Change Processes Surrounding Alliance Termination

by

Darcy Fudge

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Abstract

The in-depth case study of an alliance termination over a five-year period surrounding the termination of a critical infrastructure industry alliance represents a contribution to organizational scholars' understanding of alliance termination and the political process under which the set of relationships and competition amongst the firms change. The study develops a process theory to explain the termination and the events that unfold following the termination. Termination is suggested to be an important aspect of the change process. By including termination as an antecedent to firm action, both the social movement and institutional entrepreneurship and the literature on alliance processes can benefit from understanding how termination may shape firm routines and relationship formation.

Chapter 1: Introduction

1.0 Motivation and Research Question

The literature on the process of interorganizational relationships (IORs) tends to emphasize formation processes over termination events. While we understand the benefits of alliances and the characteristics of formation – much is unknown regarding termination, let alone the change processes that unfold following the termination event.

It is not surprising that alliances end, yet what is surprising is the large proportion of terminated alliances that report that they failed to achieve their objectives (Reuer and Zollo, 2005; Bamford, Gomes-Casseres and Robinson, 2002; Hagedoorn and Sadowski, 1999). In 1999, the Atlantic Excellence airline alliance dissolved, citing problems of Swissair bankrupting the alliance member firm Sabena. Delta and Air France quickly joined another alliance (Lazzarini, 2007). Such an example suggests that following a termination, the need for the alliance does not disappear. Furthermore, the events surrounding the termination seem to shape the strategic alternatives available to the firms following the dissolution.

Scholars have estimated alliance failure rates range from 50 to 70 percent. Alliance failures often occur before the alliance even reaches its objectives (Makino, Chan, Isobe and Beamish, 2007). Dacin, Hitt and Levitas (1997) estimate that nearly 50 to 60 percent of all alliances are unable to capitalize on their objectives, while Slowinski and Sagal (2003) estimate the failure rate ranges from 60 to 75 percent. The literature provides various causes of alliance termination (e.g. failure to meet objectives, natural dissolution where objectives were met, and changes in the external environment). Much of this literature has focused on evolutionary or institutional mechanisms leading up to the termination, ignoring what happens after the termination event and how the termination colored the subsequent strategy of the firms involved. For evolutionary theorists, termination represents the end of the variation, selection and retention process. As a result, evolutionary studies of populations of firms analyze the termination at the level of the alliance between the firms but neglect that the firms involved continue to operate, and the subsequent strategy may be tainted by the termination event. Thus, there exists a gap in our understanding of the effect of the termination as a change event and the process by which the termination change unfolds.

In the strategy literature, the reasoning behind termination events tends to emphasize changes in goals. Termination occurs because the need for the alliance is no longer required. Termination events can end amicably, and several contract mechanisms exist so that alliance partners can exit gracefully whether through a natural end or a shift of goals. However, multiple partner alliances amplify the complexity of the partnership, making it more difficult to specify potential exit scenarios. Bamford et al. (2002) suggest that despite the legal best practices available, many executives avoid discussion of termination scenarios when crafting the alliance agreement in order to save face and encourage the development of trust between the parties. Moreover, Kogut (2002) suggests that relationships outside a particular partnership can amplify or mitigate probability of the termination. Thus, the assessment of whether or not the goals are unmet may be particularly challenging for the firms involved. So changes in goals may not be a sufficient explanation for the change processes surrounding the termination.

On one hand, firms can leverage the alliance termination as a possibility for growth. For example Kogut (1991) found in joint venture buyouts, firms exercised call or put options based on changes in the external environment. On the other hand, the options available to the firms may be constrained by their reputation effects and social status tainted by the termination. Failure to achieve objectives may lead to negative attributions of credibility, but also the loss of a prominent partner can signal to other firms a loss in status. These reputation and social structure effects may create barriers for the firms' future partnership opportunities. Thus, in occurrences of termination it is unclear which firm ultimately wins. The research question for this investigation is, how do the change processes unfold surrounding the termination?

