name "Botev Sports". Risto started as an importer and retailer of high quality shoes, made in Bulgaria. Bulgaria is respected by weightlifters as one of the greatest weightlifting countries, yet elusive in its methods for producing Olympic and World weightlifting champions. The shoes are branded after the world Champion from Bulgaria, and the original target market was Olympic weightlifters who idolize the Bulgarian Champion and the mystique of the Bulgarian weightlifting system (known as the "Bulgarian system").

However, poor order accuracy and change in product lead the leadership team to look for new options. Most notably, the leadership team desired the ability to design their own shoes and incorporate customer feedback. Further, it was clear that there was a market for custom shoes, small shoe sizes, and very large sizes that was not being served by any brand to date.

Using their extended weightlifting network, the leadership team was able to develop a new manufacturing source for the shoes. The team created their own brand called "Risto", after the last names of the owners – Rojas and Sisto. The name Risto was also chosen to convey an Eastern European sound, as East Europe is home to many champion weightlifters.

With the ability to create their own shoes, the leadership team was able to further transform their business model, differentiating themselves from the rest of the market, with the goals of sustainable success.

Core values

Risto Sports was created to provide valuable service to the weightlifting and sports community. The values are summarized as: Better, leaner, greener, Stronger

1. Stronger: Promote and serve strength sports

Weightlifters have been underserved by major brands, with scarce product selections and poor quality. Further, a deficit of credible weightlifting information exists in print or online. Through its business, Risto promotes the sport of weightlifting and spreads accurate knowledge.

2. Greener: Sustainable, socially responsible products and services

All products are to be manufactured in reasonable working conditions, not sweat shops. The products will support local economies and use local, renewable materials whenever possible. Preference is given to local economies that support local weightlifters.

3. Leaner

Likewise, through Lean Thinking, the company is operated in a manner consistent with Lean Thinking Enterprise values (Nightingale 2009) as defined in the subsequent chapter.

4. Better: Exceptional product/services value as defined by quality per dollar spent

Risto respects the consumer. All products are exceptional quality. Risto's are the highest quality shoe on the market. The shoes are expertly designed for better performance in sport than other brands. Even so, as Risto seeks to promote sports, these shoes must be affordable to the average weightlifter. Hence, Risto does not Skim price and uses value based pricing.

Business Model – The socially responsible shoe with the performance of weightlifters in mind

Risto aspires to be a Lean Thinking Enterprise, favoring sustainable growth. For both strategic and political reasons, Risto serves the niche market of weightlifters and strength training markets. Sales and distribution channels are online or by mail order.

In sync with Lean concepts, Risto aspires to have a pure pull system. The company aims to have a very small on hand inventory. Ultimately, Risto's goal is that every shoe is on order by the time it comes off the production line. What makes Risto different is the ability for the customer to customize their shoes as well as a selection of uniquely colored stock models. Risto is the only sustainable and made in the America's shoe currently on the market. Furthermore, Risto is different in that its shoes have design input from elite weightlifting coaches. Whereas, leveraging the aerospace and industrial engineering backgrounds of its core stakeholders, the shoes employ high tech performance designs approved by Olympic coaches and athletes alike.

Strategic goals and objectives

Risto's near term strategic goals and objectives are

- 1. Grow market share
- 2. Gain Legitimacy
- 3. Become more profitable

In consideration of the fact that Risto is a start-up, Risto is focused on growing market share and gaining legitimacy. Risto seeks legitimacy via affiliation with nationally established organizations such as USA Weightlifting. It also desires to Risto aspires to be a top 3 brand in its market. As a non-profit its must grow profitability. In line with its core values and business model, Risto aims to increase profitability through organic growth.

3.2 System Dynamics Model, Achieving current state goals

In order to achieve the enterprise goals, the enterprise system dynamics must be understood. Figure 3.0 shows a system dynamics model (Sterman 2000) of the Risto Sports enterprise.

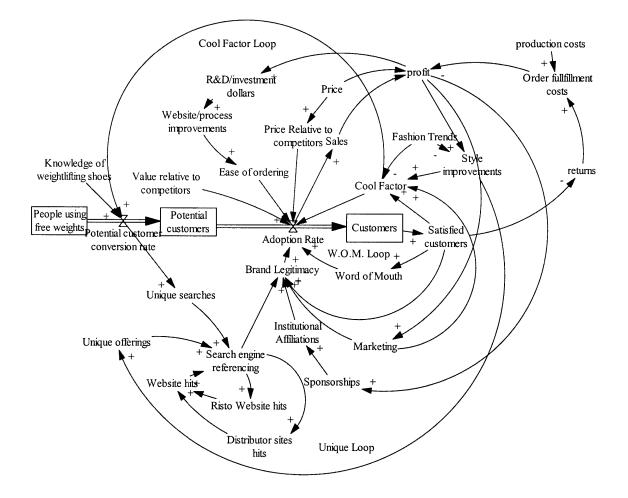


Figure 3.0. Systems dynamics model of Risto enterprise

The model centers around stocks of "people using free weights" flowing to "potential customers" which flows to "customers". The stock of "people using free weights", in the current context, is the ultimate limit to Risto's market size. Risto must seek to convert as many of these people to "potential customers". Potential customers already have awareness of weightlifting shoes, converting potential customers to "customers" is the key to generating more revenue. This is shown by the valve symbol labeled "Adoption Rate". An "adopted' customer is defined as one who has bought a product. Hence, sales are tied to adoption rate and customers.

Risto's biggest opportunities to reach its strategic objectives are to adopt more customers and to increase awareness and attractiveness of the brand. Adopted Customers affect profit through each sale. Unsatisfied customers will negatively impact profit through costs of returns or concessions; hence, the customer satisfaction variable has a negative polarity input arrow to the cost variable via returns.

Attractiveness of the product will increase objectives or market share and legitimacy. Via the customer satisfaction variable, customers have similar impact on the product awareness and attractiveness through the variables "Word of Mouth", "cool factor", and "brand legitimacy". Current customer perception of the product will influence how potential customers will view the product, ultimately, influencing whether they adopt the brand. Attractiveness is also improved by Risto's "marketing" and "style improvements". Risto's sponsorship of institutions will directly improve its legitimacy. Note, that efforts to increase attractiveness, excluding customer satisfaction, will increase cost; hence, an optima between marketing and product improvement costs ought to be pursued.

Awareness is powerful in achieving Risto's objectives. Potential customers simply need to know of Risto's existence. Most weightlifting shoes are purchased over the internet, hence being a top search result is powerful in improving capture of customer orders. Being referenced by google.com, yahoo.com, or Bing.com improves the legitimacy of the product to the customer as well. It is not clear if cool factor is always improved or sometimes negated (overexposure) by increased search results. Finally, Risto does very little marketing, and with a true marketing effort, Risto can improve overall attractiveness and awareness.

It is important to understand the power with in the loop structures. The above has described reinforcing loops dormant in Risto's structure (Sterman 2003). By encouraging these loops, exponential growth will occur; on the other hand, "balancing loops" do the opposite(Sterman 2003). The model also contains balancing loops as well as reinforcing loops which ca become balancing loops should their polarity be changed (Sterman 2003). For example, if customer satisfaction becomes negative, then returns will increase and Word of Mouth will decrease causing Risto to lose potential customers as well as be hit with return costs. This in turn decrements profit, which negatively affects R&D and style improvements, also negatively affecting market capture. In effect, it is important to "walk" the loops in the model to understand the systemic impact of behavior. As noted above, loops encouraging attractiveness and awareness loops are Risto's greatest opportunity to harness exponential growth.

3.3 Case set-up

ESAT and stakeholder data are collected and analyzed over four distinct epochs (Rhodes, etal 2009) in the enterprise's growth. These being the commencement of enterprise operations, the current epoch of the enterprise and major enterprise milestones between these two points. Figure 3.1 shows graphically these enterprise epochs

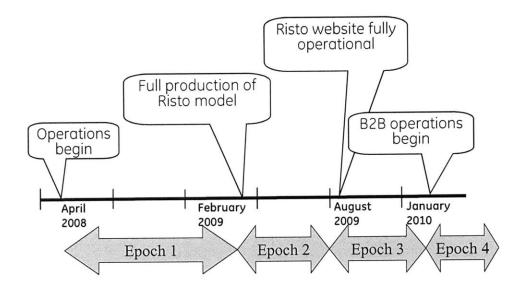


Figure 3.1. Risto Sports timeline, significant milestones

Major enterprise milestones are defined in this thesis as any event which significantly changed the enterprise architecture. At each epoch, Stakeholder identification and value propositions data is collected in steps 1 and 2 of the ESAT.

Stakeholder saliency measured by codifying management's perception of the stakeholders. Referencing Mitchell's 1997 and Agle's 1999 works, the management's perception of stakeholders and their link to managements values– whether correct or not---- determines the stakeholder saliency. Using Grossi's qualitative assessment questionnaire (Grossi 2003), the management rates the power, legitimacy, and urgency of each stakeholder at each enterprise epoch. A Normalized Stakeholder Saliency Index (NSSI) is then calculated by the following equation (Grossi 2003): NSSI = 1/3(Power X Legitimacy + Power X Criticality + Legitimacy X Criticality) eq. 1

Leveraging from Friedman's hub and spoke model (Friedman 1995) and Leveson's control structure (Leveson 1995), a stakeholder network map showing all directional connections between stakeholders is created.

Stakeholder presence in each of the 8 EA views is measured at each epoch. The management's perception of stakeholder is recorded on a scale of 0 to 2, using the following definition

Table 3.0. Definition of stakeholder presence value

Color code	Value	Definition	
		Strong, stakeholder input directly incorporated	
	2	view design	
	1 Moderate, influences or considered in view d		
	0	None, No participation in view design	

Note, a 3 point scale-low, medium, high—is used to avoid right skew of the data (Kutner 2005).

At the fourth epoch an enterprise gap analysis is conducted. Gaps in each view are appraised to understand implications for the enterprise's future epoch. Afterwards, detailed stakeholder interviews are conducted to assess the validity and reliability of the management's enterprise stakeholder plan.

Defining the current epoch Stakeholders

Figure 3.2 shows a map or control structure of Risto Sports' current epoch stakeholders. Each bubble represents a stakeholder; stakeholders are connected to one another with arrows. The arrows illustrate some only having one way relationships with little or no reception of feedback. The arrows linking stakeholders do not indicate strength of the linkage.

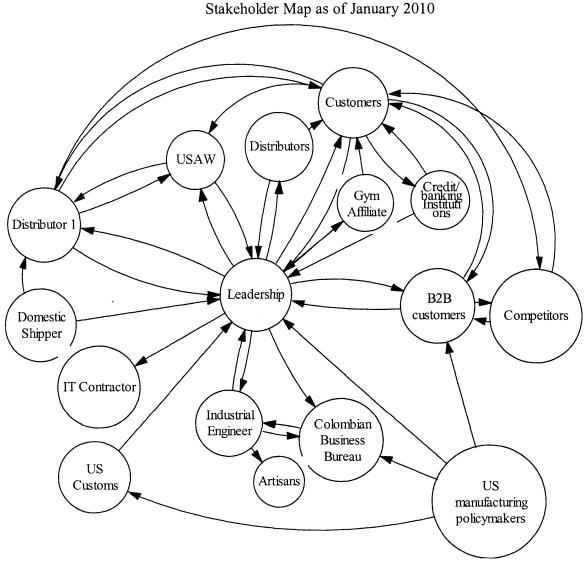


Figure 3.2. Risto Sports current epoch Stakeholder map, as of January 2010

Several of the stakeholders are exogenous to the system, having only arrows pointing into the

system; these stakeholders are: US Manufacturing Policymakers, US customs, Domestic

shippers.

Table 3.1 shows stakeholders overlaid on each view of the enterprise.

Strategy View	Policy View	Information View	Knowledge View
Leadership	US manufacturing	Leadership	Leadership
Customers	Policymakers	IT contractor	Industrial Engineer
B2B Customers	Colombian Business	Customers	Artisans
Industrial Engineer	Bureau	Industrial Engineer	B2B
Artisans	Banking Institutions	Artisans	Customers
Distributor 1	Artisans	Distributor 1	Customers
Distributors	Customers	Distributors	Distributors
USAW	Leadership		Distributor 1
Colombian	Gym Affiliate		IT Contractor
Business Bureau			Colombian
			Business Bureau
Process View	Organization View	Product View	Services View
Leadership	USAW	Industrial engineer	Leadership
Industrial	Leadership	Distributors	Customers
Engineer	Customers	Customers	Gym affiliate
Customers	B2B Customers	B2B Customers	
Distributors	Industrial Engineer	Competitors	
Distributor 1	Distributors	USAW	
B2B customers	Distributor 1	Artisans	
IT Contractor	Gym Affiliate		

Table 3.1. Presence of stakeholders in EA

Definition of stakeholders and values

Leadership

Leadership refers to the owners of Risto Sports. They are the core of the company and are responsible for its strategic direction. Leadership values sense of fulfillment and revenue stream, while providing dedicated strategic direction to the Risto enterprise.

Note on Leadership results

The Saliency score of Leadership are indeed the management's perception of itself. Using Freeman's hub and spoke model, it is necessary to model in the management as the "Leadership" stakeholder.

Artisans

The artisans are the workers who hand craft the shoes. They provide expertise and quality craftsmanship while Risto supports them by driving more work to their shops versus lower cost avenues abroad. Risto has opened a new market place for their products.

Industrial Engineer (IE)

Risto's IE's key function is to implement and execute designs in the shop. The IE brings knowledge and expertise to the enterprise as well as bridges the US and Colombian operations. Risto provides an increased revenue stream and market reach for the IE .

Distributors

Distributors sell Risto shoes online. They seek ability to make profit from the sale of shoes. They value rapid fulfillment of orders and order accuracy. Distributors bring market intelligence to Risto; they also serve as a means of promoting the brand and new channels for sales.

Distributor 1

Distributor 1 is Risto's largest and oldest distributor. As shown in the stakeholder diagram, they are more densely networked than other distributors. They value availability, short order

turn around time, and facilitation with end customer items. Customer items include exchanges, sizing questions, and any pother feedback. Distributor 1 tends to be the most work intensive distributor, yet they also the highest volume and, out of all distributors, drive the most awareness of the brand.

USAW

USAW is the National Governing body for the sport of Olympic weightlifting. Risto Sports is an official sponsor of USAW. Risto helps defray USAW costs through sponsorship while USAW helps promote awareness of Risto.

Customers (B2C)

Risto's B2C, or business to consumer, customers can be broken into two main segmentshigh end buyers and low end buyers. What is most is the leadership initially expected the market to be segmented by weightlifters and non-weightlifters. However, customers buy on brand as well as what other people are wearing versus whether the weightlifting shoe is designed for weightlifters. Below is a more detailed segmentation.

