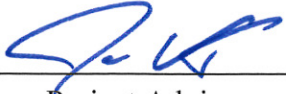


UNIVERSITY OF WISCONSIN, PLATTEVILLE  
UNITED STATES OF AMERICA



The attached educational project, by Bradley Markham, entitled *Subsidiarity and Supply Chain Strategy: A Guiding Principle for Supply Chain Leadership*, when completed, is to be submitted to the Graduate Faculty of the University of Wisconsin- Platteville in partial fulfillment of the requirements for the (MASTER OF SCIENCE IN INTEGRATED SUPPLY CHAIN MANAGEMENT) degree.

Approved:  Date: 11/23/16  
Project Advisor

Professor Jason J Woldt

Suggested content descriptor keywords:

Subsidiarity, Supply Chain, Leadership

APPLICATION OF LEAN SIX SIGMA IN SUPPLY CHAIN AT OBUASI GOLD MINE

A Paper

Submitted to the Graduate Faculty of

the

University of Wisconsin, Platteville By

Bradley Markham

in Partial Fulfillment for the Degree of

MASTER OF SCIENCE IN INTEGRATED SUPPLY CHAIN MANAGEMENT

Year of Graduation: Fall 2016

Brad Markham  
Seminar Research Paper  
University of Wisconsin-Platteville  
Fall 2016

# **Subsidiarity and Supply Chain Strategy: A Guiding Principle for Supply Chain Leadership**

*By: Brad Markham*

**Abstract:** Only recently has literature begun to address the arising issue of Supply Chain Leadership (SCL). This article looks for an overarching guiding principle in developing the best forms of supply chain leadership. Leadership at the individual/manager level is addressed, and then various supply chain strategies are examined. The argument is that the best form of leadership will be determined by the best strategy for a particular company to employ, and the form of leadership an SCL takes will depend on the strategy that best fits the companies involved. The guiding ethical principle for determining that strategy, it is argued, is subsidiarity. Subsidiarity is a Catholic social principle that has only recently been applied in business. It is the contention of the author that subsidiarity is servant leadership as applied to the supply chain, and that this requires prudence in determining the best strategy for companies in the supply chain. The argument is that the best leaders will use the guiding ethic of subsidiarity in determining strategy and leadership.

## **Subsidiarity and Supply Chain Strategy: A Guiding Principle for Supply Chain Leadership**

The thesis of this paper will be subsidiarity and how it operates within the framework of global supply chain leadership. We will examine modern literature on transactional and transformational leadership. Relational models of supply chain strategy have gained great acceptance in modern academic literature. The argument of this paper will be that the relational model actually ties into the philosophical idea of subsidiarity. Subsidiarity is a similar principle to empowerment that has gained popularity in Human Resource circles. Subsidiarity, it will be argued, is an organizational philosophy or ethic rooted in more ancient virtue theory. The argument will be that subsidiarity is servant leadership applied at the organizational and inter-organizational levels. Corporations are community of persons, and leadership styles have different levels of effectiveness. These leadership styles will be examined and the argument will be that subsidiarity will be the best form of leadership within the supply chain as it will help in determining the best strategy to employ with various stakeholders within the supply chain. An affinity between subsidiarity, empowerment, transformational leadership, and the relational model of supply chain management will become obvious as the various theories are explored. Typically, leadership skills are internally focused based on HR practices within individual firms. Firms themselves, however, can also be “servant leaders” in how they interact with the rest of the supply chain. It will be argued that subsidiarity is the best organizational model for leadership in supply chain management.

### **Introduction**

The author has noticed a fundamental trend in the business literature surrounding management and leadership. The language is grounded in philosophical ideas that tend to be much older and more ancient than business authors typically touch upon. The root of management ideas can be found in thinkers such as Aristotle, Aquinas, Plato, and Jesus Christ. Leadership has been defined as “character in action,” (Hunter, 1998) and these philosophers have developed methods of character that are evident, yet not distinct in modern commentaries on management. That is to say that what modern management and leadership authors are saying about the topic was covered in a different, and in some ways more enlightening ways, by ancient philosophies. While the language of the philosophers of old is not specifically about leadership and management, what they had to say is regurgitated by modern authors with different foci. That is, the ancients understood human nature and looked at the behavior of individuals with intrinsic precision to that nature. The moderns look more from an external viewpoint and look to empirical and sociological results. Both ways offer proper insight into managerial practice, but in reviewing subsidiarity the hope is to provide a different perspective that provides deeper insight into the question of leadership in supply chain management.

Subsidiarity is a social principle that holds that authority/decision making should be moved to the lowest level possible. It is a principle that suggests that all politics are local, and those institutions or individuals that are closest to the problems have the best ability to solve them. Literature is sparse on subsidiarity’s application in the business context, but I will argue that the principle holds there as well and offers perhaps the best way to manage a supply chain.

The principles behind servant leadership and subsidiarity are similar, and so the way the terms will be used here are virtually synonymous. The argument is that subsidiarity is servant leadership as applied in the social context. Basically, people have human needs and wants, and looking at people through the logic of gift – as recommended by subsidiarity – will commend itself to the best business practice in the

21<sup>st</sup> Century supply chain management and strategy. Numerous studies show the profitability of empowerment and job enlargement (Hayes, 2010). These ideas are grounded in the fundamental reality of the human person as a free agent with full dignity. Intrinsic motivation is something that companies are striving for, and it will be argued here that servant leaders are transformational leaders; being virtuous and understanding their associates as persons will pave the way for creative control, breakthroughs, and human resources that empower persons. Studies are already showing productivity gains in companies that utilize empowerment. This same intrinsic motivation is now needed at the inter-organizational level since supply chains stretch through several tiers globally. To gain this motivation, the relational model of supply chain is needed, but it must be governed by the philosophy of subsidiarity, which requires prudence in determining the level of followership maturity in the supply chain and whether transactional or transformational strategies need to be employed.

The ideas presented in this paper are not new, but they will follow the paradigm that firms exist for people, not people for firms. By embracing the logic of gift, firms will create for themselves a competitive advantage. The logic of gift is the idea that individuals within a firm bring with them specific talents, and allowing them to freely manage and utilize those gifts can contribute to the good of the whole corporation. (Naughton, Buckeye, Goodpaster, & Maines, 2015) This logic of gift must also be recognized at the inter-organizational level in the supply chain. Strategic HR practices are already bearing out the advantages of the logic of gift internal to corporations. Firms are shifting from viewing people as transactional and turning to recognizing them as a strategic resource. (Evans and Lindsay, 2014) Companies with the most highly engaged workforces tend to compete better. This engagement stems from having servant leadership and servant institutions. This same engagement is what is found in relational supply chain strategies, and subsidiarity in the supply chain will lead to the best engagement from sellers and supporting firms.

Finally, the ideas that foster trust and breakthrough teamwork inside organizations will be applied to the inter-organizational relationships in the global supply chain. Can servant leadership/subsidiarity be legitimately applied to the supply chain? How do focal firms empower other firms within the supply chain? Are there areas where subsidiarity is inapplicable because of adversarial relationships between suppliers and focal firms? What are the main objections to the relational model of supply chain management? Of course, the argument will be that subsidiarity *can* be applied in the global supply chain and focal firms can lead other institutions by providing proper autonomy. Indeed, many focal firms with considerable buying power do follow a subsidiarity like model when they rely on their suppliers for technical expertise and recommendations. An electronics supplier for a car manufacturer should bring the best and newest technology to bear for its buyer and it should be the expert. The focal firm should expect that kind of input from suppliers and be willing to help with R&D expenses in the give and take of technical innovation. It will also be argued that subsidiarity works even in the case of agreed upon transactional or even mutually understood adversarial relationships. Subsidiarity, we will see, shows that one size does not fit all, and some relationships will necessarily require more unilateral control by the supply chain leader (SCL). Subsidiarity says autonomy should be at the lowest level *possible*. The key term here is “possible,” as it will sometimes not be possible to delegate authority to certain levels simply because of the level of follower maturity. Subsidiarity provides a wide application of judgment for SCL’s that may not be present in other models.

## Literature Review – Leadership Theory and the Supply Chain

For the last 75 years, leadership has been an area that has been studied through the lens of social psychology. (Evans & Lindsay 2014) There has been interest in the last ten to fifteen years about how leadership and followership affect the supply chain. Most leadership studies focus on intra-organizational contexts and the best human resource practices to instantiate intrinsic motivation for employees. The literature is catching up in the inter-organizational context of global supply chain management. Scholars have delineated several supply chain strategies, most notably the resource based view (RBV), the market based view (MBV), and the relation based view (ReIB-V). The latest trend in supply chain strategy favors the relation-based view, made popular by the success and practices of Toyota. These views will be analyzed with more detail later, but for now we will look at the literature about leadership theory to see how supply chain and leadership tie together.