The research makes several contributions to the extant literature on interorganizational relationships. Firstly, the phenomenon of termination events is underrepresented in the existing literature in comparison with the work on alliance formation. Termination events are of particular scientific relevance due to their potential to be one-sided and potentially negative. It is plausible to suggest that the termination event will impact the selection of business goals and alter the potential possibilities for future partnerships. An in-depth study of the mechanisms for change surrounding the termination can reveal the potential for the termination to induce change. Secondly, social networks approaches have emphasized the persistence of structure (Zaheer and Soda, 2009) while omitting an agent's own strategic action and choice, thus taking a largely evolutionary perspective. Third, existing research tends to privilege one actor's perspective over another, making it unclear how the termination event unfolds for the firms previously involved in the joint relationship.

In sum, the literature on the process of interorganizational relationships (IORs) tends to emphasize formation processes over termination events. When the research does consider these factors there is an emphasis on teleological (goal-based) and evolutionary change processes, which also tend to privilege formation. While we understand the benefits of alliances and the characteristics of formation – much is unknown regarding termination, let alone the change processes that unfold following the termination event.

In order to answer the research questions put forth, the study uncovers the change processes that unfold surrounding the termination of a multi-partner alliance in a critical infrastructure industry in a commonwealth country over five years. The next chapter will review the change processes with an emphasis on alliance termination. The remaining chapters outline the case study methodology, the analysis and findings which include a theoretical framework for the change processes surrounding the termination and lastly a discussion of the results and concluding remarks.

CHAPTER 2: PRIOR RESEARCH ON THE TOPIC

2.0 Introduction

This section introduces the past research completed on the topic of alliance termination. The emphasis of the past work on alliance termination change processes is highlighted using the typology of organizational change provided by Van de Ven and Poole (1995). Notably, most past work on alliance processes has emphasized the evolutionary and teleological motors, highlighting the importance of strategic goals and changes to the external environment. The study builds on the past process work on alliance processes that typically treat alliance terminations as the end or a symptom of a cycle of processes. I argue that by including the termination as a focal change event, the termination contributes to the processes that follow.

Theoretical Base: Motors of Organizational Change in Alliance Termination

2.1 Introduction

I use Van de Ven and Poole's (1995) typology for organizational change[1] in order to develop the process of the subsequent events following the termination of an alliance. This typology is also used by de Rond (2003) to explain past process studies on strategic alliances.

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[1] The typology for organizational change was created to categorize the vast literature associated with organizational change. De Rond (2003) applies this typology to review past studies on interorganizational alliance processes which emphasize formation rather than termination. The perspective of the current proposed research is to apply this framework to alliance termination.

In order to develop a process theory of the change events associated with the termination of an alliance, Van de Ven and Poole's (1995) typology for organizational change can be used to organize the existing alliance termination literature and propose different mechanisms for the process that unfolds surrounding the termination. Each of the four theories for change processes, life cycle, teleology, evolutionary and dialectical suggest different sequences of change events generated by different mechanisms or motors (Poole, Van de Ven, Dooley and Holmes, 2000). These processes can be combined as in evolutionary economics where evolutionary and teleological motors are both represented.

There are four possible motors used in the theorizing of organizational change. These motors are classified using two dimensions, the unit of analysis and the mode of change. The unit of analysis where change occurs may happen within a single entity or between entities. Single entity can refer to a particular firm or an alliance. Between entities refers to a change that involves more than one firm or alliance. Between entities change may result from change experienced by an entire industry such as an economic shock or a change in technology exogenously, or it may result from conflict between the parties such as two rival firms. Mode of change refers to whether the change is prescribed or constructive. Prescribed change occurs when the change is a predictable sequence of change on a general theme while constructive change produces unique new forms. The following paragraphs will explore the life cycle, teleological, dialectical and evolutionary modes of change explanations with respect to alliance termination.