Low end customers(Low End)

The low end customers typically are looking for a slightly better shoe at a lower price than brands such as Adidas. They are often looking for a "good deal". These buyers mainly shop on price and shoe compatibility with personal style. They are less receptive to value propositions elucidated by the enterprise. Interestingly, because they primarily shop on

price, these customers tend to return or exchange shoes for minor details and, hence, are most likely to erode profit margins.

High End Customers (High End)

These customers are looking for a product hat truly differentiates itself form all other offerings. They are less price sensitive and more Value in Use focused. They can further be broken down into customers looking for a high performance shoe and sustainability customers.

Sustainability customers

These customers tend to value the fact that the shoes are made in the Americas. They understand high quality workmanship. Many of these customers own their own business and would rather support someone local than a brand that produces in China. Large corporate brands often seem faceless to these customers.

Performance customers

Performance customers are looking for the best shoes to improve their performance. They desire either a custom shoe built especially for them. Many of them value the fact that the shoes are expertly designed. They see the Risto leadership team's strength sports experience as highly valuable and are more willing to trust buying form Risto than another shoe company. These customers are not necessarily interested in the fact that the leadership team are weightlifters or that the shoes are sustainably made, more so that they are legitimate.

B2B customers (B2B)

Business to Business (B2B) customers open large one time or large reoccurring orders. Risto offers customized orders or serves as an OEM at competitive pricing while the B2B customer does not burden Risto with the risk of carrying inventory.

US Manufacturing Policymakers

This refers to policymakers influencing the manufacturing environment in the USA, in terms of which sectors of the manufacturing base will be incentivized to grow in the USA. This is an exogenous stakeholder whose attitudes, potentially, can influence the enterprises interests in making shoes in the USA.

US customs

Customs drives the import and export processes which are highly monitored by this agency. It is an exogenous stakeholder; however, tax rates and fees influence feasibility of making shoes in Colombia. Additionally, customs inspections and "sampling" can add significant delay to the import process and can lead to losses in inventory. It is of highest importance to the enterprise leadership that all import and export activities comply with regulations set forth by customs.

Colombian Business Bureau (COL BB)

This stakeholder sets standards for business operations in Colombia . This organization sees exports to USA favorable for US economy, likewise they are amicable to facilitating export process including being a repository of knowledge for improving and simplifying export

process. Colombian customs tend to sample exports, hence delaying shipments and increasing inventory losses.

IT Contractor (IT)

IT contractor is pay for service contractor responsible for Risto website. They value that Risto's successful online presence will help promote their services, while Risto values an on demand easily accessible IT support service.

Gym Affiliate

Provides professional space where some of Risto's services are carried out and aids awareness of Risto through the Gym affiliate's customer base. Risto brings legitimacy to their facility as well as expert weightlifting consulting.

Domestic Shipper

The shipping service provider used to deliver individual customer orders regardless of sales channels. The shipper values high volume shipments as well as large ground shipments; these values are also mirrored in their pricing structure. At this point, Risto does not cay the same volume of shipments as the shipper's major accounts; still, the shipper . Risto values the ease of use of the shipper's service, location to Risto warehouse, package tacking, predictable pricing, and reliability of delivery. At this point, the shipper is not highly integrated into the enterprise.

ESAT Stakeholder Results

After the initial assessment of stakeholders, exogenous stakeholders are eliminated from the ESAT analysis. Stakeholder prioritization is carried out for stakeholders that are relevant to the enterprise and is shown below:

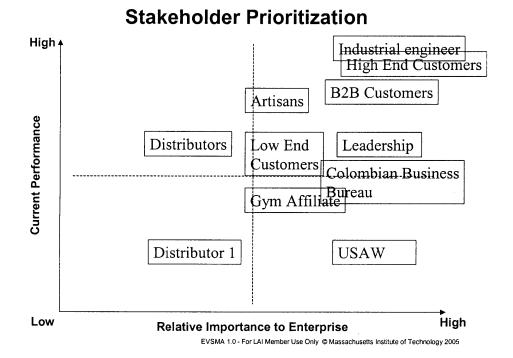


Figure 3.3. Stakeholder value delivery in current epoch

From the leadership's perspective, the majority of stakeholders have acceptable performance. At this epoch, the leadership sees a highly beneficial relationship between B2B customers, the IE, and High end customers. Distributor 1 is the enterprises' most challenging relationship as their importance has declined from prior epochs, nor have they grown their value delivery. The following chapters further analyze the stakeholder value exchanges and performance.

Chapter 4. Analysis Part I- Enterprise Epochs and evolution

4.0 Introduction

The Risto Case Study provides insights on how stakeholder salience is informed by enterprise transformation. The case study confirms that a business's Core Ideology (Collins and Porras 1996) – the values and purpose of the enterprise - drive its business model and Enterprise Architecture (EA). In turn, the defined business model and corresponding EA will drive what stakeholders become part of the extended enterprise. Stakeholders are linked to the enterprise through the value they contribute and extract from the enterprise. Their roles are explicitly defined in the EA.

The enterprise dynamics are studied in two state spaces: Enterprise Architecture space and Business Model space (Ogata 1998). Block diagrams depict the two spaces in Figures 4.1 and 4.2, respectively.

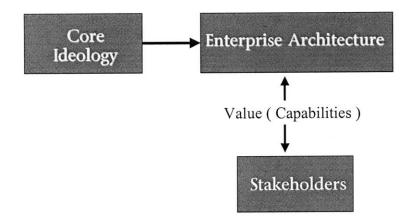


Figure 4.1 EA space

Figure 4.1 depicts the relationship between an enterprise's Core Ideology (Chapter 2.6), Enterprise Architecture, and Stakeholders. An enterprises Core Ideology ought to define the intrinsic values and purpose of the enterprise; hence, the architectural design of the enterprise is driven by this core purpose and beliefs. The EA must harmonize with the Core Ideology. The EA is then connected to the enterprise's stakeholders through the enterprise value exchamge. In this space, the value exchange is a function of the capabilities that the Stakeholders offer to the EA. As we will see later in this chapter, as well as in Chapter 6, the enterprise will enter into stakeholder relationships to fill gaps in the architecture—the stakeholder offers some ability (or "ilities" as we say at MIT's LAI) that fill needs in particular views of the EA. A two way arrow is shown to indicate feedback on stakeholder performance. Stakeholder relationships are dependent on the current Epoch needs and context of the EA, and failure to live up to expected value exchanges will result in nonstakeholder status.

Similarly, Figure 4.2 shows the relationship between Business Model, Core Ideology, and stakeholders. On first glance, it may seem near identical to Figure 4.1; however, 4.2 describes a different facet or space of the enterprise's dynamics. Most notably, stakeholders are connected to the business model by values as a function of saliency offered. Rather the stakeholder value exchanges are colored by the saliency of the stakeholder providing it. This is elaborated in detail in Chapter 4.2.

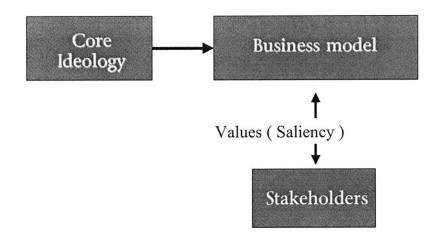


Figure 4.2 Business Model Space

Further these two spaces are encapsulated by the time dependent concept of enterprise

Epochs (Rhode, etal 2009) presented in Chapter 3. Hence, this analysis looks at two systems

- EA and business model— embedded in the overarching system of enterprise epochs. As we will see through out this analysis, the enterprise core ideology is a fixed constant.

Understanding the concept of state space in control theory (Ogata 1998), Figures 4.1 and 4.2 can be represented as one block diagram in Figure 4.3.

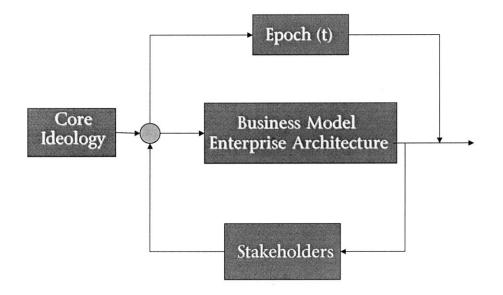


Figure 4.3 Enterprise State Space diagram

Figure 4.3 depicts core Ideology as a constant input to the enterprise system. Further, the concept of enterprise epochs as a function of time, *t*, is incorporated by the outer loop. Hence, Business Model and EA comprise a transfer function describing two spaces of the enterprise's dynamics. Stakeholders comprise a feedback loop, and the system will respond to changes in stakeholder value delivery performance. Conceptually, the output of the system can be plotted over time, with plots for Business Model and EA. As we will see later

in this chapter, the Business model and EA contain their own sets of variables and system dynamics. In other words, EA and business model "transfer function" is really more akin to two system dynamics models with in a system described by Figure 4.3.

Overview of Part I Analysis

The analysis explores these relationships in detail, by gleaning insights on both EA and Business Model spaces over 4 enterprise Epochs (one Era).

First, the analysis section reviews definitions of enterprise thinking terms used throughout the analysis section. Next, this section looks at each of the four enterprise epochs for which data was collected. Each epoch business model and EA are characterized in detail, with specific attention to context and enterprise needs of each epoch. The stakeholder dynamics with in the EA and business model spaces are analyzed side by side as the two spaces share the same stakeholder set and move together into new epochs.

Afterwards, the section garners insights on stakeholder with respect to the EA and Business model spaces. In an effort to answer the thesis questions, the analysis section investigates:

- how salience and view presence are tied to stakeholder expected value delivery
- how salience and view presence are tied to actual value deliver and extraction
- Whether the results are as expected

The analysis also examines interactions across states. Finally, findings are summarized in the land related back to the models proposed in Figures 4.1-4.3.

4.1 Definitions

Business Model and Enterprise architecture:

Figures 4.1-4.3 employ the terms business model and EA together. It is important to note the nuances between the two terms and how they are being employed in this thesis.

The term business model is used in this thesis in the traditional sense. A Business model describes the rationale of how an organization creates, delivers, and captures value. For Risto, it is the high level strategies the enterprise will use to differentiate itself from competitors, including market segmentation, pricing. It is the sets of strategies in response to the market opportunities present in each epoch.

Enterprise architecture (EA) is an enterprise thinking specific term that holistically describes how the enterprise is designed. It is the infrastructure of the enterprise that describes the enterprise's capabilities over 8 views. EA codifies the enterprise's infrastructure into the following 8 views: strategy, organization, knowledge, IT, policy, product, and service view. With respect to EA research, the business model is seen as a subset of the Strategy view (Rhodes, etal 2009). In the stakeholder context, the behavioral aspects of the Strategy view is invoked—e.g. the "ilities" ad increased value exchanged with stakeholders (Nightingale 2008). However, there are many instances where the content of each view has little interaction with the business model. For example, an enterprise in a very unregulated market will still have a policy view, even if the business model is bounded by policy view considerations.

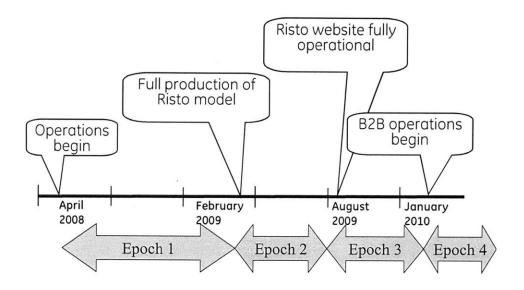


Figure 3.1 Risto Enterprise Epochs

Enterprise Epoch

Enterprise Epoch is defined in this thesis as any significant shift in business model and enterprise architecture. This is consistent with the definition provided in Chapter 2 (Rhodes, etal 2009), whereas an epoch is characterized by a shift in context and enterprise needs. The enterprise states surveyed in this thesis and method for selecting them is further described in the method section (Chapter 3.3).

The below graphic shows each of the 4 states on the enterprise timeline. This graphic is repeated from Chapter 3.

Figure 4.1. Enterprise timeline with key Epochs

Per Figure 4.1, the Epochs are described as:

Epoch 1 – Founding of Botev Sports (now Risto Sports)

Epoch 2 - Full production of Risto model begins, marking new product architecture

Epoch 3 - Ristosports.com Launched, ecommerce begins

Epoch 4 – B2B operations begin, Present Sate

4.2 Epoch 1 – April 2008, the founding of Botev sports (now Risto sports)

Epoch 1 marks the beginning of enterprise operations. Botev Sports is formed to support weightlifters by bringing a high quality shoe alternative to the market.

At this time, the enterprise ideology mirrors those laid out in the enterprise background in Chapter 3.2; albeit the enterprise is less mature in terms of its ideological vision.

For this Epoch of the enterprise, Risto's core values of Stronger, Greener, Better, Leaner, are described as:

- Stronger Serve weightlifters
- Greener- sell product made in country with reasonable labor standards (Europe), less sophisticated than current Epoch
- Better offer higher quality product with respect to market competition
- Leaner- aspire to be Lean Thinking enterprise

Business model

Risto's business model is to offer a high quality shoe choice to weightlifters that also has a unique appeal to the weightlifting community. The shoes sell on the name of a world champion weightlifter and mystique (shoes are made in a country that has produced numerous weightlifting champions). Risto prices shoes at a modest mark-up, entering the market at a price below established brands and above low quality brands. As Risto is unable to take large risks, a key focus is to build a business with a low cost structure-- encouraging slow, sustainable growth. It prefers to keep small inventories with a consistent sales demand. Likewise, the shoes are retailed via mail order, and advertised over a blog. Risto has no ecommerce means at this time.

Results and analysis of stakeholder saliency and view interactions

Tables 4.0.1 and 4.0.2 list the stakeholders present in Epoch 1 (see Chapter 3.3 for stakeholder descriptions). Table 4.0.1 shows the stakeholder saliency results by attribute as well as the calculated NSSI (Chapter 3.3), or how salient they are in the eyes of the enterprise. Further, the stakeholders are ranked by NSSI, with highest saliency given the number 1 ranking.

Table 4.0.2 inventories stakeholder presence in each of the 8 EA views. The table is color coded blue, orange, and white for strong, moderate, and no stakeholder presence in the view.