The first records of the study of leadership start with the “trait approach.” (Bag, 2014) Bag (2014) notes that literature on the topic of leadership link concepts such as ethics, culture, and trust. One of the first leadership styles defined was charismatic leadership by Max Weber in post-World War I Germany. For Weber, leaders had divine gifts that allowed them to influence people to pursue goals that aligned with the leader’s articulated vision. Leaders had strong values that allowed them to influence in creative directions. (Fritch, 2013)

Since that time various leadership theories have emerged. Deutsch (1980) argued for the theory of cooperation and competition. He theorized for three alternatives, cooperative goal setting, competitive goal setting, and independent goal setting. Cooperative alignment happens when people have common aims and realize that the work they do moves toward the same goal as their leader and community. Competitive goals happen when people perceive that the attainment of their goals precludes others attaining their goals. Goal independence is when personal goal attainment is viewed as separate, distinct, and unrelated to other’s goal attainment. (Wong, 2001)

Yukl (2012) broke down leadership styles into three categories: task oriented leadership (TOL), relations oriented leadership (ROL) and change oriented leadership (COL). (Yukl, 2012) TOL is about gaining efficiencies through the completion of tasks and keeping operations orderly. ROL is about improving relations amongst people, helping them improve, making teamwork better, increasing subordinate job satisfaction and building loyalty with an organization. COL is about finding the best strategic moves and improving upon finding those strategies.

Two of the more popular theories that emerged within the leadership literature are the transformational and transactional theories on leadership. Transformational leadership theory was first developed by James Burns and Bernard Bass. The four main characteristics of transformational leadership are idealized influence, individualized consideration, inspirational motivation, and intellectual stimulation. Transformational leadership takes a long term view, focusses on the customer, engages followers by intellectually stimulating them, promotes unity through a shared vision, invests in training, takes risks on employees, and understands employees as individuals. (Evans & Lindsay, 2014)

In contradistinction, there is the transactional leadership theory, which is based on efficacy and efficiency. This is more of the traditional way of viewing HR, where employees are expendable, and they should be governed by the enforcement of rules, contingent rewards, and management by exception. As is easy to see, this view of HR aligns closely with TOL of Yukl.

With supply chain integration being the goal of many corporations as globalization has forced closer and better alignment within the supply chain for efficiency gains, leadership has become important at the inter-organizational level. Supply chains now span the globe, and they are the linking of “three or more companies directly linked by one or more upstream and downstream flows of products, services, finances, and information from a source to customer.” (Mentzer, 2001, p.5) As a result of this inter-organizational linkage, one company has to emerge as the leader. (Defee, Stank, & Esper, 2010) Typically, this leader is the focal firm with the greatest buying power.

Defee, Stank, & Esper (2010) are perhaps pioneers in stretching leadership theory from the individual/manager level to the inter-organizational level in supply chain management. Viewing the concept of transformational leadership, they develop definitions of Supply Chain Leadership (SCL) and Supply Chain Followership (SCF). Their hypothesis is that if a leader company follows the transformational style, it will outperform a transactional supply chain.

They define a supply chain leadership as “a relational concept involving the supply chain leader and one or more supply chain follower organizations that interact in a dynamic, co-influencing process. The supply chain leader is characterized as the organization that demonstrates higher levels of the four elements of leadership in relationship to other member organizations (i.e. the organization capable of greater influence, readily identifiable by its behaviors, creator of the vision, and that establishes a relationship with other supply chain organizations).” (Defee et al, 2010)

They then go on to define SCF as “a relational concept between leader and follower supply chain organizations in which the follower organization exhibits behaviors intended to help the leader organization and the supply chain achieve goals so long as they are aligned with the follower organization’s own goals, and the overall vision and long-term objectives of the supply chain.”

A good follower according to Defee *et al* (2010) will be one that acts with integrity based on their own set of beliefs; they will partner with leaders to attain shared goals, and will challenge leaders when their behavior strays from the shared goals agreed upon by all. This follower is actively engaged and wants the relationship to expand with the leader, but thinks critically and offers novel solutions to problems.

Hersey and Blanchard (1977), while focusing on the individual/manager relationship, developed a theory of four levels of follower maturity. They are 1) unable and unwilling, 2) unable but willing, 3) able but unwilling, and 4) able and willing. Along with these four categories, they developed four styles of leadership that correspond to the follower maturity level. The first is directing, in which the leader defines the tasks and supervises the work closely (transactional leadership.) The second is “coaching,” in which leaders set the overall approach and direction, but allow subordinates to manage the details. The third is “supporting,” where leaders set the tasks, but the follower has full control over the work. Finally, there is what they called “delegating,” where followers do the work with minimal interference from the leader. (Evans & Lindsay, 2014)

Each of these maturity levels will be realized in a supply chain as well, but it will be more complex in that the follower maturity level will be realized in organizations, or communities of persons. Before we analyze how SCL will be realized via servant leadership and subsidiarity, we will take a look at the history of subsidiarity and how it applies as an overarching ethic in good leadership within the supply chain.

Subsidiarity, when applied to the supply chain, will prove the most profitable for all members of the supply chain. As Defee *et al* note, there are definite benefits to an integrated supply chain such as greater operational output and performance optimization. An integrated supply chain will be one that holds the overarching philosophy of subsidiarity, which is the macro-institutional realization of servant leadership.

## Servant Leadership

In doing the historical review on leadership, we noted that Max Weber was an influential figure in distinguishing what he called “charismatic” leadership. His first example of this kind of leadership was the twelve disciples of Jesus Christ. (Fritch, 2013) They sacrificed their lives for a cause that they saw as bigger than themselves.

While the roots of servant leadership can be traced back to the Christian religion, literature specifically about the topic in organizational literature started with Robert K. Greenleaf. Greenleaf wrote a seminal paper on the idea of servant leadership in 1970 that kicked off a firestorm of literature on the topic. (Greenleaf, 1970) Since that time myriads of books and articles have been published on the topic. Greenleaf’s work provides insight into the ideas surrounding servant leadership.

In both *The Servant as Leader* and *Servant Leadership* Greenleaf mentions the book *The Journey to the East* by Hermann Hesse as the inspiration for his writing on servant leadership. As Greenleaf (1977) puts it, “The central figure of the story is Leo, who accompanies the party as the servant who does their menial chores, but who also sustains them with his spirit and his song...All goes well until Leo disappears. Then the group falls into disarray and the journey is abandoned.” (p.21) Leo captures the essence of the servant leader for Greenleaf.

In *The Servant as Leader* Greenleaf defines the servant leader as someone who is a servant first. He says there are two kinds of people, the servant first and the leader first, and that there are a myriad of gradations between these two poles found in human nature. What separates the servant leader from other leaders is a difficult to administer test. Greenleaf asks whether the subordinates of a leader grow as persons as a result of the leadership they are under. Do they, while being served, “become healthier, wiser, freer, more autonomous, more likely themselves to become servants?” (Greenleaf, 1970, p.15)

James Hunter, in his fictional *The Servant*, which is about a businessman that takes a break from family and work – both failing enterprises in his life – to do a retreat where he learns all about servant leadership. He goes to visit a monastery to get back on track, meets with Simeon, who was the former CEO of a large company and now a monk, and learns the lesson of servant leadership. Hunter defines servant leadership a number of different ways in the book:

“Leadership begins with the will, which is our unique ability as human beings to align our intentions with our actions and choose our behavior. With the proper will, we can choose to love, the verb, which is about meeting the legitimate needs, not wants, of those we lead. When we meet the needs of others we will, by definition, be called upon to serve and even sacrifice. When we serve and sacrifice for others, we build authority or influence.” (Hunter, p.89)

Hunter (p.124) says that leadership is built on authority, which is built upon service, which is built upon love. He then lists a chart or table of virtues about love and leadership. According to Hunter, the virtues that every good leader has are patience, kindness, humility, respectfulness, selflessness, forgiveness, honesty, commitment, service and sacrifice.

There are various affinities between these descriptions of servant leadership and human resources management strategies. For instance, the servant mentality is evident in commitment models of human resource management. John Hayes notes in *The Theory and Practice of Change Management* that R.E. Walton found two approaches to human resource management that seemed prominent, commitment models and control models. (Hayes, 2010) The “hard” model focused on domineering control and is based on cost control and top down managerial practices. The assumption in this model is that low skill work and fixed jobs require close monitoring because employees are peer pressured into only meeting the minimum requirements of the job. (Hayes, 2010)

According to Hayes, then, the commitment model focuses on getting commitment from employees. The model is based on the idea that a company will get the most out of its people if they are committed to the company. The idea is that employees “can be trusted to use their discretion to work in ways that are consistent with organizational goals. This approach assumes that commitment is generated when employees are trusted and allowed to work autonomously.” (Hayes, 2010, p. 360) Hayes calls the commitment model “high performance human resource management.” The commitment model aligns with and echoes servant leadership theories.

Similarly, Evans and Lindsay (2014) define this HR distinction between control and commitment as one between traditional and strategic. They set out the differences between the two strategies. In the traditional (control) model the mindset is transactional and based on compliance and reinforcement. The view of the organization is one of narrow skill application and employees are costs that are exploitable resources.