2.1.1 Life Cycle

The life-cycle motor of change is a linear prescribed mode of change and occurs at the level of analysis of a single entity. The early organizational research was characterized by such processes where alliances began through a phase of commitment formation, establishment, and the decision to grow the purpose of the alliance or terminate (de Rond, 2003). Life-cycle processes are prescribed, occurring as expected without missing a phase of change. This process involves a single entity, whether a firm or the alliance. Alliance terminations in this case are expected after a process of formation and execution of its purpose. For a life-cycle process the termination is easy to pinpoint and predict, so it is relatively easy to identify an exit clause and write it into the contract at the time of the alliance formation (Kogut, 2002). Strategic choices exhibited by the member firms following the termination would be similarly expected as part of the natural growth and development of the firm.

The life cycle models are criticized for the lack of empirical evidence to support their predicted linear sequences (de Rond, 2003). Termination in life-cycle models is typically included as the final stage of the linear sequential process (e.g. Murray and Mahon, 1993). Yet many firms continue operation following alliance terminations. While the alliance itself may end, I propose that the change process associated with the termination is far from complete.

2.1.2 Teleological

The teleological mode of change is a constructive mode of change that also occurs at the single entity level of analysis. This motor is typified by an iterative process of goal-driven actions. Teleology differs from the life-cycle model in that the agents take an active role in the change. Change is induced internally and spurred on by agents' purpose rather than a typical or expected response. The cycle begins with a sense of dissatisfaction with existing goals, followed by new goal setting, goal implementation and lastly, re-establishment of satisfaction with the achievement of the new goal. The sequence iterates in a manner traditionally pursued in strategic planning. Regardless of the age of the alliance or the state of its development, the teleological motor suggests that at a certain point in an alliance its members become dissatisfied. Dissatisfaction through cognitive dissonance spurs a period of sensemaking whereby actors attempt to reconcile their dissonance. The period of dissonance is resolved through the emergence of a new set of goals which reinstates a period of satisfaction.

In interorganizational alliances, satisfaction is driven by a sense of equity and efficiency (Ring and Van de Ven, 1994). The partnering firms become satisfied when the outputs are fairly distributed according to the inputs (equitable), and the alliance is a more efficient mode of organizing in contrast to other forms of organizing. Once the firms are satisfied they will enable the alliance to move through an iterative process of negotiation, commitment and execution of the alliance goals. Alliance termination may be a side effect of dissatisfaction that is ultimately driven by inequity and inefficiency driving a new set of goals to materialize. The changes following the termination can be viewed as the implementation of a new set of goals.

While teleological explanations facilitate our understanding of individual goals within the alliance, it omits possible explanations external to the alliance or the goals of the individual firms. The structure of alliance relationships and changes in the external environment usher in new opportunities that challenge the existing goal of the alliance. It is also unclear what the content of the goals should be following the termination for the alliance partners. Thus the existing literature on alliance termination often invokes the teleological explanation in combination with the other change motors, most notably with evolutionary change.

2.1.3 Evolutionary

Evolutionary change motors are prescribed and occur between multiple entities. Typically, evolutionary processes exhibit a pattern of variation, selection and retention driven by competition for scarce resources. While different conceptions of evolutionary theories exist, the most commonly used analogies are Darwin's competitive selection model and Gould's punctuated equilibrium model. Organization ecology perspectives exhibit the variation, selection and retention process at the population level. Change through blind variation and survival are determined by the external environment where firms are selected and retained from a population of firms based on their ability to adapt to the demands imposed by the external environment.

Alliances may terminate as a result of the lack of fit with the external environment. Technological innovation, policy changes or consumer preferences, for example, may induce an exogenous shock requiring all of the firms in a population to reconsider their strategy. Scarcity may be involved in acquiring the new technology, thus selecting out existing long-time supply partners or research and development partnerships that lack the new technology. The nature and direction of change is predictable based on the characteristics of the population of firms shaped by the external environment. For alliances, termination often indicates the environment has naturally selected a particular form of alliance from a population. One type of alliance is preferred over another. Thus, the studies described below often miss the potential for the termination to affect the change processes unfolding after the termination event.