	Ep	och 1- Opera	tions Begir	Ŋ	
Stakeholder	Power	Legitimacy	Urgency	NSSI	Rank (NSSI)
USAW	2.0	7.3	0.0	4.9	5
Low End	9.0	8.0	6.0	58.0	2
High end	8.0	8.6	5.0	50.7	4
B2B	2.0	6.0	1.0	6.7	8
Leadership	7.3	9.7	9.0	74.6	1
OEM 1	9.0	8.0	5.0	52.3	3

 Table 4.0.1 Epoch 1 Business model space, Stakeholder Saliency

Table 4.0.2 Epoch 1 EA space, Stakeholder View Presence

	1				-			
Stakeholder	Strategy	IT	Knowledge	Product	Policy	Process	Organization	Service
USAW	1	0	1	0	0	0		1 0
Low End	2	2	2	1	1	1		1 0
High end	2	2	2	1	1	2	-	0
B2B	2	1	1	1	0	1	1	0
Leadership	2	2	2	2	1	2	2	0
OEM 1	2	1	1	2	1	1	1	0

Epoch 1- Operations Begin

From Table 3.0, color coding is defined as:

Color code	Value	Definition
		Strong, stakeholder input directly incorporated in
	2	view design
	1	Moderate, influences or considered in view design
	0	None, No participation in view design

In general, stakeholders are present in views that affect their value propositions with the enterprise (Table 4.0.2) and are raked by the salience to the enterprise (Table 4.0.1).

In Epoch 1, the shoes are being supplied by OEM 1. As they are supplying all the material Risto retails, they are ranked high in salience – number 3 out of all stakeholders (Table 4.0.1). However, initial value delivery data indicates that the stakeholder may not be a high performer relative to timeliness expectations.

Much of this is rooted in cultural differences. Cultural mismatch between OEM 1 and enterprise leadership is a leading indicator that relationship may not be as smooth as desired. For example, instead of sending small frequent shipments to enable Risto to carry small inventories, OEM 1 imposes batch and queue shipment with long lead times in between shipments. This clearly is in conflict with Risto's core value of "Leaner". Resource dependency (Oliver 1991) keeps Risto in a business relationship with OEM 1, for now.

Low end customers are ranked 2 by NSSI (Table 4.0.1). This is due to the fact that this segment generates the enterprise's initial cash flow. Price conscious customers place the majority of Risto's initial orders; they are looking for a "good deal" without sacrificing too much quality. Some customers place advance orders before stock is available. Hence, they hold power in terms of cash flow and form a legitimate relationship with the enterprise through there orders. This is reflected by the high Power and Legitimacy value of 9 and 8, respectively, in Table 4.0.1.

The low end customers salience is composed mostly of legitimacy and power than urgency. Adopting new customers makes Risto legitimate to potential customers, and customers who have placed orders have a formal claim on the enterprise. After orders are fulfilled, customers have the power to advocate or oppose products to potential customers; this is especially important for a new, un-established brand. As shoes are not sold on a quick turn time proposition, orders placed at this Epoch have little urgency. Orders are only urgent in that Risto must make good on delivering to the quoted long lead time.

With respect to architecture (Table 4.0.2), the Low end customers are present in all views. This is due to the fact that Risto accommodating aspects of each EA view to attract more customers. Referencing the System Dynamics model (Figure 3.0), Risto needs to attract and adopt as many customers as possible to build a revenue stream. For example, Risto tries to design the ordering and billing processes around the impatient, bargain hunter nature of Low end customers. Per Table 4.0.2, these customers' demands are felt strongly in the Process, Strategy, IT, and Knowledge views. Risto aims to build knowledge of market from customer feedback (Knowledge View) and flow information to OEM 1 (IT View). This will enable harnessing information to fine tune sales strategy and demand forecasting (Strategy View).

High end customers are less salient than low end customers as they have not adopted Risto's new shoe offering (Table 4.0.1). The High end customers buy on brand name and quality. In this market, there tends to be few early adopters; many wait to hear if quality advertised by Risto sports is delivered. The anticipated value exchange between High End and Risto is revenue and market intelligence.

At first, High end contributes only a small percentage of total customer sales, they are less salient than Low End customers. With a small percent of contractual orders with Risto, their potential legitimacy value is reduced, and without formal claims on the enterprise, High end's potential Power value is also reduced. Like Low End customers, High end customers have higher power and legitimacy than urgency components of saliency. However, current Epoch saliency does not implicate presence in EA views.

Much like the Low end customer segment, the high end customers are present in all views. Risto is looking to capture more of this market segment, hence Risto accommodates aspects of each view of the architecture to attract more customers for future Epochs. For example,

Risto works to organize its Leadership team, such that customers talk to Risto salesperson with most familiarity to customers background and needs. For the High Enders, this makes ordering more personable and customized to them. Again, as Risto's business model is not to sell on high volume, Risto is catering to customers who will pay for value in use, versus pay for cheap commodity. Hence, High End customers have the strongest presence in Knowledge, IT, and strategy views for the same reasons as the Low End segment-- the enterprise accommodates the architecture for High end in anticipated value capture.

Out of the 6 stakeholders, Leadership is the most salient for reasons endogenous to the EA. For one, measuring saliency requires an egocentric view of an enterprise. As mentioned in the Literature Review (Agle 1999), stakeholder salience is measured by how the management views the importance of other stakeholders to themselves. Since the enterprise would not exist with out the core leadership team, Leadership ranks itself as highest NSSI.

To clarify, Leadership is connected to the EA and business model by providing the driving vision of the enterprise. In terms of value propositions to other stakeholders, Leadership creates new value exchanges that did not exist before the enterprise's creation. For example, Leadership provides values to both customer segments by offering a high quality shoe option at a price where no other one exists. Leadership provides OEM 1 an entry to the US market, a market that greatly exceeds the size of OEM 1's past reach.

As the Leadership is tasked with designing each of the views, it is present in all EA views. This is not to say that the Leadership will have strong presence in each view. For example,

Leadership is weakest in the Policy view as it has little power to influence international trade laws or tariffs. Risto is able to design its own set of customer policies, such as return and exchange policies. However, much of Risto's policies are benchmarked to competitors policies as Risto has no established brand. This echoes Oliver's (1991) Institutional theory, whereas the less powerful organization is pressured to adopt the cultural or norms of the more powerful groups.

The bottom two stakeholders, ranked by NSSI are USAW and B2B. These two stakeholders contribute little value to Risto in its fledgling Epoch. However, Risto's Leadership is aware of potential value exchanges these stakeholders can offer. In effect, Risto considers them in the architecture views, to plan for the future Epochs. At this Epoch, B2B is similar to the B2C (Low end and High end customers combined) in its views presence, and B2B is not given as much weight as it is not contributing any value at this point. USAW is in a more limited role. Risto sees USAW as able to affect Risto's Legitimacy attribute to potential customers, and the USAW has the power to positively or negatively influence the weightlifting community towards Risto.

4.2 Epoch 2- April 2009, Arrival of the Risto

The Leadership becomes an OEM of their own shoes. It can now design its own shoes to capture more market demand. The Leadership brands themselves as "Risto Sports". Due to OEM 1 underperforming to expectations and coupled with other market demands, OEM 1 is replaced with the Industrial Engineer and the Artisans. Finally, Risto has the capabilities to better live-up to its core Ideology, applying high-tech design methods and Lean, to create

shoes that even better perform for weightlifters. Another new addition is the Colombian Business Bureau which sanctions business transactions where the shoes are made.

Risto's core values, although similar to Epoch 1, become more defined. Risto moves closer to current Epoch values greener, leaner, stronger, better. This is due to the fact that they have more control over the entire product life cycle -- from design, manufacture, frequency of inventory shipments—as an OEM. Even more consistent with their value set of supporting weightlifting community is the fact that the shoe makers and operations people have direct ties to weightlifting community. The shoe design and manufacturing processes leverage the aerospace and industrial engineering backgrounds of Risto's core enterprise members. The shoes are expertly designed and tested alongside Olympic coaches and athletes.

Business model

Risto's business model in Epoch 2 is to be an OEM, that designs and make its own shoes in sync with changing market opportunities. Likewise, Risto is able to address the market for custom shoes. B2B orders are Risto's target customer for custom shoes. In addition to custom designs, Risto now offers stock models in an array of colors, which is revolutionary for weightlifting shoes.

Risto also has new sales channels. Risto sells through distributors, who have their own websites, in addition to Risto's mail order operations in Epoch 1.

Epoc	h 2 - Full	Production of	of Risto Mo	odel	
Stakeholder	Power	Legitimacy	Urgency	NSSI	Rank
USAW	2.0	7.3	0.0	4.9	10
Low End	8.0	6.0	6.0	44.0	5
High end	7.0	8.6	5.0	46.2	4
B2B	2.0	7.0	3.0	13.7	8
Distributors	5.0	6.0	3.0	21.0	7
Distributor 1	8.0	7.0	5.0	43.7	6
IT Contractor	0.0	0.0	0.0	0.0	11
Artisans	6.7	7.2	7.0	48.3	3
IE	6.7	9.0	7.0	56.6	2
Leadership	7.3	9.7	9.0	74.6	1
COL BB	3.0	4.0	2.0	8.7	9

Table 4.1.1 Epoch 2 Business model space, Stakeholder Saliency

Table 4.1.2 Epoch 2 EA space, Stakeholder View Presence

	Ep	ooch 2 - Full P	roduction	of Riste	o Model		
Stakeholder	Strategy IT	Knowledge	Product	Policy	Process	Organization	Service
USAW	1 0		0	0	0	1	0
Low End	2 2	2	1	1	1	1	0
High end	2 2	2	1	1	2	1	2
B2B	2 1	2	1	0	1	1	0
Distributors	1 1	1	1	0	1	1	0
Distributor 1	2 1	1	0	1	2	2	0
IT	0 0	0	0	0	0	0	0
Artisans	1 2	2	2	less tel	2	2	0
IE	2 2	2	2	2	2	2	1
Leadership	2 2	2	2	1	2	2	2
COL BB	0 0	1	0	1	0	0	0

Results and analysis of stakeholder saliency and view interactions

Per Table 4.1.1, the newest highly salient addition to the enterprise are the Industrial engineer and Artisans. They contribute the value of new manufacturing channels as well as highly experienced and capable in making weightlifting shoes. Correspondingly, both stakeholders have a heavy presence in Knowledge, Product, Strategy, and Information views (Table 4.1.2). In Knowledge view, Risto wants to extract and codify the knowledge from customers and shoemakers and provide feedback to these stakeholders; for example, producibility of custom designs is important to understand ahead of taking a customer's custom order. With respect to the Information View, information needs to flow accurately from Leadership to the IE and Artisans. This is especially important for order correctness. Additionally, because IE and Artisans drive the execution of the product design, they influence the design sophistication and timing of new models. Thus, their capabilities influence short term strategy (Strategy view)- what Risto can make, and the shop cost. Process view is influenced by the physical execution of orders over which the IE and Artisans have control.

The Leadership shares close value exchanges with Artisans and IE. The Leadership delivers value to IE and artisans via new market opportunities. Leadership extracts the value of a competent manufacturing base that can offer current and potential customers an even better product. The Leadership can now actively incorporate customer feedback in the shoe design and harness the "unique" and "cool factor" reinforcing loops of the systems dynamics model in Figure 3.0. The Leadership, as in Epoch 1, continues to have the highest saliency as it drives Risto.

Distributor 1 is another new stakeholder. The Leadership believes that Distributor 1 (D1) is viewed positively by weightlifters. In other words, Distributor 1 offers a sales channel that has established legitimacy with weightlifting shoe customers. It is anticipated that this

additional sales channel will add legitimacy to the Risto brand and increase incremental sales.

Per Table 4.1.1, D1's saliency has strong components of power and legitimacy. D1 appears to be well networked into the same community that Risto draws. Hence, Risto wants to capture positive Word Of Mouth (W.O.M.) from this distributor, harnessing the W.O.M. loop in Figure 3.0. Still, D1 is lower salience than other stakeholders as it does not contribute as much value as customers or IE & artisans. Risto can exist without D1.

Additionally, D1 keeps an arms length relationship, making itself sometimes difficult to work with. D1 often expects Risto to provide additional support to D1's customers, which goes well beyond how OEM's typically interface with distributors. Hence, D1 is a demanding versus cooperative relationship (Rowley 2001), which is consistent with their high Power NSSI component in Table 4.1.1.

Due to D1's arms length relationship or willingness to collaborate with Risto, D1 has only a moderate presence in views with which they interact (Table 4.1.2). D1 does have a stronger affect on Strategy, Process, and Organization. Became D1 is Risto's first distributor, it requires new strategy, processes, and role responsibilities to be formed. As will be elobrated on in the next epochs, D1's greatest affect is to drain enterprise resources and capacity.

In this Epoch, Risto also acquires several smaller, less powerful, less legitimate distributors. These are consolidated into one "Distributors" stakeholder as their needs an affects on the

enterprise are relatively homogenous. This stakeholder contributes little value add other then opening more sales channels as well as exposure for Risto Interestingly, Distributors are easier to work with and more willing to collaborate than D1. This ties in well with institutional theory (Oliver 1991), in that the, most powerful distributor tried to make Risto conform to their culture, while less powerful ones are more amicable to subordinate to Risto (Rowley 2001).

Because Distributors have the same functions as Distributor 1, they are present in identical views (Table 4.1.2). However, since they are expected to contribute less value in these views, their presence is much weaker. Special architecture concessions for this group are not needed.

B2B customers begin to contribute tangible value in Epoch 2. Due to ability to customize orders for their organization, they place more orders with Risto. Still, they are a small percentage of total sales. Per Table 4.1.1, they are seen as a legitimate force to be more involved in the enterprise in the future, hence they have an 8th overall NSSI ranking. At this Epoch, Risto does not feel powerful B2B customers affecting the enterprise. Once again, the views are architected in consideration of this future customer segment. B2B has its strongest appearance in the Strategy and Knowledge views as Risto studies this segment.

Correspondingly, B2C customers continue to provide the largest revenue stream for Risto. Low end customers still contribute the bulk of sales. High end comprises the majority of custom sales, hence its higher presence in the Process view. Risto architects new custom

order process to placate the High End customers. Otherwise, the views and salience ranking are similar to Epoch 1. Risto highly values its customer as it recognizes that it would not continue to exist without a loyal customer base.

At the bottom of the NSSI rakings is the USAW and COL BB. This is, again, due to little active role in the enterprise. Risto has awareness that future value delivery potential exists. It will be up to Risto to construct future value exchanges.

4.3 Epoch 3- August 2009, website launches

This next enterprise Epoch is marked by the launching of Risto's new website, www.ristosports.com. This radically changes Risto's EA and business model in terms of order fulfillment, knowledge management, marketing, and sales channels. Risto's values remain unchanged; they continue to mature to the current Epoch.

Business model

Risto creates a website to capture more direct sales, which have more margin versus distributor sales. Risto also focuses on smaller number of stocked colors, while still offering custom shoes at slightly higher price than stock models. Overall, the product is more mature and even higher quality, enabling Risto to ask for more price in line with the product value.