The strategic (commitment) model has a transformational mindset and a consultative orientation. That is, employees are to be considered idea generators and valuable assets. The view of the organization is broad skill application and employees are critical resources. (Evans & Lindsay, 2014, p.156)

So servant leadership bears an affinity to the commitment or transformational models. The commitment and transformational models are highlighted here to show that trends in HR are following a servant-like paradigm. In order to understand the servant-leader institution in the context of supply chain management as a whole, we have to extend the general idea of “servant-leadership” to organizational and inter-organizational level. Subsidiarity provides that bridge.

### **Subsidiarity – An Overview**

Subsidiarity is a Catholic political principle that can trace its ultimate roots back to the middle ages and renaissance (Mele, 2004) It was first mentioned in a papal letter by Leo XIII in 1891. In *Rerum Novarum* the pope made the argument that the state did not have the right to interfere with the functioning of intermediary institutions (family, private schools, churches, unions, etc.) that existed between the state and the individual. These groups were to be allowed their own functionality and autonomy. At the corporate level, this would be moving decision making to the most appropriate level while maintaining a framework of authority.

The principle of subsidiarity is perhaps best expressed in two subsequent papal letters. As noted by Mele (2004):

“Just as it is gravely wrong to take from individuals what they can accomplish by their own initiative and industry and give it to the community, so also it is an injustice and at the same time a grave evil and disturbance of right order to assign to a greater and higher association what lesser and subordinate organizations can do. For every social activity ought of its nature to furnish help to the members of the body social, and never destroy or absorb them.” (Pope Pius XI, 1931, no.79)

Mele notes another definition by John Paul II:

“A community of a higher order should not interfere in the internal life of a community of a lower order, depriving the latter of its functions, but rather should support it in the case of need and help to coordinate its activity with the activities of the rest of society, always with a view to the common good.” (Pope John Paul II, 1991, no.48)

You can see how these two definitions will contribute in a discussion about servant leadership in the supply chain. Simply put, the leader organization will need to allow sufficient autonomy, but also must guide follower institutions for the development of both.

Perhaps the most significant investigation of subsidiarity as applied to business and the organizational level and not the societal level – as the papal considerations do – was done by the Ryan Institute for Business with their book *Respect in Action*.

Naughton, Buckeye, Goodpaster, and Maines (2015) describe the history of subsidiarity as coming from the Roman military. The Latin *subsidium ferre* was a term used by Roman soldiers for the reserves that would stay outside of the battle and wait to assist those who were in battle. “Subsidium” literally means “to assist or strengthen.”

The main thrust of *Respect in Action* is to capture the idea that the best organizations realize the capabilities of their employees. “Subsidiarity is based on the understanding that each person has a right to be respected, and that each person bears gifts to be exercised. Leaders are at their best, according to this principle, when they build organizations that actively draw upon the diverse gifts (talents, abilities, and skills) of all employees.” (Naughton *et al*, 2015, p.2) The authors label this idea as the “logic of gift,” i.e. understanding the talents of employees and allowing them to flourish with those talents.

Similarly, Mele (2004) notes that even Aristotle, when writing about politics, had something of the idea of authentic human development in mind. Aristotle wrote, “As man is the best of all animals when he

reaches his full development, so he is the worst of all when he is divorced from law and justice.” (Mele, 2004, p. 4) In order to reach his or her full potential, a person must have the proper freedom to develop, but must also keep in view the common good. In the corporate setting, the common good is working to achieve the common goals of the organization, i.e. shareholder value, profitability, ROA, asset management, sales, and so on.

Subsidiarity bears a resemblance to empowerment, which has received much attention in business literature. Mele (2004) demonstrates the difference between the two in that empowerment is a tool to gain competitive advantage, while subsidiarity is an ethic recognizing the dignity of each employee and their ability to organize their work themselves. Empowerment is more of a tactic of delegation, while subsidiarity is more about an overarching ethic to give autonomy to organize work. Empowerment is just one tool in the toolbox of subsidiarity.

Subsidiarity, then, “implies that the power properly belongs, in the first place, lower down or further out. You take it away as a last resort. Those in the center are the servants of the parts. The task of the center, and of any leader, is to help the individual or the group to live up to their responsibilities, to enable them to deserve their subsidiarity.” (Handy, 1994, p.146)

To “deserve” subsidiarity is to give employees, or supply chain followers legitimate responsibility over their work. Similar to private ownership, it is to get supply chain followers invested in the work for the good of the whole supply chain.

The affinities between various leadership theories and subsidiarity should be readily apparent after this review. Similar themes, principles, and ideas are threaded through commitment models of HR, transformational leadership, strategic HR, and subsidiarity. Since there is relatively little business literature on subsidiarity, support for its efficacy will have to be gathered from themes from leadership styles that bear these affinities. Before discussing its efficacy, we must first look at the various supply chain models and their strengths and weaknesses because leadership styles will need to adapt to the strategies employed. Subsidiarity is fluid enough to work within these strategies, and SCLs will have to develop subsidiarity around the strategies employed.

### **Supply Chain Strategies**

There are three supply chain strategies (SCS) that we will look at to see if subsidiarity can apply in the various models. There is very little literature on supply chain leadership (SCL) and supply chain followership (SCF). So, in order to clarify that subsidiarity is the best model for SCL, we will first examine the resource based view (RBV), then the relation based view, and finally, the market based view (MBV) of supply chain strategy. These various strategies will help us to identify affinities with subsidiarity and give us a basis for making the claim that the principle of subsidiarity is the best guiding ethic for SCL. We will begin by looking at the resource based view (RBV).

### **Resource Based View Defined**

The model proposed by Jay Barney (1991) in his, "Firm Resources and Sustained Competitive Advantage," defines the RBV as, "sources of sustained competitive advantage are firm resources that are valuable, rare, imperfectly imitable, and non-substitutable." (p.116) He defines resources as, "all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm to conceive of and implement strategies that improve its efficiency and effectiveness." (p.101)

What do these resources amount to? They may be managerial expertise or culture that other firms cannot imitate. They may be logistical advantages based on firm location that give a firm a competitive advantage; for instance, being located nearer to raw materials than a competitor. A "sustained competitive advantage," is an advantage that a firm has when it "is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors." (p.102) Barney defines a "sustained competitive advantage" as one that a firm attains when its resources cannot be duplicated.

For Barney, valuable resources are those that "enable a firm to conceive of or implement strategies that improve its efficiency and effectiveness" (p.106). Rare resources are those that are not or cannot be implemented by a large number of competitors. If large numbers of firms can conceive of and implement the resources, then it will not be a "rare" resource nor will it be a source of competitive advantage. "Imperfectly imitable resources" are resources that are dependent upon "unique historical conditions," or if the link between resources and a firm's competitive advantage are causally ambiguous, or if the resources are socially complex. A unique historical condition would be locating your firm in place that turns out to accidentally be a source of competitive advantage. Causal ambiguity is the result of not knowing the link between a firm's resources and its sustained competitive advantage. In this situation, a competitor could not copy the resources as the link is not understood. Finally, social complexity can create an imperfectly imitable resource, for instance, complex managerial relations.

The last part of Barney's definition of the RBV is "substitutability." Any resource that is to be a source of sustained competitive advantage is that there can be no equally valuable substitute for that same resource. There can be no "strategically equivalent valuable resources that are themselves either not rare or imitable." (p.111)

The difficulty with the RBV is the rigid and stoical application. The definition is all in the abstract, so putting a finger on precisely what resources line up with the abstract definitions could be hard to do. It also lends itself to a non-strategic alignment with partners, and promotes a business environment that encourages opportunism. The RBV could be the source of what establishes a supply chain leader, but its methodologies could contradict subsidiarity.

### **Resource Based View (RBV) – weaknesses and problems**

It has been noted that in the RBV, to obtain competitive advantage, a firm must have resources that are valuable, rare, imperfectly imitable, and non-substitutable. In the article, "Generalizing about uniqueness: An essay on an apparent paradox in the resource-based view," Gibbert (2006) argues that there is a paradox that arises when a firm tries to generalize unique (idiosyncratic) resources. The argument is that one cannot generalize in any meaningful way when discussing unique resources. So the RBV falls on its face because it is inapplicable to a general audience. This captures a logical fallacy if the referent "inimitable resources" are said to be generalizable. *Prima facie* this appears to be merely applicable to the inner workings of reason, that is, how one thing refers to another in logical order within reason, as opposed to being actually problematic to the RBV itself.

Other authors have captured the weakness within this critique by distinguishing the misapplied application of the terminology. Levitas & Ndofor (2006) argue in the following way, "the attribute of *uniqueness* in the RBV applies to *resources*, whereas *generalizability* in positivist science refers to *research findings*" (p.137). So these two authors argue that the RBV deals with attributes of resources as opposed to specifically referring to the resources themselves. This in turn means that the theory itself is generalizable.