Examples of this research use a population of alliances such as Gulati's (1995a, 1995b and with Gargiulo, 1999) work on alliance formation. Similarly, Gimeno's (2004) study of alliances in the airline industry focused on niche width dynamics of generalist alliances that had multimarket contact, versus niche alliances with focal location contact. Based on population-related properties he investigates the influence of indirect competition on alliance formation. The extent to which the alliance focuses on specialized activities affects the formation of potential partnerships, particularly with rival firms. In a study of the network and instrumental (governance and resource based view) antecedents of alliance termination in Canadian investment bank cliques, Rowley, Baum, Greve, Rao and Shipilov (2005) found that overlap in the roles and inequality in the available bridging ties increased exits from the alliance. Such approaches are prescriptive in that the notion of fit for the alliance and its partnering firms depends on the externally imposed competitive dynamics. To sum up, the outcomes from evolutionary change processes are often anticipated when a change in the external environment occurs.

2.1.4 Dialectical

Dialectical change motors are constructive and occur between multiple distinct entities. Van de Ven and Poole (1995) explain the dialectical motor as a process of pluralism, confrontation and conflict, wherein a Hegelian social philosophy the opposing thesis and antithesis collide and may or may not result in synthesis. In alliances, such conflict may occur between two partnering firms each struggling to impose its own goals for the partnership. At the end of the conflict, a new synthesis may result in the domination of one set of goals, a new entity, or an impasse between the two entities. Researchers strive to synthesize such paradoxes through identifying the temporal ordering (forces shift through time) and spatial segregation (forces are separated by level of analysis); finding a synthesis of the contradictions; or achieving acceptance of the contradictions through a balance without a resolution.

Rather than viewing the alliance as a single entity or the participating firms as atomistic actors, the dialectical perspective enables the instability amongst partner firms and tensions to be brought to the forefront (de Rond, 2003). Alliances are particularly prone to instability because they face at least five tensions more so than any individual organization: cooperation vs. competition, rigidity vs. flexibility, short-term vs. long-term orientation, vigilance vs. trust, and power vs. embeddedness (Das and Teng, 2000; de Rond, 2003; Gulati and Sytch, 2007). Das and Teng (2000) argue that individual organizations are able to cope with the dominance of any one of these dimensions, whereas in alliances the dominance of any one of these dimensions risks pushing alliance partners away from accomplishing the initial goals, contributing to instability and reducing alliance performance. These tensions often result in novel change whereby the outcomes for the firms of a dialectical tension are unexpected. Yet when change is driven by dialectics, it is possible the tension surrounding the conflict can continue well after a termination.

2.1.5 Multiple Motor Processes

Multiple motor theories involve an interaction of the generative mechanisms from the four motors. These are a combination of the generative mechanisms for the motors that lead to a new change theory. Given that there are four primary motors, this leads to 12 possible combinations that involve generative mechanisms from two, three or four motors. The most commonly combined motors for the extant literature on strategic alliances are the teleology and evolutionary motors derived from evolutionary economics (Nelson and Winter, 1982). Other combinations of the motors at the firm level of analysis involve Greiner’s (1972) model of organization growth and crisis which uses both the life-cycle motor and the dialectic motor. In Greiner’s model, periods of prescribed growth lead to crisis and conflict, which then propel the organization towards the next phase of prescribed growth.

More recent work has softened the population-level assumptions posed by the ecological perspective and incorporated the goal-based or learning aspects of the teleological perspective. These process studies incorporate firms' internal evolutionary processes with those imposed by the external environment. Efforts to induce agency that link ecological evolutionary processes include theories of co-evolution (Lewin, Long and Carroll, 1999), guided evolution (Lovas and Ghoshal, 2000) and Nelson and Winter's (1982) theory of evolutionary economics. Often these perspectives adopt a teleological perspective in addition to the evolutionary perspective where the variation, selection and retention process of organizational routines within a particular entity aligns with strategic goals' fit for the internal organizational ecology's selected routines (Burgelman, 1991). In other words, actors undertake intervention in the ecological process akin to selective breeding.