Epo	ch 3- Ri	istosports.co	om Launc	hes	
Stakeholder	Power	Legitimacy	Urgency	NSSI	Rank
USAW	5.0	7.3	4.5	30.6	6
Low End	7.3	6.0	5.0	36.9	5
High end	7.0	8.6	5.0	46.2	4
B2B	5.0	7.0	3.0	23.7	8
Distributors	1.7	3.8	2.5	6.7	11
Distributor 1	6.0	5.3	4.0	25.7	7
IT	2.7	4.0	3.0	10.2	10
Artisans	6.7	7.2	7.0	48.3	3
IE	6.7	9.0	7.0	56.6	2
Leadership	7.3	9.7	9.0	74.6	1
COL BB	3.0	5.9	4.0	17.8	9

Table 4.2.1 H	Epoch 3	Business	model space,	Stakeholder	Saliency
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Table 4.2.2 1	Epoch 3	EA space,	Stakeholder	View	Presence
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			Epoch	3- Ristos	sports.c	om Laund	ches	
Stakeholder	Strategy	IT	Knowledge	Product	Policy	Process	Organization	Service
USAW		10	0	1	0	0	1	0
Low End		1 2	2	1	1	1	1	0
High end		2_2	2	1	1	2	1	2
B2B		2 1	2	1	0	1	1	0
Distributors		1 1	1	1	0	1	1	0
Distributor 1		2 1	1	0	1	2	2	0
IT	(2	1	0	0	1	0	0
Artisans		1 2	2	2	the state of	2	2	0
IE		2 2	2	2	2	2	2	1
Leadership		2 2	2	2	永 · · · 1	2	2	2
COL BB	(0 0	1	0	2	0	0	0

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Results and analysis of stakeholder saliency and view interactions

Leadership, Artisans, IE continue to rank as the most important stakeholders to the enterprise. The value exchanges and view presence between the three are mostly unchanged. The new business model does not affect operations, other than increasing demand. This is indicative of improved stakeholder performance between the three. This is particularly relevant to an improved product as well as the strategy to focus on smaller set of better products. However, this is not significant enough to change ranking by NSSI. Interestingly, although performance of these stakeholders is improving their saliency ranking stays unchanged. Whereas, to some extent, Leadership will always have the highest salience. Evidently, at some point, the relationship between performance and salience saturates. Up to this Epoch, better performance at contributing value to the enterprise seemed to correlate with increased saliency. However, here, better performance does not imply higher salience. If anything, with respect to Table 4.2.1, value contributed to the enterprise affects how much the stakeholder is taken into account for the view in which their value creation participates. Salience, on the other hand, is relative to management's perceptions of stakeholders, usually to one another. Hence, saliency is only a relative measurement; it is the overall ranking among stakeholders that matter most, not the individual NSSI values.

Likewise, D1's saliency shows the importance of relating NSSI to enterprise context. With new website capability, D1's e-commerce is of less value to enterprise; hence, its salience decreases. With respect to value, D1 contributes value with order volume as well as its image of having an established legitimate standing in customer networks (discussed in Chapter 7). There is no significant change in D1's role for respective views, hence, no change in view presence as the same processes and relationships are in place.

Since the last Epoch, there are more ongoing talks with B2B customers. Risto aims to extract knowledge from this stakeholder; in effect, there is an increase in Knowledge view presence. The business model does not change dealings with B2B, and there are no direct structural impacts on views or salience due to the new business model. At the same time, Risto is

becoming more legitimate to other stakeholders, and this makes B2B business development more possible. Hence, B2 salience also increases as this market --identified in earlier Epoch strategy—is closer to becoming a reality.

B2C begins to show changes in High and Low end saliency ranking. Low End decreases in salience. From historic distributor data, Low end is most responsible for returns and exchanges, which generates enterprise waste. This customer type is also most abusive – for example, wearing items multiple times then returning the item for a refund. In effect, the enterprise is not interested in making EA design concessions for Low end. EA views stay the same.

On the contrary, High end increases in salience, while its affected views stay the same. Again, High end is Risto's target market, and Risto will make additional EA considerations for this segment. This segment is more labor intensive than Low End; however, it is more reasonable with returns and exchanges (less waste). High End is also more likely to place an order at the new Risto site versus distributors, providing additional value to Risto.

The remaining stakeholders show little change in NSSI. However, Risto begins to enter into sponsorship arrangements with USAW. It creates a value exchange that can increase Risto's perceived legitimacy to customers. However, few customers are even aware that Risto is sponsoring USAW.

4.4 Epoch 4- January 2010, mature product and B2B operations begin

Epoch 4 is the current Epoch already described in Chapter 3. The Epoch 4 values are listed in the case study overview as well as the business model.

Business Model Changes

In this Epoch, the business model better reinforces values; the enterprise matures and improve at living to its values. Additionally, Risto sports now offers a service component via its relationship with the Gym Affiliate stakeholder. Risto now offers comprehensive product and services packages such as training, program design, consulting, and seminars. Risto opens the "Risto weightlifting academy", where clients can connect with the services branch. Finally, the first significant B2B orders begin to occur.

Ep	och 4 -	B2B Operat	ions Begi	n	
Stakeholder	Power	Legitimacy	Urgency	NSSI	Rank
USAW	5.0	7.7	4.5	31.9	7
Low End	7.3	5.6	5.0	35.4	6
High end	7.0	8.6	5.0	46.2	5
B2B	7.0	8.4	5.5	47.9	4
Distributors	1.7	3.8	2.5	6.7	12
Distributor 1	6.0	5.3	4.0	25.7	9
IT	2.7	4.0	3.0	10.2	11
Artisans	6.7	7.2	7.0	48.3	3
IE	6.7	9.0	7.0	56.6	2
Leadership	7.3	9.7	9.0	74.6	1
COL BB	4.0	5.9	4.5	22.8	10
Gym Affiliate	5.3	5.5	5.0	27.7	8

 Table 4.3.1 Epoch 4 Business Model Space, Stakeholder Saliency

Stakeholder	Strategy IT	Knowledge	Product	Policy	Process	Organization	Service
USAW	1 0	0	2	0	0	1	0
Low End	1 2	2	- 1	1	1	1	0
High end	2 2	2	1	1	2	1	2
B2B	2 1	2	2	0	1	1	0
Distributors	1 1	1	1	0	1	1	0
Distributor 1	2 1	1	0	1	2	2	0
IT	0 2	1	0	0	1	0	0
Artisans	1 2	2	2	1	2	2	0
IE	2 2	2	2	2	2	2	1
Leadership	2 2	2	2	1	2	2	2
COL BB	1 0	1	0	2	0	0	0
Gym Affiliate	0 0	0	0	1	0	1	2

Epoch 4 - B2B Operations Begin

Table 4.3.2 Epoch 4 EA Space, Stakeholder View Presence

Leadership, Artisans, and IE have the same ranking and view presence as the last Epoch (Tables 4.3.1 and 4.3.2). Again, this highlights the saturation issues of salience and EA presence. However, at a detailed level, specific areas of value delivery can be improved. The enterprise is resource dependent on this stakeholder set (Oliver 1991).

Further, as long as stakeholder performance stays with in some acceptable band or threshold, as defined by the enterprise management, the stakeholder maintains NSSI ranking. This is not to say that IE and artisans could not be replaced with an equally salient IE and artisans. The architecture of the enterprise –except for knowledge and process views-- supports Leadership's abilities to "swap out" IE and Artisans should value exchanges deteriorate.

This is further illustrated by COL BB and B2B's increase in salience. COL BB, however, becomes more salient and more present as the enterprise begins to understand potential value

exchanges. The IE solicits resources from the COL BB. B2B also has more presence in views as more business transactions take place. The EA changes to facilitate this new part of the business model. As both groups are performing better and contributing more value than other stakeholders, their salience increases.

As a consequence of B2B customers' greater importance, B2C customers decrease in salience (Table 4.3.1). The Enterprise decreases the salience of Low end as it becomes a smaller part of sales. For the current enterprise context, the High end salience saturates. Although High end is a core area of customers that Risto will continue to cater, High End cannot out rank the top 4 value contributors - the Leadership, Artisans, IE, and B2B. Indeed, even if High end further improves performance, the value propositions of High end are out ranked in in comparison to the top 4 value contributors. It is still important to emphasize that this insight on NSSI ranking is context dependent for this given business model.

USAW also takes on a new NSSI as it begins to deliver value. In comparison to the prior view, the USAW more effectively advertises Risto's sponsorship. This is evidence by the placement of a link and logo of Risto Sports on USAW's website. Still, there are loose boundaries and unclear expectations in the relationship.

Per Table 4.3.1, USAW's salience is legitimate dominant. As in previous Epochs, it has power to influence core USAW supporters for Risto. However, outside USAW's core following, the USAW brand value has declined over the last 10 years. Risto's affiliation with USAW only serves as voucher to some customers that Risto is legitimate vendor. USAW association does not improve "cool factor" (Figure 3.0) or customer's perceived value of Risto's products. Thus, once again, there is a clear link to NSSI and performance, especially, for low salience stakeholders who have not saturated their overall saliency ranking.

Per table 4.3.2, USAW is present in Product, Strategy, and Organization views. USAW provides direct input to products that Risto designs for USAW. It contributes value by engaging Risto in developing new color schemes and USA themed designs. Risto can reuse this in its product designs if needed. Interestingly, the products made for USAW has no implication on the Knowledge view. There is no knowledge transfer from USAW to Risto as the designs are not revolutionary. Furthermore, USAW has no feedback mechanism on the designs, hence no learning between the stakeholders on product design occurs.

There is a moderate presence in Strategy and Organization views. In the Strategy view, ideas for how sponsorship can improve market position and accomplish value of supporting weightlifters are generated. This maturation in the Risto-USAW relationship also leads to the need to manage new relationships, behaviors, and new mental models, hence impacting the Organization view (Table 4.3.2). USAW is a very organizationally different stakeholder by nature of Risto's role of donating versus selling products to USAW.

D1 and Distributors see a small decrease in overall salience ranking (Table 4.3.1). Distributor 1 is more complicated and difficult to work with than other stakeholders who also generate revenue. As in Epoch 3, D1 also does not do enough of its own customer service

and expects Risto to resolve any D1 customer questions. D1 creates negative value, where Risto is devoting resources for less revenue in comparison to organic sales. Distributors begin to lose value as they do not support enough volume to justify a discounted distributor price. Though they are easier to work with than D1, it is not clear how much value they provide in terms of market capture that Risto would not already capture itself. Finally, D1 and Distributors do not take on enough risk, causing Risto to further question their value delivered. Due to the above, both stakeholders are in the lower rankings of saliency.

The Epoch 4 business model does not change either's role in the EA, but it does change the management's perception of Distributors and D1's performance. In the context of focusing more on B2B customers, D1 and Distributors sales contribution are less valuable to Risto. The total sales volume of D1 and Distributors changes little from Epoch 3 to Epoch 4, yet, in Epoch 4, their percentage of total Risto sales volume is decreasing. Still, neither has hit a lower threshold of value creation where they become non-stakeholders to Risto.

The Gym affiliate is a new stakeholder. This stakeholder enables additional value creation with respect to services. They provide better access to facilities and network of service oriented customers. The Gym affiliate also possesses network access points in other niche markets of service. Hence, the Gym affiliate provides legitimacy by way of "vouching" or "social proof" for Risto's legitimacy with in the Gym affiliates own network. Indeed, this is a reciprocal relationship. At this Epoch, Risto is a legitimate force in the weightlifting world; hence, Risto provides legitimacy to the Gym affiliate's weightlifting programs. In short, the Gym Affiliate provides market knowledge, while Risto provides weightlifting expertise.

As expected, the Gym Affiliate has strong presence in Service with moderate presence in Policy and Organization views (Table 4.3.2). It facilitates services with providing gym space. On the other hand, with respect to customers shared between Gym affiliate and Risto, Gym Affiliate imposes social norms on Risto's organization as well as customer policies.

Even so, Gym Affiliate is not highly salient (Table 4.3.1). It is not a very powerful or urgent stakeholder. It is salient in that it enables additional services value creation, but the value is less important as services are not a core aspect of Risto business and Risto conducts services outside the Gym affiliate's network. Risto is not resource dependent on Gym affiliate, and Gym affiliate's institutional power is limited to a small percentage of Risto's service customers.

4.5 Analysis Across Epochs

This subsection focuses on making inferences in stakeholder saliency across the 4 enterprise Epochs. These 4 epochs are strung together to form an Era. The researcher describes insights across Epochs in this enterprise Era (Rhodes, etal 2009).

EA Space and Business Model Spaces, Enterprise Era analysis

The below figure, Figure 4.4, plots stakeholder NSSI with enterprise Epoch.

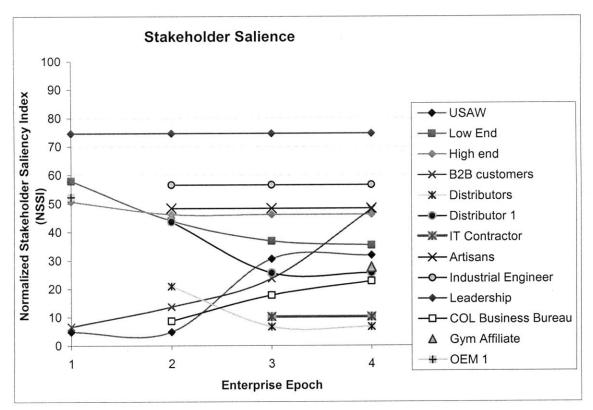


Figure 4.4. NSSI by stakeholder for each Enterprise Epoch

When examining Figure 4.4, it is important to note that Risto kept consistent values and tweaked in the business model and EA across each Epoch. As shown in the analysis of Epochs 1 - 4, business model has implications on EA; this is expected as , by definition, business model is a component of the Strategy view.

Figure 4.4 illustrates that stakeholder salience is context dependent by Epoch. Stakeholders are added or removed from the enterprise based on business model changes. Sometimes there is a direct swap of stakeholders if one is replacing another's value stream. The absence of OEM 1 from Epochs 2 - 4 demonstrates this.

OEM 1 acted as Risto's supplier of products in Epoch 1. By Epoch 2, Risto no longer maintained a business relationship with OEM 1. As Risto's business Model was still focused around retailing high quality weightlifting shoes, Risto developed a manufacturing source with IE and Artisans. As a result, IE and Artisans filled a similar function as OEM 1 from Epoch 2 onward.