The Gibbert critique, however, does highlight one of the glaring issues of the RBV, which is that it appears to be empty conceptually. It appears to be a glossy theory that is impractical because it has no applicable meat to it. It loses its pragmatism precisely because identifying unique resources can be an impossible task. Indeed, Barney relates that some firms may not even know the source of their competitive advantage because they are rooted in a longtime business culture and practice. They become inimitable because even the firm possessing the resource cannot identify the resource. What this does for theory in practice is that it places it purely in the speculative realm. If managers take the approach that they are going to identify their strengths and weaknesses so as to create competitive advantage, and yet they cannot identify their advantages, then they cannot strive towards increasing their strengths. If they cannot measure what gives them advantage, then they cannot improve upon that advantage.

Levitas & Ndofor (2006) make the basic argument that resources are evolving and static and that they involve complex networks of "resource and/or capability interactions." Again, if such is the case, the theory is inapplicable to practice because the *uniquely valued resources are unidentifiable*. So while companies may be in a position of competitive advantage, they will not know where that advantage resides. As such, they will be unable to act on that, which then means if the unique resource is lost because of changes in market conditions or business culture, the source of that inimitable resource will be non-recoverable. The RBV is then an empty theory, which may have meaning for scholars in their ivory towers, but no meaning for managers who would want to put it to use. It is a solipsistic theory in that sense.

Levitas & Ndofor (2006) capture this sentiment by writing of dynamic capabilities. They define dynamic capabilities in the following way, "*Dynamic capabilities* are conceptualized as a firm's ability to build and/or extend basic capabilities to deal with changing environments....a shift in focus to dynamic capabilities reduces if not eliminates the applicability of the valuable, rare, inimitable, and nonsubstitutable (VRIN) framework because the emphasis of the strategist shifts from trying to protect resources of current competitive advantages to continuously creating resources and/or capabilities to yield future competitive advantages." (p.140) In a sense, the argument is that the RBV does not capture what firms are actually doing to sustain competitive advantage, but is a tool that looks in the rearview mirror at what gave them competitive advantage. This would be valuable if and only if those resources were identifiable, but the theory itself says that they may not be.

Does the theory gain credibility if those resources are identifiable? It most certainly would, as that would provide real life firms with actionable data. Perhaps RBV researchers ought to look into doing case studies that identify resources. If it is possible at the micro level, it may be generalizable, but the general rule of the theory would need to be applied to particular cases.

Other authors have noted the logical tautology found in the RBV, as resources that give competitive advantage are by definition valuable. (Priem & Butler, 2006) It would be similar to saying the female who is the daughter of my parents is my sister. Again, though, this critique is similar to the Gibbert critique in that it highlights a logical problem, but not so much a problem with the utility of the theory.

The Levitas & Ndofor (2006) article makes a similar claim to the one above, and that is that the RBV may be a metatheory with a very wide application, but it can only be applied in specific contexts.

Peteraf has argued that there are four main conditions to sustain competitive advantage using the RBV. (Peteraf, 1993) Her main contention is that heterogeneity is the key to sustained competitive advantage. By "heterogeneity," she means a uniqueness that is inimitable by competitors. This highlights another issue with the RBV that is similar to what has already been highlighted. The issue is that terminology within academia itself is not univocal. For the untrained eye, because of the unique language that author's use, the exact meaning of the theory can be tricky to locate.

Peteraf also notes a strange trend that does not fit with the RBV theory. She says that the trend is that firms move into additional markets before realizing full resource potential in initial markets. It seems that firms do not "exploit" their position in initial markets before moving to new ones. The RBV has no way of accounting for such trends, as it would suggest a unique resource would fully exploit its advantages in initial markets before expanding. In practice, however, that does not happen. (Peteraf, 1993)

Other authors have noted that another weakness of the RBV is that it does not account for *resource weaknesses*. The literature all speaks of maximizing resource strengths, with little focus on resource

weaknesses. Ignorance of resource weaknesses, they say, can sink businesses because they are unaware of those weaknesses. (West & Decastro, 2001)

West & Decastro (2001) state the following example about IBM, "Examples from industry illustrate these factor differences. IBM had developed considerably unique strengths in computer technology as it entered the 1980s. Its weakness may have been its inability to foresee growth in PCs and distributed processing and its inability to translate such forecasts into substantive development efforts internally...the company continued to emphasize mainframes and large scale customized applications throughout the 1980s and into the 1990s. The result was that its performance declined and its stock price dropped over one hundred dollars per share." (pp.428-429)

So, another weakness of the RBV is that it does not teach firms how to deal with resource weaknesses, which these authors contend, if not well understood, can result in considerable competitive disadvantages. Sometimes they say the strengths and the weaknesses are interrelated in such a way that the weakness is actually inherent in the strength. In general, they say that the inability to identify a change in circumstances is a main weakness that most firms face. That which would compel change in SCS is undiscovered, leading to considerable market weakness.

So, in conclusion, it should be noted that there are three main weaknesses to the RBV. First, it has the problem of being an empty metatheory that is inapplicable in practice. Second, the language used by its adherents is itself heterogeneous, leading to an idiosyncratic terminology that is non-usable by the non-specialist. The third problem identified is that its adherents have attenuated all of their focus on resource strengths as opposed to weaknesses. By so focusing their attention, they have missed a large component in firm's competitive disadvantages. These are the three main weaknesses identified, and surely there are others. The academic literature was replete with recognition of the logical tautologies, and difficulties with its generalizability. The strongest objection, though, is related to the first problem identified. The theory seems to be nothing but theory as it is filled with empty terminology. Managers will have difficulty with its application as it is too far in the abstract universal to be applied to particular firms. Its basis as a metatheory makes it unusable. Better studies of actual application of the theory would prove worthy, as these studies could highlight what are actual idiosyncratic resources, and in the long run perhaps prove usable in a general way. Until definitions are clarified and tautologies removed, the theory is difficult to place.

We have reviewed here because substantial amount of ink has been spilled on the topic. With regards to supply chain leadership and subsidiarity, it does not link in with any of the leadership or followership theories we have identified. The reason it does not link in is because of the main weakness of the theory, it is a pure abstraction. As such, one could with little precision state that a supply chain leader arises because of a resource advantage – this could be a focal firm with substantial buying power based on OEM technology, or it could be a raw material leader, in the sense that everyone within a given industry is at the mercy of the owner of the resource. In either case, subsidiarity could be applied,

though it is more difficult in the latter scenario as that is a dependent relationship where exploitation and opportunism can possibly arise, especially in the case of a rare and highly demanded resource. In that case, relationship building would be necessary to bridge the inherently transactional relationship.

That is to say, a leader in the supply chain could be the one with the rarest and most demanded resource. As an example, forgings are in high demand for automotive and off road utility vehicles. Capacities are maxed, so lead times are extended. No one firm has enough purchasing power to “push” lead times, leading to what can be adversarial relations. In a case like this, subsidiarity would suggest adopting a transactional approach. Because followership gets muddled in such a relationship, i.e. the buyer is essentially lead by the follower based on the scarcity of the resource, how to lead and who is in the lead becomes blurred. The follower (i.e. seller) has the power in such a situation, and the leader (buyer) cannot lead because they cannot procure the necessary materials because of scarcity. Subsidiarity would then suggest that the buyer turn to its customers and openly communicate the scarcity. If one OEM is experiencing shortages, most should be as well. Subsidiarity is about reaching the common good for all involved, and thus solidarity is about open communication lines throughout the entire supply chain, from raw resource provider to end user.

How the relationship is managed throughout the supply chain, then, becomes important, which leads us to our next supply chain strategy to be examined, the relation-based view.

### **Relational Based View Defined**

The definition for the relation based view comes from the article, “The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage,” by Jeffrey Dyer and Harbir Singh (1998). The authors make the claim that, “Recent studies suggest that productivity gains in the value chain are possible when trading partners are willing to make relation-specific investments and combine resources in unique ways.” (p.661) What are relation-specific investments? They can be anything from knowledge sharing, co-location, to strategic location.