Organizational routines are similar to the genes of an organization (Galunic and Weeks, 2007). Routines interact with the environment exhibiting a process of change behavior within an organization. Following Galunic and Week's definition (2007: p. 76) routines are "the regular, predictable, and discernable actions and mental processes that pattern organizational activities." Humans interact with the routines in order to reproduce them. Routines experience both interaction processes and replication processes. Interaction processes suggest that routines are embedded with the larger environment through competition and complementarity. Replication processes emphasize the persistence of the routines by containing a residue of the history that the routine experienced. Interaction processes highlight the selection and termination of the routine in alliances, while replication processes emphasize routines that may remember what has happened in the past. Alliance failures may exhibit problems for routines; failures may arise from poor adaptation of routines. The failure also may be stored in the memory of the routine affecting its further reproduction.

Termination studies that take this approach suggest that a convergence of routines negates the need for the alliance. Nakamura, Shaver and Yeung’s (1996) study of the convergence of alliance routines found that firms that did not diverge in their routines following an initial period of learning and knowledge sharing were more likely to terminate. Reuer and Zollo (2005) used an evolutionary economics and transaction cost framework that incorporates teleological processes to explain different types of termination outcomes, including completion of the alliance objectives; outright failures; outright failure where parties are dissatisfied with the alliance; and intermediate outcomes such as expiration of the contract without renewal or unilateral exit by one of the parties. Alliance experience (general or in the same technology) did not affect the termination outcomes, whereas previous experience with the partner did help prevent failure outcomes. In other words, relationship memory in the routines may be particularly salient for the humans that interact with them following the termination.

It may also be the case that these processes experience tensions that impede the evolution of goals or exacerbate their evolutionary path. In de Rond's (2003) research on biotechnology alliances, the evolutionary trajectory he argues is most akin to the punctuated equilibrium model where events increase exponentially and deliver sudden path-breaking change. In situations of termination, the punctuation may be an expression of the underlying dialectical tension instigating a change in the relationship rather than externally determined by evolutionary processes. De Rond (2003) emphasizes a tension between the particular and the general representing a theoretical conflict between agency (teleology and chance) and evolution as an artifact of structure. While he highlights the importance of alliance processes, he does not go as far in developing the relationship between alliance termination and the subsequent evolution of the firms and their inter-relationships. I use de Rond's work as a launching point in order to investigate whether an alliance termination possibly embroiled in conflict could shape the subsequent relationship between goals and the structure of competition amongst the firms.

2.2 Summary of the Literature Review

The changes following the termination are likely affected by a combination of these processes. While the motors of change highlight several studies that have explored alliance failure, none of the studies identified thus far provide predictions for the subsequent process following the termination. This in-depth exploration of the change process that unfolded following an alliance termination may shed light on this gap in our understanding of alliance processes.

CHAPTER 3: METHODOLOGICAL APPROACH AND RESEARCH CONTEXT

3.0 METHODS

This section outlines the research methodology used to capture the processes and events that unfolded leading up to the termination and after the termination. Semi-structured interviews and archival analysis were used to triangulate the sequence of events and the processes that unfolded surrounding the termination event. Respondents were asked to recount the events leading up to and following the termination (Graebner, 2009). Such an approach prevented the researcher from leading the interview participant. The lens with which these events were examined was that of grounded theory building (Glaser and Strauss, 1967; Eisenhardt, 1989). The researcher approaches the data abductively iterating between abduction and induction. The methodology also used discourse analysis to categorize the meaning from the text. The initial coding framework was developed from the coding scheme established in the Minnesota Innovation Research Program conducted by Van de Ven and his colleagues (Poole et al., 2000). Such a coding scheme has been used consistently in the field of process research in order to identify the presence of change motors. Codes were also developed inductively from the interviews following the methods proposed in Glaser and Strauss (1967). Using a single case study, the interaction between the firm level and alliance levels of analysis is explored offering a unique perspective on the change events.