In the EA space, the IE and Artisans fill a capability gap after OEM 1's departure. This is highlighted in Table 4.4 . Artisans and IE contribute to all views in which OEM 1 was present. Like Leadership, they maintain their view presence (Table 4.4) and NSSI (Figure 4.4) over the epoch because they consistently perform to the expected capabilities contributed to the EA.

Goig back to Figure 4.4, IE and Artisans achieved ad maintained a greater NSSI than OEM 1 because they added additional value. They provided values of custom design and size capability (EA space). Finally, this example confirms that resource dependence theory implicates salience: because Risto depended on the performance of these stakeholders shipping product to generate revenue, these stakeholders are highly salient (to be discussed in Chapter 5 further). Additionally, this example shows that the interplay stakeholder performance and importance are really interactions between the EA and Business Model spaces, respectively.

A second example of context dependency is the decline of D1. D1 exhibited higher saliency in early Epochs as it provided an e-commerce site. However, from the beginning of its

relationship with Risto, it was evident that D1 sought a commander role to Risto (Rowley 2001). It expected Risto to adopt D1 process and values. This is in line with institutional theory: D1 sees itself as more powerful, more established in weightlifting network than Risto and, in effect, wants Risto to adopt D1 practices.

Further, D1 had a different value set from Risto. Distributor 1 did not have a core value of being a Lean thinking company like Risto; hence, it expected higher inventory and batch and queue thinking. D1 did not see value of disseminating detailed shoe sizing knowledge to potential customers, which would have been in line with Lean culture. In effect, D1 garnered a higher rate of merchandise returns and exchanges in comparison to other distributors and Risto. Ultimately, D1's incompatible values made it too difficult with which to work.

As a result, when the business model changed between Epochs, the value D1 contributed seemed less and less important to Risto. In other words, D1 value delivery stayed fixed as Risto's context changed. As Risto's context of business model changes and EA becomes more sophisticated, what may seem to be reasonable value delivery becomes less and less appreciated overtime.

Additionally, per Table 4.4, the EA did not mature to exclude D1; the EA became more elaborate, finding new sales channels that would add value beyond what D1 contributed. So, per Table 4.4, unlike the OEM 1 case, D1 was not swapped out for another distributor. Rather, Risto added new sales channels that were easier to work with, developed B2B segment, and developed its own website. This added B2B capability is highlighted in the

Product view in Epoch 4 of Table 4.4 (circled I red). Again, this articulates the link to EA's role in maintaining a stakeholder mix that adds to the enterprise's needed capabilities.

								pace an			-					
Stakeholder	Strat. I	Γ Kn	ol. Pr	od. P	ol. Pr	oc. O	rg. S	erv. Sti	rat. IT	Kn	ol. Pr	od. Po	ol. Pr	oc. O	rg. Se	erv.
USAW	1	0	1	0	0	0	1	0	1	0	1	0	0	0	1	0
Low End	2	2	2	1	1	1	1	0	2	2	2	1	1	1	1	0
High end	2_	2	2	1	1	2	1	0	2_	2	2	1	1	2	1	2
B2B	2	1	1	1	0	1	1	0	2	1	2	1	0	1	1	0
Distributors	0	0	0	0	0	0	0	0	1	1	1	1	0	1	1	0
D1	0	0	0	0	0	0	0	0	2	1	1	0	1	2	2	0
IT Contractor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Artisans	0	0	0	0	0	0	0	0	1	2	2	2	1	2	2	0
IE	0	0	0	0	0	0	0	0	2	2	2	2	2	2	_2	1
Leadership	2	2	2	2	1	2	2	0	2	2	2	2	1	2	2	2
COL BB	0	U	U	U	U	U	υ	U	U	U	I	U	1	U	υ	0
Gym Affiliate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OEM 1	2	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0
				Epoch								Epoch				
Stakeholder	Strat.	Г Kn		•		oc. O	rg. S	erv. Sti	rat. 11	Kn		• • • • • • • • • • • • • • • • • • • •		oc. O	rg. Se	erv.
Stakeholder USAW	Strat. I	0	<mark>ol. Pr</mark>	•		oc. O	rg. Se 1	erv. St	rat. 17 1_	0		• • • • • • • • • • • • • • • • • • • •		oc. O	rg. So 1	e rv. 0
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USAW Low End High end B2B Distributors D1	1 1 2 2 1 2	0 2 2 1 1 1	ol. Pr 0 2 2	od. P 1 1 1 1 1 1 0	ol. Pr 0 1 1	0 1 2 1 1 2	1 1 1 1 1 2	0 0 2	1 1 2 2 1 2	0 2 2 1 1 1	ol. Pr 0 2 2	od. Po 2 1	0 0 1 1 0	0 1	1 1 1 1 1 2	erv. 0 0 2 0 0 0
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USAW Low End High end B2B Distributors D1 IT Contractor Artisans	1 1 2 2 1 2 0 1	0 2 1 1 1 2 2 2	ol. Pro 0 2 2 2 1 1 1 1 2	od. P 1 1 1 1 1 0 0 0	ol. Pr 0 1 0 0 1 0 1 0	0 1 2 1 1 2 1 2	1 1 1 1 2 0 2	0 0 2 0 0 0 0	1 2 2 1 2 0	0 2 1 1 1 2 2 2	ol. Pr 0 2 2 1 1 2	od. Po 2 1 2 1 2 1 0 0 2	ol. Pr 0 1 1 0 0 1 0 1 0 1	0 1 2 1 1 2 1 2	1 1 1 1 2 0 2	erv. 0 0 0 0 0 0 0
USAW Low End High end B2B Distributors D1 IT Contractor Artisans IF	1 1 2 2 1 2 0 1 2 0	0 2 1 1 1 2 2 2 2	ol. Pro 0 2 2 2 1 1 1 2 2 2	od. P 1 1 1 1 1 0 0 0 2 2 2	ol. Pro 0 1 1 0 0 1 0 1 2	0 1 2 1 1 2 1 2 2	1 1 1 1 2 0 2 2	0 0 2 0 0 0 0 0 1	1 2 2 1 2 0 1 2	0 2 1 1 1 2 2 2 2	ol. Pr 0 2 2 1 1 2 2 1 2 2 2 1 2 2 2 1 2 2 2 1 2	od. Po 2 1 2 1 2 1 0 2 2 2	bl. Pr 0 1 1 0 0 1 0 1 2	0 1 2 1 1 2 1 2 2 2	1 1 1 1 2 0 2	0 0 2 0 0 0 0 1
USAW Low End High end B2B Distributors D1 IT Contractor Artisans IF Leadership	1 1 2 2 1 2 0 1 2 0	0 2 1 1 2 2 2 2 2 2	ol. Pro 0 2 2 2 1 1 1 1 2 2 2 2	od. P 1 1 1 1 1 1 0 0 0 2 2 2	ol. Pro 0 1 1 0 0 1 0 1 2 2 1	0 1 2 1 1 2 1 2 2 2	1 1 1 1 2 0 2 2 2	0 0 2 0 0 0 0 1 2	1 2 2 1 2 0	0 2 1 1 2 2 2 2 2 2	ol. Pr 0 2 2 1 1 2 1 2 2 2 2 2 2 2	od. Po 2 1 2 1 2 0 2 2 2	ol. Pr 0 1 1 0 0 1 0 1 2 2	0 1 2 1 1 2 1 2 2 2	1 1 1 1 2 0 2 2 2	0 0 2 0 0 0 0 1 2
USAW Low End High end B2B Distributors D1 IT Contractor Artisans IF Leadership COL BB	1 1 2 2 1 2 0 1 2 0 1 2 2 0	0 2 1 1 2 2 2 2 2 0	ol. Pro 0 2 2 2 1 1 1 1 2 2 2 2 2 1	od. P 1 1 1 1 1 1 0 0 0 2 2 2 0	ol. Pro 0 1 1 0 0 1 0 1 2 1 2	0 1 2 1 1 2 1 2 2 2 0	1 1 1 1 2 0 2 2 2 0		1 1 2 1 2 1 2 0 1 2 0 1 2 2 1	0 2 1 1 2 2 2 2 2 2 0	ol. Pr 0 2 2 1 1 2 2 1 2 2 2 1 2 2 2 1	od. Po 2 1 2 1 2 1 0 2 2 0	bl. Pr 0 1 1 0 0 1 0 1 2	0 1 2 1 1 2 1 2 2 2 0	1 1 1 1 2 0 2 2 2 0	0 0 0 0 0 0 1 2 0
USAW Low End High end B2B Distributors D1 IT Contractor Artisans IF Leadership	1 1 2 2 1 2 0 1 2 0	0 2 1 1 2 2 2 2 2 2	ol. Pro 0 2 2 2 1 1 1 1 2 2 2 2	od. P 1 1 1 1 1 1 0 0 0 2 2 2	ol. Pro 0 1 1 0 0 1 0 1 2 2 1	0 1 2 1 1 2 1 2 2 2	1 1 1 1 2 0 2 2 2	0 0 2 0 0 0 0 1 2	1 2 2 1 2 0 1 2	0 2 1 1 2 2 2 2 2 2	ol. Pr 0 2 2 1 1 2 1 2 2 2 2 2 2 2	od. Po 2 1 2 1 2 0 2 2 2	ol. Pr 0 1 1 0 0 1 0 1 2 2	0 1 2 1 1 2 1 2 2 2	1 1 1 1 2 0 2 2 2	0 0 2 0 0 0 0 1 2

Table 4.4 EA Space analysis across Epochs

4.6 Implications

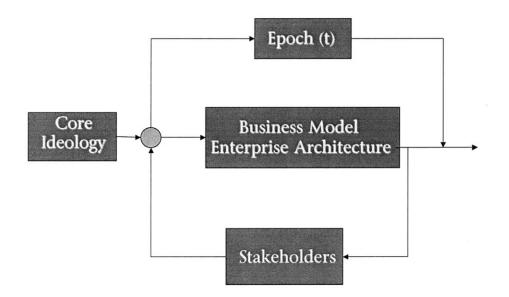


Figure 4.5. The enterprise system block diagram

Per Figure 4.5, the enterprise is not static it moves through time. As the analysis has shown, the researcher can, in fact, divide the enterprise timeline into discrete Epochs. As the Enterprise enters a new Epoch its business model and EA also evolve, as depicted by Epoch as an outer loop to EA and business model in Figure 4.5. In an epoch, the context of the business model and the needs of the EA distinctly change.

As the business model related to the EA Strategy view, both EA and business model move in harmony with the new enterprise Epochs. In effect, the business model and EA will share the same set of stakeholders (as shown by a single stakeholder block in the feedback loop in Figure 4.5, see Chapter 4 section 4.0 for more detail on modeling). Further, stakeholder dynamics, with respect to NSSI and view presence, occur via the feedback loop from stakeholders back to the business model and EA transfer function block (see section 4.0). In other words, the salience and performance of stakeholders are fedback and compared to the expected salience (business model space) and performance (EA space), resulting in the changes across Epochs in Figure 4.4 and Table 4.4.

As described in section 4.0 of this Chapter, only the enterprise Core Ideology stays constant through out Epochs. Correspondingly, it is shown as an input to both the outer (Epoch loop) and inner (business model, EA) loops in Figure 4.5. Finally, at the stakeholder level, Leadership is the only stakeholder to maintain a fixed NSSI and view presence as it defines the Core Ideology.

Business model Space

With respect to the enterprises business model, the enterprise cares about saliency as stakeholders are groups with whom the enterprise management will form relationships to capture market value. Stakeholders offer Institutional power, which is composted of legitimacy and urgency, or key resources (resource dependency), power and urgency. This describes the value that the stakeholders contribute—they either provide value in terms of providing resources or providing institutional legitimacy.

As business model changes with market context, business model addresses the significant changes in "context" that occur during a shift to a new Epoch. The stakeholders importance across states (Figure 3.3) is driven by their saliency relative to the epoch's context.

EA Space

In the EA space saliency is not relevant. The EA space is concerned with completing the enterprise views. Hence, stakeholder value exchanges are looked at through the perspective of "how will this stakeholder complete a particular view". Again, a stakeholder's performance (figure 3.3) is relative to their ability to fill the gaps in enterprise views.

A stakeholder's failure to deliver to expected performance is detrimental to the enterprise fulfilling its view needs. As a result, a stakeholder can change in saliency to because of failure to deliver expected capabilities (values) to the EA. However, the opposite in not true, whereby stakeholders like the IT contractor can fulfill a need in the EA as expected without experiences changes in importance to enterprise, because business model is an input to the EA strategy view.

Next Chapter

The next Chapter will focus on the network dynamics of the stakeholders. Furthermore, Chapter 4 demonstrated that stakeholder saliency can saturate on either end of the stakeholder saliency distribution. Overall rank by NSSI, is most important for understanding the stakeholder's role in the enterprise. This insight is further elaborated on in Chapter 5.

Chapter 5. Analysis Part II - Network centrality and enterprise decisions

5.0 Introduction

This section examines, in detail, the stakeholder map depicted in Chapter 3. IT strives to understand the network effects of stakeholders. Of particular interest is centrality and its effects on decision making. The Dependency Structure Matrix (DSM) method is employed to assess centrality. Throughout Epochs, the enterprise maintains two major clusters: Leadership & OEM, customers, & distributors

5.1 Definitions

In this section, the enterprise stakeholder map is defined as having two forms – the core enterprise and the extended enterprise.

Core Enterprise

The core enterprise is defined as the set of stakeholders that define the enterprise vision and are key to execution of enterprise operation. For Risto Sports, the core of the enterprise is the Leadership and the product sources, OEM1, IE and Artisans.

Extended Enterprise

The extended enterprise is the complete set of stakeholders entering into value exchanges. The extended enterprise includes the core enterprise.

Exogenous stakeholders

Per Chapter 4, stakeholders that only enforce rules or policies on Risto but are unavailable for engagement with Risto are exogenous to the enterprise. These stakeholders are subsequently trimmed out of the enterprise stakeholder map.

Figure 5.0 shows the original stakeholder map presented in the case background section with trim points for exogenous stakeholders.

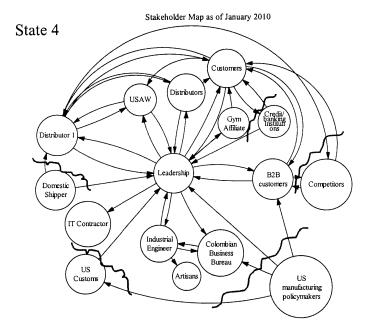


Figure 5.0. Trimming of Exogenous stakeholders

US Customs, US Manufacturing Policy makers, and banking institutions provide a set of rules for the enterprise to operate with in. The enterprise has either insufficient desire or power to negotiate these rules and accepts them as norms. Hence, these groupings do not actively participate in value exchanges per Figure 4.0 and are in effect non-stakeholders.