The authors write of “relational rents,” which are returns that exceed a factor’s short run opportunity cost. Basically, they are profits that are realized because of strategic relationships. So, the official definition of a relational rent is “a supernormal profit jointly generated in an exchange relationship that cannot be generated by either firm in isolation and can only be created through the joint idiosyncratic contributions of the specific alliance partners.” (p.662)

Based on this definition, the authors then go on to lay out a number of propositions in support of their thesis that cooperative and strategically aligned buyers and sellers can realize greater relational rents by investing in that relationship. The propositions are as follows:

- 1) The greater the alliance partners' investment is in relation-specific assets, the greater the potential will be for relational rents.
  - 1a) The greater the length of the safeguard is to protect against opportunism, the greater the potential will be to generate relational rents through relation-specific assets.
  - 1b) The greater the volume of exchange is between the alliance partners, the greater the potential will be to generate relational rents through relation-specific assets.
- 2) The greater the alliance partners' investment is in inter-firm knowledge-sharing routines, the greater the potential will be for relational rents.
  - 2a) The greater the partner-specific absorptive capacity is, the greater the potential will be to generate relational rents through knowledge sharing.
  - 2b) The greater the alignment of incentives by alliance partners is to encourage transparency and reciprocity and to discourage free riding, the greater the potential will be to generate relational rents through knowledge sharing.
- 3) The greater the proportion is of synergy-sensitive resources owned by alliance partners that, when combined, increase the degree to which the resources are valuable, rare, difficult to imitate, the greater the potential will be to generate relational rents.
  - 3a) The ability of firms to generate relational rents by combining complementary resources increases with the firms (1) prior alliance experience, (2) investment in internal search and evaluation capability, and (3) ability to occupy an information-rich position in its social/economic networks.
  - 3b) The ability of alliance partners to generate relational rents from complementary strategic resources increases with the degree of compatibility in their organizational systems, processes, and cultures (organizational complementarity.)
- 4) The greater the alliance partners' ability to align transactions with governance structures in a discriminating (transaction cost minimizing and value maximizing) way, the greater the potential will be for relational rents.
  - 4a) The greater the alliance partners' ability is to employ self-enforcing safeguards (e.g., trust or hostages) rather than third-party safeguards (e.g. legal contracts), the greater the potential will be for relational rents, owing to (1) lower contracting costs, (2) lower monitoring costs, (3) lower adaptation costs, (4) lower re-contracting costs, and (5) superior incentives for value-creation initiatives.
  - 4b) The greater the alliance partners' ability is to employ informal self-enforcing safeguards (e.g. trust) rather than formal self-enforcing safeguards (e.g. financial hostages), the greater the potential will be for relational rent, owing to (1) lower marginal costs and (2) difficulty of imitation. (p.664-671)

As can be seen from the propositions, the relation based view is one that views buying and selling firms as synergistic entities that can realize profits by integrating knowledge and expertise. The weaknesses (highlighted by the authors) of this view are that powerful buyers can change the organizational structure of smaller suppliers and perhaps make them less competitive in that they cannot source other

buyers. Secondly, trust is important and it increases the ability of opportunism and to have intellectual property stolen, especially across international borders. It is also dependent upon long term relationships, which take time to develop and can be easily dissolved if trust is broken. (Dyer and Singh, 1998)

Developing trust within the supply chain, then, is integral to the relation based view. As should be obvious, subsidiarity is most relatable to this model of supply chain strategy, and developing profitable relationships will require subsidiarity to be practiced by the SCL. With that said, there are weaknesses that must be explored to see if an ethic of subsidiarity is the proper guiding ethic for this model.

### **Relation-based view – weaknesses and problems**

In a paper titled, “The burden of relationships or who’s next,” presented at the 1995 IMP 11<sup>th</sup> International Conference in Manchester, authors Hakan Hakansson and Ivan Snehota reminded the business world that the current relationship trend within business needed some revision. They noted that while businesses can gain positive results from relationship building, there is also a “dark side,” that is rarely noted or investigated. (Hakansson & Snehota, 1995)

The question that proponents of the RelBV rarely ask is, “How significant are the investments that need to be made on the front end of relationship building, and what is the risk?” Hakansson and Snehota give a list of five reasons that caution must be exerted in developing close relationships with suppliers and customers. The five quandaries that they present are:

- 1) Unruliness - loss of control
- 2) Undeterminedness
- 3) Energy, resource draining
- 4) Exclusiveness or preclusion
- 5) Stickiness

Regarding number 1, loss of control, the authors give the example of an Italian company that entered a licensing agreement with a Japanese company, and in so doing, they gave up production control and even choice of suppliers. Although the Italian company viewed this as a positive, it still meant they lost the ability to make determinations about the direction of their own company. Imagine wanting to change the direction you are going with a supplier and being told by the larger company you do business with that you could not do that. This is the fear with a larger company calling the shots, and basically absorbing the smaller subsidiary. Relationship building can lead to loss of control. (Hakansson & Snehota, 1995)

The authors also note what they call “undeterminedness,” where the future direction of two companies working in concert is indeterminate. The claim is that relationships depend upon history, and that there

is constant reinterpretation of events, so the nature of the relationship is subjective. Thus, the importance of one party to another may be misinterpreted and could lead to a surprising disintegration of the relationship by one of the partners. (Hakansson & Snehota, 1995)

The third issue that Hakansson and Snehota discuss is the amount of energy and that relationship building can be resource draining. Basically, returns on relationship building are unpredictable, so there is a need for significant investment on the front end of that building. Firms have to spend money getting to know each other and each other's processes, and return on investment is hard to gauge on the front end. (Hakansson & Snehota, 1995)

Other issues highlighted are exclusiveness and stickiness. When entering any relationship, it may entail excluding other relationships, even if those other relationships are attractive. (Hakansson & Snehota, 1995) If a business enters a long term relationship as a supplier and gets comfortable with that buyer, it could follow that customer service lessens as business is guaranteed. This could in turn lead the buyer to dislike the relationship, but be unable to break the relationship because of contractual necessity or because "it's the way things have always been done." It is more likely that a larger buyer can cause exclusivity for its suppliers. So in relationship where a supplier sees an attractive opening with a competitor of its primary buyer, the relationship may preclude the supplier from pursuing that option. The question becomes, "Do the positives outweigh the negatives in this relationship?"

Stickiness is when you are "guilty by association." When entering a long term relationship, your friends ultimately become the friends of your friends, and your competitors ultimately become the competitors of your friends. This can ultimately cause reputational issues. If a company has a reputational issue, and another company is in close relationship with that company, the latter company can be impacted negatively by the reputation of the former. How many companies in close collaboration with Enron were impacted by Enron's cheating ways? This is what Hakansson and Snehota call "stickiness." (Hakansson & Snehota, 1995)

The real issue with the RelBV is that relations are not adequately defined. (Blois, 1998) While the trend of the last 20 years has been focused on relationship building, true investigations of costs and risks associated with the RelBV have not been investigated. Furthermore, in the limited literature review done for the research for this paper, little in the way of empirical data that emphasizes the profits organizations *actually see* was offered. That is, there is a lot written about the *potential* of integration, but little offered in the way of *data* that it gives competitive advantage or better profits.

The relative lack of clarity in the definition of relationships can be highlighted by the example of NECX. NECX acts as an intermediary between computer chip makers and chip purchasers worldwide. It makes its profits by "wheeling and dealing." It locates chips that will quickly be obsolete for purchasers that are short of supply of those chips. NECX leverages the ability to locate high demand chips for purchasers who are in short supply ("in a pinch,") and they exploit that by charging a premium price. Producers

know they are paying a premium, but the existence of NECX gets them through when they cannot locate the chips elsewhere. NECX makes its profits by exploiting both customers and purchasers. They pay a low price for chips that will soon be obsolete, and sell at a high price to purchasers in dire need of the product. What is to be said of collaboration and the RelBV in regards to a company like NECX? (Blois, 1998)

Of course, NECX does not exist in a vacuum. It has to have a relationship, but that relationship is by nature exploitative of both those they are purchasing from and those they are selling to. Blois suggests that there is an element of relationship for NECX as purchasers trust them to hide their identity from competitors, and sellers trust them to get rid of their product for them. (Blois, 1998) However, the relationships here contradict the general notion or definition of the RelBV given in the literature. NECX is a sore thumb for the trend of relation building as they exist by not having relationships in the traditional vein.

Some proponents of the RelBV have attempted game theoretic models to capture the various ways in which relationships develop. (Parkhe, 1993) It is an interesting attempt at guessing behavior based on logic. However, there is a difficulty in predicting behavior precisely because agents working for companies are human, and the scope of determining a corporations' behavior can be linked to the habits and morals of employees, as well as the general culture of a given company. If there is a "culture clash" between firms, or opportunism rears its head, relationships can come to a screeching halt with no value gained from the relations. Imagine that a firm makes the initial investment in another firm, hoping to gain competitive advantage by utilizing the technical capabilities of its partner. Now imagine that a few rogue agents decide to steal proprietary information and sell it. Because of the breach of trust, the companies part ways, but this after a substantial investment by each of the companies. So the companies experience loss of investment with no future gains, as well as proprietary information now being in the hands of competitors. It comes down to how trustworthy companies are, which is tough to gauge until after a relationship has been developed. Much like marriage, a person does not know who they are going to marry until they have dated.

In the Dyer and Singh article reviewed in the section describing the RelBV, there are several steps in their model to try to create good relationships. For instance, they state that the greater the lengths taken to safeguard against opportunism, the better the chances for gaining relational rents. (Dyer and Singh, 1998) This is fine to state in the abstract, but in concrete, what does that do to the relationship? It shows a genuine lack of trust, for instance, if a buyer hides the purchasing amounts it uses for say VMI. If a PO is created for \$60,000 for a year, but that amount is hidden from the supplier, they are just supposed to ship to a limit to load the VMI (to protect against opportunism), does that build the relationship and show trust?