3.0.1 Theoretical Unit of Analysis and Unit of Observation

The theoretical unit of analysis reflects the interaction between the firms and the alliance. I identified conjunctive processes which indicate a pluralistic set of change motors. In conjunctive processes, events in one process are related to and influence events in other processes. The units of observation are the firms from the critical infrastructure industry at the point of termination of the alliance, leading up to the termination, and following the termination. As the study progressed, the natural window for the events started in 1997, when the events related to the termination escalated in their occurrence, and diminished in their occurrence at the beginning of 2002. Process in this study represents the events that change the relationships amongst the firms involved in the alliance. The process theories examined are the four archetypal change motors.

3.0.2 Case Study Design for Process Theory

Due to the requirement that the alliance terminates, this study relies on longitudinal retrospective interviews and archival data. The sample involves a summary case study (Poole and Van de Ven, 2004), where many events occur in few cases. The case study approach was selected as the most appropriate empirical method to address the research question for this study. Yin (2003) suggests a case study allows the researcher to examine events that cannot be manipulated in an experimental setting. Experimental research for the focal research question was not feasible due to the vast number of activities carried out by the firms and the alliance, the number of employees, and the stakeholders involved in such a highly regulated industry. The case study method was also preferred over cross-sectional survey techniques because the process-based research question requires an explanatory approach where the researcher can observe the events over time. Finally, because terminations are rare instances, secondary data that allow for exploratory inquiry is also not presently available.

In the case study analysis, there is one alliance that consists of three primary firms and nine other member firms. Many events occur during the period of investigation that influences the alliance and the firms. The research design followed the methodology used by Bunderson, Dirks, Garud and Van de Ven (2000), where they investigated the change processes surrounding the relationships amongst firms involved in the cochlear implant innovation process. They focused on the central firm 3M and 3M's relationships with other organizational entities. The two designs diverge in that this study was retrospective and focused on termination rather than innovation processes.

3.0.3 Sample or Replication Logic and Sample Selection

The selection of the case reflects theoretical sampling (Yin, 2008; Eisenhardt, 1989). In theoretical sampling, the researcher is able to explore a contemporary phenomenon where the theorizing becomes transparently observable (Pettigrew, 1990). Alliance failures are particularly difficult to capture in other modes of data collection – survey and experimental designs often cannot capture the context and implications of the situation (Labianca and Brass, 2006).

A critical infrastructure industry where a well publicized alliance termination occurred was investigated for the case study. Substantial archival material from a variety of sources is available to support the research in this study. The weekly industry reports were used as the primary archival source in order to provide the content of the event, date the events, and name the actors involved. These reports are published approximately 50 times a year with 20 events per report on average. More than 5,000 events were coded for the purpose of this research. Each event contained a two to three sentence description, while more important events were given half to a full page of description. Secondly, 10 interviews with key stakeholders were used to provide various retrospective interpretations of the documented events. These interviews involved stakeholders from the regulatory body, executives on incumbent and competitive firms, and an industry analyst. Two of the respondents were upper-level executives of the alliance. Three respondents were upper-level executives at Whittier[2]. Two respondents were upper-level executives at Loring. Equal representation across the firms was achieved by interviewing senior level managers from both Loring and Whittier so that one perspective was not privileged over the other. The respondents' involvement in the industry spanned the full period of inquiry. Appendix B provides a table of the informants and their respective background in the industry during the period of observation.

[2] The firms investigated for the study are introduced in section 3.1

I used a snowball strategy in order to contact key informants, in which I asked the key actors to suggest other informants knowledgeable about the termination event until I reached saturation and no longer received new information. Consultation with other critical infrastructure industry process researchers suggested that this is an appropriate strategy. I found that during the course of my interviews new names would arise, but at the point of saturation I found that I was able to capture the perspectives of the primary actors in industry named in my archival research, as well as identify perspective of actors who were deeply involved in the termination but were not named in the media. Typically, those that I interviewed were named by other actors at least twice by different respondents during the course of recounting the events or at the end of the interview when I requested for assistance in locating and contacting key informants.