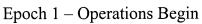
Competitors and domestic shipper touch extended enterprise stakeholders but they do not participate in value exchanges. Hence, they are also non-stakeholders.

Note on Customers in stakeholder map

Per the case study background, the B2C customers can be segmented into low and high end customers. For simplicity of graphic representation, the Low and High End customers are simply represented as "Customers" in the stakeholder map. In the DSM, this grouping will again be segregated into Low and High End; they will be listed adjacently in the DSM for consistency.

5.2 Epoch 1 network analysis

Figure 5.1 shows the stakeholder map for Epoch 1. Stakeholders within the green boundary comprise the core enterprise, while the red boundary encapsulates the extended enterprise.



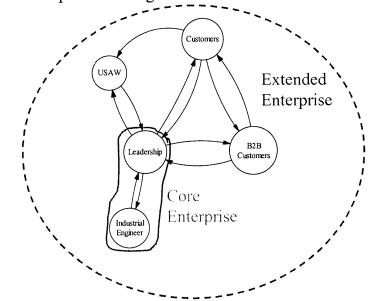
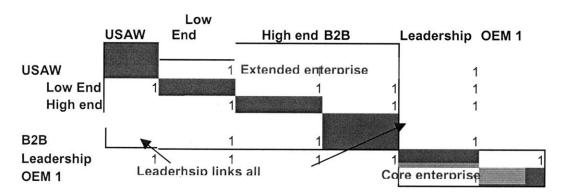


Figure 5.1. Core and Extended stakeholder map for Epoch 1

Corresponding to the stakeholder map, a DSM is constructed. Table 5.1 shows the DSM for Epoch 1. The stakeholders in Figure 5.1 are listed at the edges of the DSM. A 1 is placed in a cell where a connecting arrow on the stakeholder map exists. For example, Leadership share an arrow connection in Figure 5.1 with all stakeholders; hence, every cell that has Leadership as a cross reference contains a 1.





The DSM shows clusters of stakeholders and links between these clusters. There are two distinct clusters: a cluster around Customers and USAW and a cluster between OEM 1 and Leadership.

The cluster between the Leadership and OEM1 is the same as the core enterprise on the stakeholder map (Figure 5.1). The DSM reveals that OEM1 has no direct links to the second cluster. On the other hand, the Leadership has links to the customers and USAW. Hence, the Leadership serves as a cluster link between the two.

Further, the Leadership has high centrality. On the stakeholder map, the leadership has arrows connecting it to every other stakeholder, and, on the DSM, the Leadership similarly has a 1 in every cell it is adjacent too. In effect, being the cluster link, this stakeholder it holds the enterprise together.

On the other hand, the Customers are very dense. This density is outside the Leadership's control. The Leadership can only control what information is leaked out to customers. The B2C customers display the most emergent behavior. Information sent to one set of customers may, ultimately, make its way back to the leadership through a different set of customers. The USAW is weaker linked to the customers; it can influence weightlifters with in low and high end segments. At this Epoch, the USAW by being sponsored by Adidas inadvertently emits the perception that Adidas is the gold standard in weightlifting gear.

5.3 Epoch 2 network analysis

Figure 5.2 shows the stakeholder network map for Epoch 2. OEM 1 is replaced in the core enterprise with Artisans ands IE. The extended enterprise also grows and has added several new stakeholders.

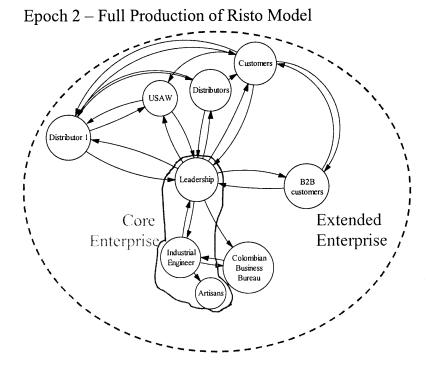
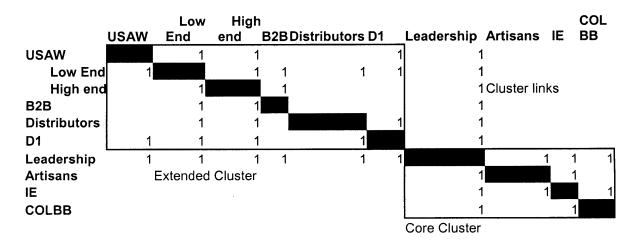


Figure 5.2. Stakeholder network map for Epoch 2

Table 5.2 shows the DSM for Epoch 2



Like Epoch 1, two main clusters exist, and both are linked by Leadership. The core cluster, in the lower right hand side of table 5.2, consists of the core enterprise as well as the COL BB. Only the Leadership has access to stakeholders outside this cluster. The stakeholders

with in this cluster are tightly linked to the design, manufacturing, and export of Risto products.

The second cluster, on the left hand side of Table 5.2, contains the remainder of the extended enterprise. Distributors and D1 are now added to this cluster.

This cluster illustrates access to customers. In Epoch 1, distributors already existed outside the enterprise. By letting the distributors into the enterprise, distributors can interact with customers with in the context of Risto Sports products. As distributors (D1 and Distributors inclusive) also depends on customers for revenue, they tend to cluster with the customers.

This creates an interesting dynamic: Leadership wants to gain more access to customers by opening new sales channels (all distributors), and Leadership may feel competing interests from distributors. For example, the distributors may retail multiple shoe brands, and Risto may not know if the distributors market all brands equally. Secondly, distributors can spread inaccurate sizing and availability information. Consequently, customer satisfaction can be negatively impacted from distributor sales of Risto.

As in Epoch 1, Leadership links the two clusters. It maintains high centrality. Centrality provides Leadership with additional control. As it still has direct links to customers, it can take action to adjust any emergent customer or distributor behavior. It also serves to segregate the two clusters; this enables simplification in the order execution process via Leadership clarifying and simplifying requests from distributors and customers (including

B2B) to shop operations. This enables Leadership to provide a lucid strategic direction to the shop.

5.4 Epoch 3 Stakeholder Network analysis

Epoch 3 adds one new stakeholder: Risto Sports' IT contractor. The IT Contractor provides website services for the new <u>www.ristosports.com</u>. It is added to the extended enterprise grouping, and it is only connected to the Leadership. Otherwise, the map remains unchanged. Figure 5.3 displays these changes.

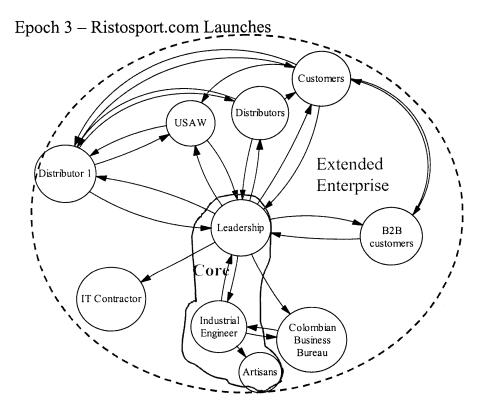
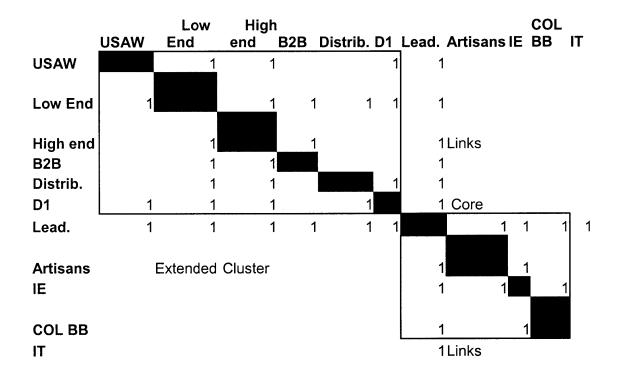


Figure 5.3. Epoch 3 Stakeholder Map

Table 5.3 shows the DSM for Epoch 3.



The Stakeholder clusters are similar to Epoch 1 and 2. A key difference is the IT contractor. It is not in either cluster and is only linked to Leadership. This is purposefully done. The Leadership wishes to maintain control of information flow between clusters; this includes protecting the privacy of orders. However, the IT contractor, outside their role in Risto enterprise, may have contact with customers, but in the context as a consumer.

Similar to the last Epoch, Leadership maintains access to all stakeholders and mitigates density where it is not needed and where density is possible to mitigate. This continues to be necessary since Risto has small capital of institutional power. This prevents stakeholders from pressuring Risto to conform to their norms or pushing back on Risto decision making ability.

Risto is not able to control micro-level relationships with customers. Again, all the majority of the stakeholders in the upper left hand cluster seek access to customers. Stakeholders like D1, Distributors, and B2B draw revenue from customers; even USAW may gain membership fees from customers.

Further, Risto relies on the willingness of distributors to adopt Risto culture towards the shoes, such that customers receive good service and accurate information. The DSM brings to light the implications of D1's relationship described in Part I of the analysis. Low fidelity in D1 flowing incorrect (or not flowing at all) product sizing info to customers will not only affect the orders D1 sends to the Leadership, it may also affect future orders directly over Risto's website. For example, a potential customer may talk to a customer of D1 about Risto Sport's products. The D1 customer may flow wrong information to the new customer and the new customer may in turn use this wrong information when ordering from Risto Sports directly or even from Distributors.

Finally, poor customer screening by D1 affects what new customers enter the extended enterprise. If D1 accepts orders from opportunistic or malignant customers (e.g. customers who order 5 pairs of shoes then return 4 pairs), this has a network affect of encouraging even more opportunistic customers (predominantly Low End segment) from placing orders and causing downstream enterprise waste. In effect, this shows the limitations of centrality when

dealing with a highly dense network. Risto does not control D1 through other stakeholders nor other stakeholders through D1; Risto only seeks to place D1 on the same mental model as Risto with its direct network connection.

5.5 Epoch 4 Stakeholder Network analysis

The Gym Affiliate enters the stakeholder extended network in Epoch 4. All other stakeholder connections remain the same. Figure 5.4 illustrated the new network below.

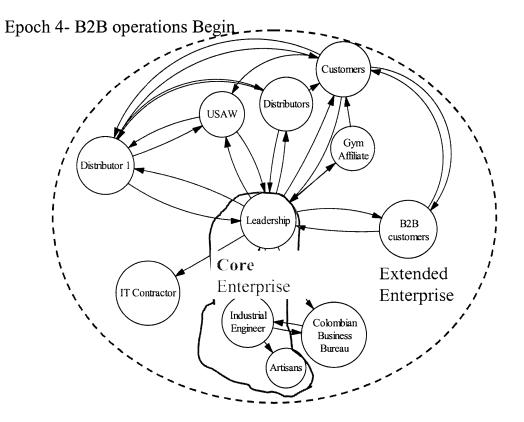
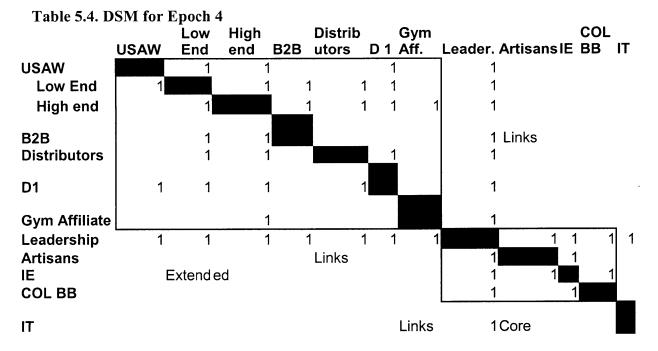


Figure 5.4. Epoch 4 stakeholder network map

Correspondingly, Table 5.4 shows the DSM for Figure 5.4. The clustering behavior is similar to prior Epochs. The Gym Affiliate is absorbed by the upper left customer and distributor cluster, the lower right cluster still contains the core enterprise and COL BB, and the IT contractor remains exogenous to all clusters. Leadership is still the vital link between all clusters.



The Gym Affiliate is added to the upper left cluster as it shares some connections with High end customers. In comparison to the Gym Affiliate, Risto is more prolific and powerful in weightlifting services and sports equipment context. Hence, Risto has more reach and power with high end customers than gym affiliate.

With respect to context of the business model, Risto's management of links between clusters becomes more important. In Epoch 4, B2B salience and value delivery is increasing (see Part 1 about changes in business model); thus, Risto has more incentive to understand B2B's actions and knowledge flow with left side cluster stakeholders as well as incentive to manage access to Risto's manufacturing base. In other words, Risto desires B2B to keep its focus on contracts with Risto and not distributors that sell Risto products or Risto's direct manufacturing shops. Recall from Part 1, Risto is also re-examining Distributors and D1 role as stakeholders; the network effects are significant to this decision. In the distributors relationships, Risto sometimes is put in a compromiser (Rowley 2001), even a subordinate role when rectifying customer returns and exchanges. From a network perspective, clearly, Risto must carry-out any changes in a delicate manner. The distributors are intertwined with the customer network. If Risto is to better control customer access and correctness of information disseminated to customers. If Risto is to benefit form a highly central network, then Leadership needs to increase its power attribute (component of NSSI).

5.6 Limitations of analysis

DSM does not account for the strength of relationships. Rather, this was articulated qualitatively in the above sections. Grossi, 2004, did propose a Normalized Relationship Salience Index (NRSI) to quantify the cell entries between stakeholders. His calculation of NRSI between Stakeholder A and Stakeholder B is:

$$NRSI = (NSSI_A X NSSI_B)/100$$

This formula is not consistent with the definition of salience being defined by the perception of the enterprise's management towards the individual stakeholders (Agle 1999). Whereas, two less salient stakeholders will have a very low NRSI, even if their relationship is important to the functioning of the enterprise. For example, in Epoch 4, the Distributors-Low end relationship NRSI would score scores lower than the USAW-Low End relationship. This is inconsistent with the value exchanges occurring with the enterprise. The Distributors-Low End relationship adds more value than the USAW-Low End relationship: DistributorsLow End relationship generates revenue and spreads awareness of Risto. The USAW-Low End relationship is one where USAW informs Low end of Risto via listing logo on USAW website. It is an indirect source of revenue and has additional externalities. Since USAW will enter into relationships with Low End customers under the pretense of becoming registered USAW athletes or coaches, this relationship has little to do with Risto's goals of selling product and Risto has no direct path for influencing what info is spread on Risto to customers. Again, the value USAW contributes is having the Risto logo on USAW website in the hopes that customers will infer that Risto is Legitimate or a favorable vendor.