This leads to another issue discussed by Dyer and Singh, which is transparency. According to them, the greater the transparency amongst partners, the greater the potential for profits. There is a flip side to

this, and that is the risks that accompany transparency. Transparency means giving greater visibility to transactions and accounting to a partner. This opens a company to exploitation in terms of stealing of sensitive information, or opens a company to the possibility of competitors gaining access to such information.

The trouble, then, with the RelBV is that relations are ill defined, the empirical data is lacking for its success, and it cannot be applied universally as all relationships are individual. Companies need to be careful in how they integrate as it opens them to costs and risks that would not exist if not for close collaboration with customers and suppliers. The truth of the matter is that no company can exist in a vacuum, they must have relationships, but those relationships need to be defined based on the nature of the business in question, and full collaboration or integration may work for some companies, but not others. As the NECX example exemplifies, there are indeed contingencies that negate the need for the RelBV. For all that it offers, the RelBV is only applicable in some circumstances and not all, so its viability is dependent upon contingencies. As such, as a model, its weakness is that not all companies can use it.

This is precisely where subsidiarity can play a role because it says to delegate all responsibility to the lowest level possible. Depending upon supplier followership, subsidiarity would suggest that collaboration and integration are indeed the goal, but circumstances may dictate that a transactional model of leadership is necessary, because the principle says delegate autonomy only to responsible levels. If a supplier cannot be trusted with integration, then subsidiarity would suggest withholding responsibility from them.

The last SCS we will look at is the market based view, which will be outlined below.

### **Market Based View**

Marshal Fisher (1997) in his article, "What is the right supply chain for your product?" that first appeared in the Harvard Business Review, laid out a market based program for determining supply chain strategy (SCS).

Fisher says that the first thing focal firms need to do is to determine if their product is functional or innovative. A functional product is a good that meets a basic need, such as food, clothing, shelter or transportation. As a result of its stable and predictable demand, companies can implement JIT type strategies because they do not have to be reactive to the market. The stability of these products, as Fisher points out, often invites steep competition which can lead to low profit margins.

Companies that sell innovative products have to deal with unpredictable demand, and because of that unpredictability, these companies ought to design their supply chains according to a reactive model. That is, companies that make innovative products (think of high tech gadgets) need supply chains that can react to fluctuating demand. The trick, Fisher admits, is figuring out what kind of product your

company produces. Many companies are unsure of whether their products are functional or innovative because there is gray area. (Fisher, 1997)

Fisher recommends that managers recognize that there are two types of function, physical and market mediation. For functional products, physical efficiency is needed, i.e. converting raw materials into parts, components, finished goods, and the transportation and warehousing of those goods. Efficiencies can be discovered ad nauseam here, and Fisher argues that most supply chain managers have squeezed as much as they can out of costs in this area. The area that is often ignored is market mediation, which is the ability to react to the market. Fisher states that the managers he talked to all said the major headaches were in innovative products and the inability to capture accurate demand, which lead to either stock outs or over stocking goods. (Fisher, 1997)

Fisher develops a matrix for helping companies determine what category the products they sell fall into and gives examples of how companies like Campbell's Soup utilized EDI to capture demand better for their functional products, and realized steep increase in profits because of it. He also relates a story about the company called National Bicycle, which used the threefold strategy introduced by Fisher to increase their market share by 27% in one year. The strategy that Fisher recommends for innovative products is to 1) "reduce uncertainty – for example, by finding sources of new data that can serve as leading indicators or by having different products share common components as much as possible so that the demand for components becomes more predictable," 2) "Avoid uncertainty by cutting lead times and increasing the supply chains flexibility so that it can produce to order or at least manufacture the product at a time closer to when demand materializes and can accurately be forecast." The final thing innovative product makers can do is hedge against uncertainty by creating inventory buffers or by having excess capacity for production.

The way that Fisher describes that National Bicycle was able to do this was to increase production costs and capacity, but have real time demand. They let customers customize their bikes at the store and guaranteed that they would have the bikes delivered to them within 2 weeks. So a customer's choice of bike went from a limited number of models to over 20 million models they could choose from. As noted production costs increased, but in a single year they gained 27% in market share by their ability to react to the market. (Fisher, 1997)

So, in summary, the market based view is one that allows a company to determine what its products are and then gives them the opportunity to react to the market based on whether their product is innovative or functional. The MBV is more transactional in nature in that it is based on reacting to supply and demand.

#### **Market Based View – Weaknesses and Problems.**

In writing of the market based view, Fisher describes three ways to gain profits. All of them circle around reducing, eliminating, or hedging against uncertainty. (Fisher, 1997) This is precisely the issue with the market based view; markets are by their nature unpredictable.

Fisher recommends determining if your product is innovative or functional, and then developing an SCS around that. The problem is twofold, what constitutes an innovative product and what constitutes a functional product? Some are clear as day, for instance, groceries, fuel, natural gas, or any product that provides the natural needs of human beings – food, shelter, transportation – fall into the functional category. What about sports cars or high end tractors? They certainly fall into functional in that they provide transportation or till the land, but they are just as subject to fluctuating demand and trends as any innovative product. The reason for this is they provide for necessities, but are luxurious in how they provide for those necessities. The gray area probably needs to be sorted out for the market based view to work.

If one looks at the field of consumer behavior, he or she will find that there are several grand theories claiming allegiance, but none that can claim the predictive ability of a physical science. (Anderson, 1994) In short, where human behavior is concerned, there is a lack of the ability to predict because free creatures are free to make choices. Any attempt at understanding social behavior by mechanistic means is doomed to difficulty, as the lack of science in marketing theory attests to. One could state that science allows for a “prediction threshold” where accuracy does not have to reach one hundred percent, but where probabilities are so extreme that a theory can be justified. That is, chance is all but eliminated when probabilities reach such a grand scale that the opposite happens so rarely that it can be said to not happen at all. In the world of physics in the quantum world, there are particle leaps that would allow people to pass through walls if they only walked into the wall for an eternity. There would be one instant where they could pass through. This would be reaching the threshold of predictability, marketing theory does not, and will not reach that threshold.

To summarize Anderson, (1994) the events studied by physical science are easier to predict because physical systems are simply not as complex as human behavior. Aristotle explained as much in the beginning of his *Nicomachean Ethics*, we ought not demand of ethics and politics the same certainty we demand of the physical sciences because ethics is full of contingencies that can multiply to infinity. McTier and Anderson demonstrate as much in citing a study where a group of academics, practitioners, and high school students were interviewed and asked to make predictions about consumer behavior. The results were that the practitioners were correct 58.2 percent of the time, high school students 56.6 percent, and academics 51.3 percent of the time. (Anderson, 1994) In short, this demonstrates that guessing consumer behavior is a crapshoot.

Anderson critiques modern scholarship for becoming too technical with their theories and developing “tool kits” that are often inaccessible to practitioners. What all of these highlight is that market based theory depends on knowing the market, which can be tricky to say the least. Anderson also points out

that Japanese manufacturers were able to gain large profits on Walkman's because American businesses trusted in large scale "scientific" studies that showed the item would fail. Sony, they argue, recognized via hands on, qualitative research, that showed the product would be a success. (Anderson, 1994) The question is, were the Japanese strategies using qualitative methods better theoretically, or did they "get lucky" with the market swinging in their favor? Perhaps the American companies were insulated from progress by trusting large scale studies, but there could quite possibly be the reverse, where the large scale study pays off and the qualitative research fails. What does this tell us about market based theory? It says there may be indicators of where a market will go, but the market is ultimately unpredictable.

In the realm of unpredictability, there are a number of things that can and do go wrong when it comes to marketing strategy. N. Craig Smith (2007) offers a number of historical failures that marketers failed to notice when introducing new products. The first instance he mentions is Dasani bottled water, which Coca-Cola tried to introduce to the English market. They simply bottled tap water, and a "cultural" campaign was waged against them, where consumers recognized that they were paying for what they could get from the tap, but with the added negative of being in plastic bottles that can cause cancer. Dasani failed in England even though it's the second largest bottled water company in the world. (Smith, 2007)

Smith also notes when Cadbury, the chocolate company, decided to get on the fitness bandwagon. They developed a marketing strategy that included getting certificates with chocolate purchased. Once a certain number of certificates were gained, Cadbury would buy a piece of exercise equipment for a school of the winners choosing. The problem? People had to eat an enormous amount of chocolate to qualify for the equipment. There was a cultural backlash that forced Cadbury to remove the promotion. (Smith, 2007) Sometimes it's almost laughable what marketing departments miss when they do not see the forest for the trees.

The final example that Smith gives is of Nike, who tried to separate themselves from third and fourth tier supplier's sweatshop operations. They attempted to wash their hands of the situation, but consumers and NGO's would have none of it. Nike ended up changing its policies regarding the issue when consumers raised enough complaints. (Smith, 2007)

What the Smith article highlights is that consumers are culturally aware, and a negative image can result in severe damage to brand loyalty and recognition. As regards the MBV, it highlights that simply relying on what one produces and determining whether it is functional or innovative, may not capture the wide array of issues that consumers pay attention to.