The informants were asked to recount the events surrounding the termination to the best of their recollection. I encouraged them to begin from the earliest event and move forward in time in a linear sequence. Probing questions were only used for clarification. The open-ended approach is used in prior literature to avoid leading the informants and bias in their responses (Graebner, 2009). The interviews lasted on average 45 minutes, with 1 hour and 15 minutes as the longest interview duration and 35 minutes as the shortest. The average interview produced approximately eight pages of transcribed text.

A period of five years, 1997 though 2001, was chosen for the investigation of the archival events from the weekly industry reports. Yet the interview respondents were not limited to this time frame; the respondents recounted the events as they recalled the timeframe and importance. In some instances of triangulation, I went back to earlier reports from the regulatory body and the weekly reports from (1989 through 1996, and after 2001) to draw out key events identified in the interviews. However, as I cross-referenced the interviews with the archival reports, the frequency of events related to the termination increased in frequency during the period of 1997 through 2001. The beginning of 1997 was marked with the introduction of competition across all traditional network services by the regulatory body, while the end of 2001 was marked with financial losses for Loring and the departure of Loring's CEO Mike Smith in the spring of 2002.

3.0.4 Definitions for Event Categorization

The process variables that were examined in this study represent the four archetypal process theories. Poole et al. (2000, p.98, Table 4.1) provide the testing criteria for the narratives of the four motors for process studies: teleological, dialectical, evolutionary and life-cycle. Life-cycle models emphasize a number of prescribed stages that follow a linear sequence. Teleological models emphasize satisfaction and dissatisfaction derived from goals and constraints within an entity. Evolutionary models emphasize the variation, selection and retention of certain firms, organizational forms, and relationships as a result of competition over scarce resources driven by changes in the external environment. Dialectical models emphasize conflict and the resolution or partial resolution to the conflict. Construct categories and representative codes that combine Ring and Van de Ven's (1992) framework for alliance processes and Poole et al.'s (2000) criteria for the four change motors and the representative queries used on the coding categories are shown in Table 2.

The *life-cycle motor* was identified based on the extent that the event was prescribed or predictable in a linear sequence for a firm or the alliance. A life-cycle process must follow a unitary sequence, program or code, or sequencing device. Goal-setting, conflict or contradiction respectively is only possible at a single stage. There is one central subject, and the course of action is predictable. Coding categories that marked the beginning or the end of a stage of related events enabled me to identify whether the process was linear. The code category, *expected,* indicated whether the explanation for the event suggested the event followed a predictable sequence. NVivo was used to query for sequences that involved linear prescribed processes (Table 2, last column). Events coded for *formation*, *execution* and *termination* that occur in a linear sequence for a firm or the alliance provides support for the presence of a life-cycle motor.

The *teleological* motor, on the other hand, lacks a unitary sequence, program or code, or sequencing device. The process will iterate across stages. The start and end codes reappear for the same type of stage across events. For example, if the parties in the alliance negotiate only at the initiation of the alliance, this represents a life-cycle process. If *negotiation* re-occurs throughout the events surrounding the alliance termination, it indicates a teleological process for the alliance.

Typically for a firm or alliance there is a *goal*-setting process or strategy. The process operates on one central subject either a single firm or a single alliance. A teleological sequence will repeat iteratively following a period of dissatisfaction that triggers instances of *sensemaking* where actors seek meaning or make sense of an interaction or cognitive dissonance (Weick, 1995). For example, a firm's strategy that results in low performance may cause the firm to identify a reason for failure that could be corrected by reformulating the strategy and thereby initiating a new sequence of goal setting.

Goal setting and execution are iteratively adapted based on sensemaking and assessment events. *Sensemaking* events provide evidence that parties are attempting to understand or reduce uncertainties of their own or the other party's perceived motivations, proposals, roles, capabilities and behaviors in their relationship with respect to the alliance and the set of firms. There is no interaction between parties. *Assessment* events – the affective response to an event –can be positive (satisfaction, pleasure, and good news), negative (dissatisfaction, displeasure, and bad news) or mixed (neutral, ambivalent, ambiguous news). The valence of the assessment will drive the continuation of goal if the assessment is positive or a revision of the goal if the assessment is negative.