Secondly, sociomatrices were also employed. Using MATLab, the matrices shown in the DSM were rearranged programming the algorithms described in Beum & Brundage (1950). Due to the intentionally sparse network –despite minimizing and maximizing diagonals of the matrices—no additional significant insights were gleaned.

Therefore, consistent with the thesis's goal of showing the importance of employing both structural and behavioral measures in enterprise thinking, the author finds it most effective to describe the strength of stakeholder network relationships qualitatively.

5.7 Implications

This analysis is applicable to enterprise networks with a highly central core and dense extended network. In this case, high centrality is an efficient means of controlling connections between network clusters. Stakeholders outside the core enterprise's cluster do not interfere with strategic business decisions, such as new models. However, with high centrality comes efficiency trades. The Leadership has the burden of screening all customer orders and information and flowing it to the artisans and IE.

Density in the extended network also has benefits and trades. The dense customer network makes Leadership inefficient at communicating with one stakeholder through the influence of another stakeholder. Density, in fact, is good for spreading positive reviews on Risto's products, and it is also problematic when wrong information is spread. Perhaps, spread of incorrect information is due to limits on the Leaderships Institutional power (Oliver 1991). For example, if D1 saw Risto as institutionalized, it is likely the D1 would take more care in the message it spreads to customers.

The analysis also implicates that Leadership can take on different relationship positions in the network. When Risto works with network connections between less powerful stakeholders, Risto is a "Commander" (Rowley). For most connections, Risto's highly central positions allows it to be a commander. In other cases—with D1 or B2B-- Risto is a compromiser. Risto is a compromiser when it works with institutionalized and greater power stakeholders that have network access to customers.

The next chapter looks closer at these relationships. Chapter 7 collects data on stakeholder perceptions of management and other stakeholders.

Chapter 6. Analysis Part III - EA views and stakeholder dynamics

6.0 Introduction

This section builds on insights from Parts I and II and applies it to future Epoch EA design. Part III takes a closer look at salience and participation in one or multiple views. may not change salience relative to other stakeholders. EA view hierarchy is also examined. Finally, future Epoch design is discussed.

6.1 EA View hierarchy for Risto enterprise

The Strategy view informs all other views of Risto. Stakeholders with strong presence in this view have higher salience. Consequently, when a Stakeholder is present in the strategy view, they are also present in other views. As discussed in Part I, the business model is closely tied to the Strategy view. Hence, any stakeholder that participates in the Strategy View has input to business model decisions; hence, they are more likely to remain stakeholders in future Epochs (i.e. unless it is the stakeholders goal to exit the enterprise or their performance falls below the minimal performance threshold discussed in Part I).

6.2 Stakeholder dynamics and enterprise capabilities

Across Epochs, Leadership is adding or deleting stakeholders to fill capability gaps of the enterprise. For example, the Gym Affiliate is added in Epoch 4 to improve the Services View. The Gym Affiliate fills needs of better gym location from Epoch 3 to Epoch 4. It adds to organization with behaviors and attitudes of how services are carried out with service only customers. It also fills helps fill gaps in policy relative to services. A second example is changes in the core enterprise. From Epoch 1 to the latter Epochs the IE and Artisans

replace OEM1. IE and Artisans improve the product and knowledge views with improves expertise and product design capabilities. A third example is the addition of the IT contractor. The IT contractor fills capabilities in the IT view. It creates an improved order system. Great simplification and standardization of order taking and pricing occurs. Further, the standardized system facilitates information flow, and it stores knowledge in an organized and secure manner.

View presence and salience

As we saw in Chapter 4, presence in one or multiple views does not imply salience; however, degree of presence in views does imply how embedded a stakeholder is in the architecture. The IT contractor articulates this. IT contractor is present in 3 views; it has a strong presence in IT view versus weaker presences in process and knowledge view. The enterprise is most dependent on the IT contractor in the IT view. With some initial difficulty, the enterprise could swap the IT contractor for another provider if need be. Further, removing the IT contractor has less dire implications on the Knowledge and process views as these views have other value contributing stakeholders.

In effect, the enterprise can more readily compensate for a missing stakeholder in a view, when there are multiple stakeholders in that view having a stronger presence. Similarly, Distributors is in multiple views with weak presence. Risto can eliminate this stakeholder if it underperforms and still be able to operate the enterprise. In contrast, stakeholders tightly networked to highly salient stakeholders, regardless of view presence, cannot be easily replaced. Customers are a prime example. High end customers are present in the same views as low end, but with stronger presence. Since there is overlap in the two segments, Risto cannot dismiss Low end. In fact, Low end customers may, one day, become high end customers. In some cases, Low end customers have strong social ties to B2B customers. Hence, the best Risto can do is to discourage problematic Low End customers by posting policies that prevent value destroying behavior¹.

It is also important to consider the future Epoch when understanding the implications of stakeholder view presence. From Epochs 1 through 2, the USAW is a dormant stakeholder in the enterprise (Mitchell 1997); it has a moderate presence in 3 views. In contrast, in Epochs 3 and 4, the USAW is present in the same views with stronger presence in two of the three affected views. In Epochs 3 and 4, USAW delivers value through the legitimacy of Risto Sports's sponsorship of USAW. Were it not for Risto Sports mindfulness of USAW's dormant Epoch in Epochs 1 and 2, USAW may have been a non-stakeholder by Epochs 3 and 4.

6.3 Future EA and value delivery

At Epoch, Risto Sports must plan for their future state EA. As mentioned in Chapter 4, changing the Enterprise Architecture affects what enterprise expects from stakeholders.

¹ In this case, value destroying behavior is defined as any behavior that does not create value for the customer and causes losses to the enterprise. The following is a common scenario encountered: A Low End customer, who shops on price, buys Risto shoes. After receiving the shoes, the customer finds another shoe brand that is a few dollars lower in price- irrelevant to the customer, is the fact that they are buying a shoe with lower value in use than the Risto. The customer then returns the Risto shoe. Risto loses money in terms of banking institution credit transaction fees, surplus inventory, and administrative burden in adjusting revenue recognition.

Its Strategy view focuses on growing the company, and Risto must face maturity issues to do so.

Figure 6.0 details capability gaps that must be filled in each view.

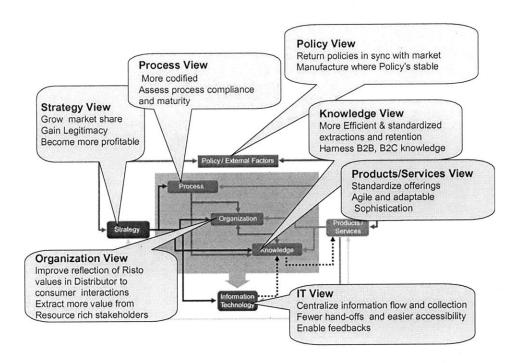
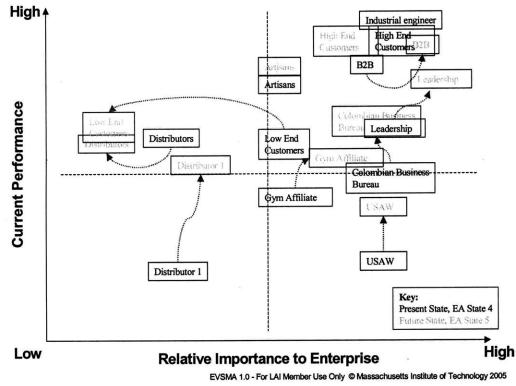


Figure 6.0. Future State Gap Analysis

Risto's growth will be enabled by more standard and repeatable processes, more sophisticated knowledge capture, and homogenization of organizational mental models across the enterprise. Risto must also keep policies in sync with market norms and avoid areas of business operations that enforce challenging policies on Risto. At this stage, Risto's products and services are the most sophisticated views in the enterprise.

After defining the future state EA, in Figure 6.0, the stakeholder mix and value propositions must be planned for the future state context and needs.

Figure 6.1 plots the current Epoch stakeholder performance with the desired future state performance.



Mapping Future State Stakeholder Value Delivery



In Figure 6.1, each stakeholder is plotted with current performance and relative importance. Stakeholders that are high in both these variables are plotted in the upper right hand corner of the chart. The black text indicates the stakeholders' current state (Epoch 4) performance and importance value, while the gray texted stakeholders show the desired future state values. The grey color shows where stakeholders need to be in future state to accomplish EA gap analysis in Figure 6.0. Overall, Risto needs more value from multiple stakeholders.

6.4 Stakeholder capabilities and EA views

Now, that it is understood which views require maturation and which stakeholders underperform, the stakeholder value delivery performance can be mapped back to the EA views. Stakeholder areas needing improved performance with respect to EA views are circled in red in Table 6.1(view presence table for Epoch 4 in Chapter 4). These gap areas are in line with Figure 6.0 (Gap analysis) and are on a more detailed level by stakeholder.

Epoch 4 - B2B Operations Begin								
Stakeholder	Strategy	IT	Knowledge	Product	Policy	Process	Organization	Service
USAW	1	0	1 0	2	0	0	1	0
Low End	1	2	2	1	1	1	1	0
High end	2	2	2	1	1	2	1	2
B2B	2	1	2	2	0	1	1	0
Distributors	1	1	1	1	0	1	1	0
Distributor 1	2	1	1	0	1	2	2	0
IT	0	2	-1	0	0	-1	0	0
Artisans	1	2	2	2	1	2	2	0
IE	2	2	2	2	2	2	2	1
Leadership	2	2	2	2	1	2	2	2
COL BB	1	0	1	0	2	0	0	0
Gym Affiliate	C	0	0	0	1	0	1	2

Table 6.1 EA Gap Analysis by Stakeholder and View

Below is a summary of necessary adjustments from the egocentric point of view of the enterprise management:

D1 needs to improve performance with respect to the Organization view, by changing its behaviors with customer interactions. Further, to alleviate D1's drain on Risto's order fulfillment resources, D1 must make their processes more standard, repeatable, and with less rework steps. If no change occurs, D1 becomes a potential non-stakeholder, or another role in the enterprise that does not involve Risto's B2C end customers.

The USAW can more actively market Risto equal to the value that Risto provides to them as well as provide feedback on donated products. USAW can add capabilities to the strategy view in terms of accomplishing market share goals. USAW can also add capability to the knowledge view with feedback from USAW athletes using donated Risto products.

As Low end customers and distributors are desired to maintain performance, yet, become less important to the enterprise, it is not necessary to grow participation in the EA views of either grouping.

High End customers, similarly, need not change value contributions to the future state EA. Per Figure 6.1, Risto is happy with their performance and, if anything, sees High end as

being a smaller percentage of total Risto value in the future state needs and context. Hence, no change in the High End EA is desired.

Gym affiliate and COL BB are desired to have both improved performance and importance. This is relying on the enterprise to devise more opportunities for value exchanges to increase value delivered. Both can further contribute to the Strategy and Knowledge views: COL BB has export regulation expertise that can influence export strategies and Gym affiliate has niche market knowledge and expertise that can influence services strategies. Likewise, the enterprise management would also like more value form the COL BB in terms of shaping the Policy and Process view to buffer Risto from risks related to changes in export regulations. Risto also desires more contribution of capabilities from the Gym Affiliate to the Services view for the Services conducted at Gym Affiliates gym.

B2B is desired to continue to become an even larger and important contributor of value to the enterprise. With respect to the EA, B2B can make the biggest contributions to Product and Knowledge views. B2B can contribute a different set of market knowledge as it has its own distinct customers. In the Product view, it can better describe the objectives behind its design specifications to improve design interpretation by Risto's shop as well as grow product sophistication.

Finally, the core enterprise (Artisans, IE, Leadership, see Chapter 5) needs to continuously improve itself across all views. In particular, the Product, Process, and Knowledge views

need more performance contribution from the core stakeholders. Additionally, the Leadership, alone, needs to further fill capability gaps in the services view.

6.5 Implications

Stakeholder salience is not proportionate to number of views that a stakeholder is present in. A stakeholder can be indispensible to the enterprise and only present in 4 views. However, this does not contradict insights from Part I. Core enterprise stakeholders will still remain inextricably linked to each view of the architecture. In general, saliency and EA presence is a case by case basis.

Additionally, many views will have more than one stakeholder present. When multiple stakeholders are strongly present in a view, it is anticipated that the absence of a moderately present stakeholder can be more readily compensated.

The above has implications on the future state EA. The management will add or delete stakeholders to fill capability gaps in the EA. When planning the future state EA, stakeholders performance and importance to the enterprise are inventoried.

Chapter 7. Analysis Part IV- Insights on Case study interviews

7.0 Introduction

Up until this point, this thesis has centered on management's view of the enterprise, the following insights are from stakeholder perceptions of Risto Sports. This data is significant to the future architecture. The goal of collecting data from the perception of the stakeholder was to further understand the value propositions at work and add fidelity to the future enterprise design in Part III.

Data is presented on core enterprise stakeholders and extended enterprise stakeholders that Risto seeks to extract more value from in the future state. The selected extended enterprise stakeholders are D1, USAW, and COL BB. All three are close in saliency in Epoch 4, have seen significant change in saliency across three Epochs, and Risto seeks significant change in their performance in the future state.

Finally, as the analysis has shown the importance of running your enterprise with consistent core ideology, this data will shed light on whether Risto does so and hence the validity of findings in Part I.

7.1 Results and Analysis by Epoch 4 Salient Stakeholders²

Artisans

The Artisans reported that their standard of living was improved by conducting business with Risto. Risto provides a consistent order demand, which enables a stable flow of income for the Artisans. Before working with Risto, their work was "sporadic"; they would receive orders when weightlifting leagues and schools had "money for shoes and uniforms". One Artisan reflected, "we didn't know when we would get work".

The Artisans ecstatically remarked, "we completed one year of shoemaking in one month". Even with increased work hours, the artisans take vacation and holiday time as desired and often decline overtime hours offered to them. As one Artisan remarked, "we would rather party than work".

Overall, they have a amicable relationship with the Leadership. They refer to one of Risto Sport's founder's, as "The Gringo from Miami". To the Artisans, all American business people are "Gringos from Miami"³, regardless of ethnicity or whether the American is even from Miami. This reflects their views of American businesses in Colombia

They also noted that the Industrial Engineer's standard of living improved. The Industrial Engineer " takes a Taxi now" to the manufacturing site, and no longer "rides on his motorcycle".

² All quotations in this section are attributed to the stakeholder under which they appear.

³ Note, Miami is a major US hub for travel to Colombia and South America. To many Latin Americans, Miami is the gateway to the USA.

In terms of their thoughts on Risto's customer's, they also found the custom designs to be "funny". They are amused by many of the custom shoe order designs, and sometimes they change the order to make the design "look better".