For example, there are numerous NGOs and PACs that specifically target and find out what political and/or controversial issues companies attach themselves to. Life Decisions International, for instance, puts together a "boycott list" of companies that donate to pro-abortion causes. Perception is everything

when it comes to the market, and knowing your audience or who you cater to is important. The trick is in how to discover who that audience is. As noted earlier, American firms have tended to base marketing decisions on broad surveys and studies, while Japanese firms have focused on “what” the product can do. In the cases we analyzed, this approach paid off for the Japanese companies.

Ultimately, then, the weakness of the MBV is that it falls into unpredictability. Typically the best models for determining the direction of the market is to look at the past and determine where it will go based on that. The trouble with this approach to forecasting is that it cannot predict wars, natural disasters, political disasters, etc.

In some ways the MBV is at odds with subsidiarity in that subsidiarity suggests the building of trust. The MBV is necessarily transactional. However, where subsidiarity fits with the MBV is gaining access to customer relationship management or “knowing the market.” Open communication and integration are keys to the development of trust, and one of the outcomes of properly utilized subsidiarity would be better visibility to market trends and customer needs. An OEM might have greater awareness or be able to meet customer specifications and gain share of wallet by placing more authority at the customer service level.

We have now reviewed the RelBV, RBV, and MBV. Subsidiarity, as a wide ethical approach, can be applied to each strategy, depending on the circumstances of individual businesses. We will now review how precisely it aligns with the various strategies.

### **Supply Chain Strategy and Supply Chain Leadership**

Now that we have reviewed the various supply chain strategies and their weaknesses, we can examine the affinities between leadership theory and supply chain strategy. Prima facie it is easy to see the linkage between transformational leadership, subsidiarity and the relation based view.

We saw how the relation based view is built for the long term through intimate collaboration amongst focal firms and their various suppliers. It is the idea of gaining profitability by tapping into the innovative resources and potential of followers. Transformational leaders intellectually stimulate their followers and seek to develop them.

The same can be said for the supply chain leader. As noted, SCL is “a relational concept involving the supply chain leader and one or more supply chain follower organizations that interact in a dynamic, co-influencing process. The supply chain leader is characterized as the organization that demonstrates higher levels of the four elements of leadership in relationship to other member organizations (i.e. the organization capable of greater influence, readily identifiable by its behaviors, creator of the vision, and that establishes a relationship with other supply chain organizations).” (Defee et al, 2010)

As a “relational-concept” it can be seen that leadership requires relationship building in the supply chain. Following the RelBV, one can quickly see the advantages of the co-influencing process. Perhaps no company expresses this more than Toyota. The Japanese developed highly integrated supply chains and took the long view and saw tremendous gains in market share and quality as a result. This can be attributed to an ethic of subsidiarity as applied at the inter-organizational level.

Suppliers should bring to the table specialization and technical capabilities that the focal firm itself does not have. At John Deere, for instance, as part of the supplier rating system is a “technical innovation” scorecard. Suppliers are rated on collaborative ideas they have brought to the table. As a firm with buying power, the leader in this chain expects contributions from followers.

Of course, in the supply chain there are going to be various levels of follower maturity. Some companies will be innovative partners, becoming so enmeshed as to be indistinguishable from the supply chain leader. Others, as we saw in the case of NECX, will necessarily be in a non-collaborative position; others will be periphery partners and will have low levels of follower maturity. As Hersey and Blanchard noted there are the 4 levels of follower maturity: 1) unable and unwilling, 2) unable but willing, 3) able but unwilling, and 4) able and willing. And just as they developed leadership models according to follower maturity, so too does the SCL have to develop and utilize various leadership styles in order to direct an entire supply chain.

This is precisely where subsidiarity steps in to provide a guiding ethic. As noted, subsidiarity means to “assist” and to let decision making be done at the most appropriate levels. Prudence must be utilized in order to determine what form of leadership is necessary for the firm or suppliers in question.

*Naughton et al* note:

“The core meaning of subsidiarity, therefore, is “to assist,” or to strengthen, to stand behind or beneath. A higher authority or social body can assist a lower (or subsidiary) body in two ways. The first is more passive: higher authority does not absorb or supplant the initiative of a lower body on issues where the latter should exercise freedom and initiative. The second way is proactive: higher authority helps a lower body where the latter is unable to accomplish an essential task on its own. Subsidiarity, therefore, calls for higher authority to provide help in a way that fosters not dependence, but “freedom and participation through assumption of responsibility” (p.15).

Just as with follower maturity at the individual/manager level, so too will SCL’s run into areas where incompetence, incapability, or flat unwillingness are the case. Subsidiarity says that delegation in these cases is wrong, and perhaps a transactional leadership style will be necessary. If an SCL encounters such a supplier, then they may need to utilize a market based supply chain strategy. In essence, they would need to utilize a transactional model in anticipation of market needs. The nature of the relationship would be such that strict enforcement of contracts and strong oversight would be necessary. Much like a parent with an undisciplined child, an SCL would have to utilize strategies to protect themselves from opportunism of low maturity suppliers. Indeed, because supply chains are relational entities in buyer/seller relationships, subsidiarity can mean completely cutting ties with a firm that does not hold up to its responsibilities as a supplier.

For instance, in a service parts business there may be suppliers that are unwilling to fulfill service lives on parts because economies of scale no longer apply. Such behavior falls into the able, but unwilling category. Subsidiarity would suggest providing opportunities for the seller to attain an integrative/collaborative model. If the seller only wants current production parts and refuses to assist in the long term goal of satisfied customers of the focal firm, then subsidiarity would suggest that in the framework of authority, it would be time to cut ties with that supplier, for they are not participating in the solidarity of the entire supply chain. That is, it would be obvious that a transactional approach was being taken by the seller, and not a mutually agreed upon transactional approach, and as such that relationship would best be terminated.

Returning to the affinities between the RelBV, transformational leadership, and subsidiarity, we can state that while the three of them share similarities and that transformational leadership leads to greater productivity and efficiency, it is too limited because there are situations where it will not work. With those suppliers that are able and willing, or even unable and willing, transformational models will work. Where they are unwilling and unable, transactional models will be necessary. As such, subsidiarity helps account for both situations. The higher body, or SCL, will need to step in and utilizing prudence, develop or eliminate suppliers based on their levels of collaboration.

We saw that one of the weaknesses of the RelBV was that it caused a loss of control. So the SCL would dominate, direct, and not provide autonomy for the SCF. This type of over lordship is contrary to the ethic of subsidiarity, which requires that autonomy and responsibility be moved to the lowest levels possible. By making decisions for the SCF that the SCF should be making for itself, the SCL violates the ethic of subsidiarity. Where the RelBV fails, if subsidiarity is properly the ethic of the SCL, then the idea of loss of control should not be an issue. In reality, this does happen. Under the pressures of cost cutting and innovation, when the SCL has more skilled workforce, it can always be a temptation to take decision making away from SCFs. Subsidiarity would suggest this temptation should be avoided. Indeed, SCLs should encourage SCFs to have a diversified customer portfolio to eliminate the SCLs own financial risk. By being open to their suppliers having, or even pushing their suppliers to have greater customer diversification, SCLs can eliminate this weakness with the RelBV. A diversified customer portfolio would have benefits for the supply chain, in that it limits financial risk, and eliminates the temptation to control all decisions of a SCF. This would be in line with an ethic of subsidiarity.

The RelBV says collaboration is the goal of all supplier/buyer relationships. Business demands that this cannot necessarily be the case in all circumstances since there are companies that are incapable or unwilling to follow where the leader is going. There will be a mix of good suppliers, average suppliers, and bad suppliers based on the level of business and technical capabilities. Subsidiarity suggests that a SCL take suppliers only as far as they are willing to go. One size does not fit all, and prudence is required.

Because the levels of supplier follower maturity will vary, SCLs will need to adopt each of the supply chain strategies we have discussed with different suppliers. The goal of a SCL should be to develop all of their suppliers to the point where they are world class suppliers and receive the highest rating a SCL can give. In a perfect world, the level of collaboration would be at levels that the RelBV demonstrates. Subsidiarity would suggest that the goal of SCLs would be the integral development of a supplier. An SCL would want to make them more competitive, more cost efficient, more innovative and technically sound, leaner, more agile, with the ability to deliver on schedule and with higher quality. Sophisticated

rating systems in a 360 degree review fashion might prove beneficial for this development. Rating suppliers and giving them incentives to improve themselves would help serve this theme. Allowing suppliers to rate the SCL as well would be in line with subsidiarity. By giving voice in both directions in a supply chain, communication lines open and trust is developed. With trust come breakthroughs and relational rents.

Since development of suppliers would be the goal of subsidiarity, and because there are several levels of SCF maturity, it follows that the prudence a SCL has would tie back to the SCS's we have reviewed. Where follower maturity is low, the market based view would be the prudent strategy to follow with a particular supplier. Where follower maturity is high, the RelBV should be utilized.

In cases where the RBV applies, the level of relationship may be pertinent to determine how subsidiarity would function. As noted earlier in discussing forgings, in the RBV model, what company emerges as the SCL can be confusing. There may essentially be two leaders, and depending upon the business to business buying power and leverage, the relationship could span from the transactional to the transformational. A buying firm would need to gauge the level of interest in relationship the seller or owner of the inimitable resource might have. It may be that the buyer is in the follower role, yet does not need to be developed by the resource provider. In that instance the power shifts to the seller, and so open communication and integration would be integral from the buyer. They would need to develop as strong of a relationship as possible to secure leverage. The nature of such a relationship would necessarily be transactional, and so subsidiarity would suggest a transactional approach. The resource provider may be unwilling to serve the needs of the buying firm because the share of wallet is minimal in comparison to other customers. Thus, it would be no question of subsidiarity or "development," but one of securing resources. Follower maturity could be in the able, but unwilling category. A transactional approach would be prudent in this situation, and securing resources from multiple suppliers might be the right decision.

Subsidiarity, then, requires recognizing all firms within a supply chain as communities of persons. There will be various levels of follower maturity within the supply chain, and so subsidiarity (tying into the larger virtue theory ethic), suggests that various leadership styles will be necessary to deal with the contingencies of supply chain followership. A prudent (prudence defined as "right reason about things to be done") SCL is one that is familiar with the supply chain strategies outlined, understands where each of its suppliers fall into the maturity levels, and utilizes the best SCS based on that maturity level. The goal of the SCL, following an ethic of subsidiarity, should be to develop and better all followers in the supply chain. This means developing relationships so as to better the entire supply chain to realize mutual benefits. Similarly, in a supply chain where the ethic of subsidiarity is found, SCFs will want to contribute to the goal of solidarity with its customers, and thus they would want to gain responsibility and better the company they are following. This would be a two way transaction, both leader and follower would strive to obtain what is best for all and both would be willing to sacrifice for each other in order to better both.

## **Conclusion**

After reading this article, the reader may be tempted to walk away stating that subsidiarity is just another empty concept because it does not suggest one directive, but is like an umbrella that pulls various supply chain strategies and leadership theories together. The reader may be tempted to look at

it and say, "This is a great theory, but just as empty of a concept as the RBV. Similar to that, all that has been demonstrated is that subsidiarity is a metatheory with not substance. All that has been demonstrated here is that there are various theories of leadership and supply chain strategies that subsidiarity "fits" with. All you have done is plugged a bunch of theories together, said companies can choose what method is best for them, and call it subsidiarity."

The accusation would not be entirely unwarranted, and in some ways true. Subsidiarity is meant to be a meta-ethic as it is a guiding principle. To be a servant institution, a supply chain leader must have as its goal the integral development of its followers. Better, more mature followers would mean more efficiency and better profitability for the SCL.

If an SCL takes the development of suppliers seriously and seeks to give them autonomy, but also to guide them within a framework of authority, then having this purpose will be utilizing the ethic of subsidiarity. By taking the vantage point of the logic of gift, SCLs can realize that the companies they work with bring talents and gifts to the table.

Of course, this is not a perfect world we live in. Follower maturity will always be an issue. Developing a low maturity follower may mean using prudence to follow a market based transactional strategy. As Aristotle warned in his ethics that we should not require mathematical precision because human actions can descend into infinity, so also in inter-institutional relationships will there be this lack of precision. Due to economic circumstances, some followers will always be less mature and not fully invested in the companies they sell to. Furthermore, persons within companies may not take on the same level of investment as the company does. Since there are such contingencies, stating that a SCL should always invest huge amounts of resources into suppliers that are not interested in mature followership, would be a mistake.

Because human actions are myriad to infinity, an ethic must be broad enough to capture these contingencies. Subsidiarity is a guiding principle to understand that institutions serve persons, and persons require autonomy to do their best work. Responsibility should be pushed out from the center, from the leader, but when there are SCFs that are unwilling to take that responsibility, legitimate authority will recognize the lack of solidarity, and push for more transactional approaches. Subsidiarity needs to be this "umbrella," and allow for contingencies, but it should be viewed as a *guiding ethic*. "Do unto others as you would have them do unto you," such a loaded statement requires much prudence in implementing. As we saw with servant leadership, SCLs need to give to suppliers what they need and not what they want. Subsidiarity is a guiding ethic, under which transformational, transactional, and the various models of supply chain strategy fall. By taking the guiding principle of giving autonomy to the lower and serving those institutions, companies will, in the long run, see financial gains and stability.

This may seem like a large claim, but because of subsidiarity's affinities to transformational models of leadership, empowerment, enlargement, strategic HR practices, RelBV, and so on, the literature already suggests its economic power. Future studies might look at the efficacy of specifically implementing policies in line with subsidiarity within the supply chain. The hypothesis is that, just as companies see great improvements in profitability and morale as a result of subsidiarity, the same would be true of an SCL that utilized the ethic. (Mele, 2004)

## Reference list

- Anderson, L. (1994). Marketing science, where's the beef? *Business Horizons*, 37, v1.
- Bag, Surajit. (2014). Impact of sustainable supply chain management on organization performance: mediating effect of leadership. *Indian Journal of Management Science*, v.4, issue 3, p10-25.
- Barney, J. (1991). Firm resources and sustained competitive advantage., *Journal of Management*, v. 17 issue 1, p99-120.
- Blois, K. (1998). Don't all firms have relationships? *Journal of Business & Industrial Marketing*, v13(2-3), p.256
- Defee, C.C., Stank, T.P. & Esper, T. (2010) Performance implications of transformational supply chain leadership and followership.
- Dyer, J. and Singh, H. (1998). The relational view: co-operative strategy and sources of interorganisational competitive advantage. *Academy of Management Review*, v23, (4) , pp. 660-79.
- Fritch, E. (2013). An examination of transformational leadership style and supply chain management performance. Dissertation submitted to Northcentral University, June 2013.
- Gibbert, M. (2006). Generalizing about uniqueness: an essay on an apparent paradox in the resource-based view. *Journal of Management Inquiry* 15 (2), p124-134.
- Greenleaf, R. (1977). *Servant leadership*. New York, NY. Paulist Press.
- Hakansson, H. and Snehota, (1995). "The burden of relationships or who's next?" Proceedings of the IMP 11<sup>th</sup> International Conference (Manchester) 522-536.
- Handy, C. (1994). *The Age of Paradox*. Boston, MA. Harvard Business School Press.
- Hersey, P. & Blanchard, K.H. (1977). *Management of organization behavior: utilizing human resources* (3rd. ed.). Englewood Cliffs. NJ: Prentice-Hall.
- Hunter, J. (1998). *The servant*. Rocklin, CA. Prima Publishing.

Levitas, E. & Ndofor, H. (2006). What to do with the resource-based view: a few suggestions for what ails the RBV that supporters and opponents might accept. *Journal of Management Inquiry*, (15)2, p135-144.

Mele, D. (2004). The principle of subsidiarity in organizations. A case study. IESE Business School.

Mentzer, J.T. (2001). Supply Chain Management, Sage, Thousand Oaks, CA.

Naughton, M., Buckeye, J., Goodpaster, K., Maines, T. (2015). *Respect in action, applying subsidiarity in business*. St. Paul, MN: UNIAPAC and University of St. Thomas.

Parkhe, A (1993). Strategic alliance structuring: a game theoretic and transaction cost examination of interfirm cooperation. *Academy of Management Journal*, v36, p. 794-829.

Peteraf, MA (1993). "The Cornerstones of Competitive Advantage: A Resource-Based View." *Strategic Management Journal*, 14 (3) p179-191.

Pope John Paul II (1991), Encyclical "Centessimus Annus." St. Paul Books and Media, Boston.

Pope Pius XI (1931). Encyclical, "Quadragesim anno."  
[http://www.vatican.va/holy\\_father/pius\\_xi/encyclicals/documents/hf\\_p-xi\\_enc\\_19310515\\_quadragesimo-anno\\_en.html](http://www.vatican.va/holy_father/pius_xi/encyclicals/documents/hf_p-xi_enc_19310515_quadragesimo-anno_en.html)

Smith, N. (2007). Out of left field. *Business Strategy Review*, 18 (2) 55-59.

West, P & Decastro, J. (2001). The Achilles heel of firm strategy: resource weakness and distinctive inadequacies." *Journal of Management Studies*, 38( 3), p417-442.

Wong, A. (2001). Leadership for effective supply chain partnership. *Total Quality Management*, v.12 issue 7, p913-919.

Yukl, G. (2012). Effective Leadership behavior: What we know and what questions need more attention. *Academy Management Perspectives*, 26(4). 66-85.