The Artisans remarked, "we feel very happy and pride" for their products. They are proud of the fact that their products were being exported to the USA. It was culturally significant that their products were sold outside of Colombia or Latin America. They have much pride to hear shoes are sold all over the world, in places such as Australia, Japan, Canada, Sweden, UK, Germany, or Singapore.

The artisans also expressed that Colombians are happy and thankful that Risto brought work to Colombia. They feel that Risto is "helping Colombia by bringing jobs". This is especially significant whereas they feel pressure from China. Artisans reflected that Colombians are conscious that China "makes everything" and that China is "cheaper". They, themselves, buy a lot of Chinese goods, especially motorcycles.

They are thankful that Risto appreciates Colombian quality versus out-sourcing to China. There is a general Colombian opinion that 'Chinese leather goods are lower quality than Colombia's". That, "Colombian workers use real material" and that is "high quality", and "Colombia has the best leather in the world".

In terms of the future state, the artisans note that their work improves with each iteration. Culturally, they are not accustomed to working to deadlines and feel pressured. Upon seeing

one of the enterprise leaders, they remarked "the Gringo is here we need to ship for the Gringo". They feel pressured by the IE because of "the Gringo's" deadlines.

Insights

Hence, interview data is consistent with management's perceptions of value propositions. The artisans perception of the enterprise confirms the desire to continue working with the enterprise. It suggests that the future state stakeholder performance chart (figure 6.1) is attainable.

IE

Since working with Risto, the Industrial Engineer's standard of living has improved. Similarly to the artisans, the IE would rely on piece meal, ad hoc orders for income. Risto has provided a more sustainable flow of work. One of the IE's spouses remarked, "thank you, we we bought this house because of [Risto]"⁴. In working with the artisans they noted that the hours worked per week are strictly enforced per Colombian labor laws.

Prior to working with Risto, they never envisioned selling high quality shoes all over the world. The IE did not expect the growth in product sophistication and volume while working with Risto. The IE noted that, in the past, other US entrepreneurs "were not serious" about efforts to do business in Colombia. IE feels that the, "USA is the window to the world".

⁴ In Colombia, it is difficult and uncommon for most Colombians to own a house. For example, most mortgages have 7 year payment terms in Colombia versus 30 year terms in the USA.

The IE expressed similar views on China as the Artisans. They are conscious that Risto is often contacted by Chinese suppliers. Still, the IE feels Risto and Risto's customers must recognize that their "quality is better than China". The IE is "always looking for new, better quality materials" to improve the design and seeks to better understand customer needs as they differ from the Colombian market.

The IE feels pressure in incentivizing artisans to meet deadlines. The IE must constantly be "checking-on" the Artisans. The IE has implemented more quality control since making product for the international market. The IE also notes that all work is done with in the same locality and supports the local shops.

The IE views the Colombian Business Bureau as "helpful but not helpful enough". The IE receives training seminars through COL BB -- but they would really like "help getting money" such as loans and grants to "buy new machines". Additionally, the COL BB can help with simplifying export.

Insights

The interview also supports feasibility of the future state design. It also reiterates the need for more value from artisans meeting deadlines and the Col BB, and also that this value may not be easily attained.

USAW

The USAW expressed appreciation of sponsorship support from USAW member run companies such as Risto Sports. Rick Adams, the CEO, expressed that he would like to see "10-15 Risto sports". To paraphrase, there is sufficient room for additional sponsors, both large corporations and start-ups.

The USAW leadership expressed that the USAW can "contribute more" to Risto in response to Risto's support as a sponsor; that the relationship has been too "oneway" with Risto doing all the giving. The USAW is open to ideas for future arrangements.

Insights

The data is consistent with management's perception of value delivery from Epochs 3 and 4. The future state will depend on further elucidating potential value exchanges.

Distributor 1

Distributor 1 remarked that "shoes are not our core market". D1 feels the shoes are often "more of a hassle", due to returns and exchanges, than a value add. D1 also remarked, "if the shoes become a hassle, we will take them down from our site". D1 feels, it is "doing [Risto Sports] a favor by selling your shoes". D1 is indifferent to the future state; it is only interested in pursuing shoes if they are easier to administrate.

Insights

Extracting more value from D1 will be a difficult task for the future state. D1 clearly sees itself as having both Institutional Power as well as controlling key resources. This mental

model differs greatly from Risto's management's mental model. Further, there are network and social ties between Risto and D1 that would keep the relationship from ending. Regardless, shoe sales may not be the best business arrangement between D1 or Risto.

Colombian Business Bureau

They appreciate and like companies starting operations in Colombia and working in Colombia, they are glad to see companies choose Colombia opposed to China

They are aware of China's large presence. "It is hard to compete with China because China has acquired lots of technology". Versus "20 years ago", Chinese production has become more sophisticated and better quality.

With respect to companies, COL BB is "very controlling of hard currency". They control incoming money to companies located in Colombia. For example, they regulate how much cash can be paid in, so they can watch for money laundering. Secondly, they can give out loans and have efficient training program for small business owners.

The USA is the "first commercial ally of Colombia". Hence, they are more favorable to US trade. Currently, there is a "APDEA" trade agreement that gives select Colombian products lower taxes on import to the USA. They are expecting the treaty of free trade with Colombia and USA to become a reality. This will allow more jobs for Colombians.

Insights

Management's perceptions are accurate. The future state stakeholder performance will depend on management proactively engaging the COL BB and it is attainable.

7.2 Implications

Risto lives to its core ideologies. Overall, its perceptions of value propositions appear accurate for the core enterprise, with which it works most. The data from the extended enterprise stakeholders was more revelatory. Risto's future state value delivery may be ambitious for D1 and COL BB. Otherwise, Risto's future state is attainable as key stakeholders appear to be on board with Risto.

Chapter 8. Conclusion

This section presents concluding thoughts on the analysis. It relates the results and analysis back to the thesis motivations and thesis questions.

8.0 Answering the thesis questions

This thesis set out to answer the following two research questions:

Question I: How do the most salient enterprise stakeholders affect the Enterprise's Architecture (EA)? *Question II:* How do these stakeholder relationships change as the enterprise transforms?

Answering Question I:

The most salient stakeholders are present in every view of the enterprise. These stakeholders are known as the core enterprise. They define the enterprise mission and perform to the enterprise values; the enterprise exists because of this core set.

Stakeholders in the extended enterprise may not be salient in every view. These stakeholders are tied to the enterprise by the values they trade with it. Stakeholders are added to the enterprise, by the enterprises management, to fill capability gaps. Hence, it is more likely that a non-core stakeholder does not need to interact with all 8 EA views.

Further, salience in few views versus many is not important.-- it is the degree of saliency and the performance of value delivery to enterprise that matters. A stakeholder may even possess saliency when dormant, and this is typical of powerful, non-urgent stakeholders.

Answering Question II

Saliency is context dependent. As the enterprise context changes, so does the business's strategic objectives. What was viewed as good stakeholder performance in one Epoch may not longer be relevant to the enterprise in another Epoch.

However, the core enterprise is less affected by context. If the core enterprise truly lives-up to its core ideologies – the values and purpose of the enterprise- then it will not experience great fluctuation in salience as ideology drives EA and business model. On a microscopic level, the particular actors may change, but the stakeholder groupings remain the same.

8.1 The EA and Business Model State space

In Chapter 4, the following block diagram is proposed and described in great detail.

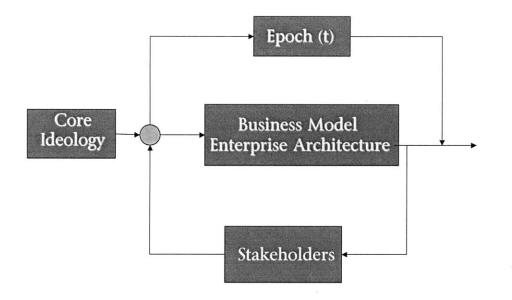


Figure 8.1 Block diagram of enterprise system

The researcher set-out to understand stakeholders, EA, and context. As described n chapter 4, To understand context, we must understand enterprise epochs. An Epoch is defined by change in context and enterprise needs. Context changes really affects enterprise business model, or the enterprises's current market opportunity to capture and create value. Concurrently, enterprise needs affect EA, or the enterprises's ability to fill capabilities in its 8 views. Stakeholders are an integral part of both the EA and business model space as they create value for the enterprise in these two spaces. Further, how the enterprise decides to responds to change in context and needs is driven by the enterprises core ideology- 0 the great constant input to the system.

8.2 Stakeholder theory: marrying Behavioral and structural views of enterprises

The Risto Case study employs stakeholder theory to analyze an enterprise. It shows that no tension exists between structural and behavioral views of enterprises, rather both are necessary.

In this study, Risto uses strategies and metrics to drive a business model. At the same time, Risto considers the power plays of stakeholders and the cultural context of their action to define the enterprise.

Through out the enterprise Epochs, Risto sought to keep stakeholders in harmony with enterprise mission. This behavior cannot be codified with purely structural thinking. Stakeholder theory allows the researcher to capture this invisible work.

8.3 Thoughts on corporate social responsibility and enterprise thinking

Risto case demonstrates that sound core ideology is necessary for corporate social responsibility. Stakeholder thinking better allows one to model in "externalities' such that more win-win relationships can arrive in an enterprise if it is desired by the enterprise. Stakeholder Normative theorists imply that that "moral principles should drive stakeholder relations" (Jawahar 2001).

However, as in Chapter 4 (Part I Analysis), this does not happen spontaneously. The enterprise must possess core values that management truly believes-in and abides.

Jensen, (2008), is correct that stakeholder theory relies too much on the benevolence of managers to make decisions that may affect the well being of society. Stakeholder theory, by itself, does not prevent the harmful short-term value maximization that can be destructive to the rest of society. Indeed, Risto enterprise could easily map stakeholders in a way that is less positive for society, but living to its socially responsible core values inhibits such actions.

An enterprise must have core values that are in harmony with social responsibility. The model in Part I shows that, ultimately, core values drive your business model then stakeholder selection. Hence, Managing a stakeholder network to positively impact society does rely on management to have views consistent with this goal. Though the EA is egocentric, it can be benevolent given the right management and ideologies. Certainly there are limitations. The world is full of entropy, not every stakeholder will be completely satisfied with management, capitalism produces winners and loser in market competition. Even so, with in one's own stakeholder map we can optimize for the greater value creation.

Benevolence is possible

Risto set out to make a highly idealized enterprise. Really, Risto set out to improve the weightlifting community and have a positive impact on any stakeholder entering its system. And, it appears Risto is doing just that. Both the standard of living for the Artisans and IE were improved. The B2B customers finally found an OEM that would make a shoe to their specifications. The Colombian Business Bureau was excited to see trade being brought to Colombia versus cheap labor sources like China.

None of this would e possible if management of the enterprise's stakeholder network did not make a concerted effort. Here, strategic decisions were made using the political and cultural lens. Risto is a clear example where organizational and structural views of the enterprise are both actively employed to create value.

Certainly, the management could have more easily ordered shoes from a sweat shop and sold them for an egregious mark-up to customers. However, core values prevent this. Perhaps a less benevolent business model may have risen to bigger short term profits, but would it gain Risto the long term value and increased legitimacy in its industry?

8.4 Future Work

Risto's results are generalizable to enterprises with similar stakeholder structures especially in the B2C domain. As our goal is to also further enterprise thinking in the aerospace industry, a comparison case study should be completed on an aerospace corporation.

As the aerospace industry is highly regulated it is anticipated that coalitions between stakeholders would also be revealed as in Risto's case. Perhaps, the largest contrast between a commercial start-up like Risto and a mature, tightly regulated defense enterprise is the ease of changing stakeholder connections that Risto exhibits. The aerospace industry would likely have even more politically based stakeholder decision, power would also be a dominant attribute in highly salient stakeholders. Secondly, the Risto case has implications on long term value creation versus short term profit maximization. Although this subject has been commented on at length by stakeholder theorists ("shareholder versus stakeholder" debates (Agle, etal 2008), more can be written in the Lean Enterprise Thinking context. In effect, monitoring stakeholder network dynamics as Risto and a comparison aerospace corporation transform to future states is needed.

8.5 Generalizing to the current economic context

As I am writing this thesis, the US went through the worst economic downturn since the Great Depression. Common accepted knowledge points to short term profiteering in the stock market and consumer lending lead to a crisis that hurt society as a whole. As Jensen (Agle, etal 2008) remarks, does anyone really win in the long term?

From a Lean Thinking enterprise perspective, short term maximization leads to enterprise waste in the future state. It is the failure to make all relevant stakeholders endogenous to one's enterprise system that allows this. This is especially relevant to the aerospace industry, which has a long term business model. This industry, inherently, requires management to adopt a long term strategy which can be accomplished via a stakeholder perspective.

Going forward, if society is really to mitigate future economic meltdowns, then it must make cultural and political changes in its business mindset. For example, Ron Bloom, President Obama's Senior Counselor for Manufacturing Policy, indicates that revitalizing US manufacturing is in part a cultural issue of leaders of corporations consciously deciding to

create jobs in the US⁵ (reference interview). Perhaps, a more stakeholder centric point of view will prevent future meltdowns.

As a culture, we need to decide that grater profit does not have to result in less value creation, that win-win scenarios do exist. Certainly, the world is full of entropy and no stakeholder system is perfect. And, an optimized stakeholder network will produce the most value possible for all.

Tying back to the aerospace industry.

In the introduction of this thesis, I stated that I was interested in advancing aerospace enterprises ability to create value. In the last 10 years, I have worked in the aerospace industry doing everything from airfoil aeromechanics to managing a military engine repair programs using a Lean pull system. From the highly technical end to the more Lean enterprise perspective, the value that aerospace enterprises offer are muted by the stakeholder aspects.

Aerospace enterprises are the epitome of socio-technical systems—it seeks to solve the world's most technologically challenging problem— hence understanding how they can efficiently and effectively create value through different economical contexts is paramount. What one will find is non-technical power struggles and legitimacy claims often get in the way of delivering to the technological aspirations. Contracts that have saved millions in tax payer dollars and delivered improve customer readiness be threatened by Institutional power plays of contracting agencies. A more well known example is the Joint Strike Fighter,

⁵ Based on interview with Ron Bloom on February 9, 2010.

where the execution of the program is dependent on powerplays in the US capital. As in the Risto case, the government leadership must ask similar CSR minded questions of its decisions: Is the government being a "good manager" if it sole sources a platform that will replace 5 platforms to one engine defense contractor? Is national defense jeopardized by doing so based on this contractor past performance? How does this tie to the US national defense's core mission?

In other words, solving the world's most challenging problems is never a simple structural issue, it's a stakeholder issue.

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