The coding categories used to identify single entity teleological or life-cycle processes at the alliance level of analysis were derived from prior literature on the alliance change processes (de Rond and Bouchikhi, 2004; Bunderson et al., 2000; Poole et al., 2000). Alliance teleological processes involve the interaction of the alliance members; thus in order to carry out the alliance-level goals, actors *negotiate*, *commit* and *execute* the alliance tasks. Negotiation events occur when parties directly interact with each other by proposing, persuading, discussing or haggling over possible expectations, terms and procedures of their relationship. Commitment events exhibiting joint decision or agreement were made about what one or both of the parties will or will not do with respect to their relationship. Execution events are actions or behaviors undertaken that carry out or administer the formal or informal commitments existing between the parties.

Depending on the sequencing of the events, the code *execution* may indicate life-cycle or teleological processes for the alliance. For instance, in life-cycle processes *negotiation* typically occurs at the beginning of a process at the time of *formation*. In teleological processes *negotiation* and *execution* of tasks will be ongoing and iterative. Table 2 indicates the queries used to identify teleological processes where sensemaking, assessment, negotiation, commitment and execution categories are directly tied to the goal setting of the firm or alliance entity.

Dialectical change processes can have a unitary sequence but lack a program, code or sequencing device. The outcomes are unpredictable, so the code category *unexpected* captures the extent to which the outcome was unpredictable. The entities interact and confront one another. There must be an exchange between firms or between a firm and the alliance. Conflict and contradiction is important to the change process. Categories used for coding included conflict, confrontation or tension indicate when entities engaged in public disagreement, displayed opposing views, or pursued lawsuits. *Conflict* events are the confrontation between parties where the interacting parties possess opposing views. *Tension* indicates the presence of contradictory ideologies. There may be an ongoing tension that may or may not result in the domination of one ideology over another. Queries that indicate conflict or tension between two entities provide support for the presence of the dialectical motor (see Table 2).

Evolutionary change processes allow for a unitary sequence; there is a program, code or sequencing device based on resource scarcity, and goal setting is only possible for units within entities. There is a set of interacting entities – usually a population of firms or alliances – where all parties are affected by the same resource scarcity. However, the firms or alliances retained are better positioned for competition related to the resource constraint, while the firms or alliances poorly positioned are selected out of the population. The effects to the entire population are predictable. Competition is important to the change process. Codes that identify *context* events, which apply to all of the firms in the industry through the introduction of new *technology*, *regulation* or *macroeconomic* events, are used to identify a mechanism related to evolutionary change processes. This is followed by a period of competition as firms attempt to capture scarce resources. Context events indicate the extent to which the events are triggered by an external force for the firms. Context events mention an external environment incident beyond the control of the parties to the relationship. The use of queries as described in Table 2, identified the evolutionary motor related to context events, and involved multiple actors indicated by firm names, firms and the alliance, or the industry at large.

Inductive codes were developed directly from the interviews for themes related to particular strategies, for instance Loring's *market entry* into the western region or Whittier's market entry into the eastern region. The theme of the *geographic* and *cultural* differences shaped by the regions was also coded. *Personality* was also talked about as a major driver of the events in the interviews.

3.0.5 Analytical Approach for Process Identification

Analysis was conducted based on careful recording and coding of the results and iterations across and within the documents to identify patterns. The interviews were digitally tape-recorded and transcribed. The interviews were coded as soon as the transcriptions were available. Coding was accomplished in an iterative, inductive manner. However, the approach was also abductive, which requires iteration between retroduction (codes that emerge from the data) and deduction (codes that emerge from prior literature). Abduction refers to the use of both predetermined codes and codes that emerge from the data. The abductive approach allows the researcher to remain open to unique combinations of the four archetypal processes (Van de Ven, 2007). These codes included the "start list" derived from the Minnesota Innovation Research Program framework for the four archetypal change motors. A cycle between fine-grained specifics of each case and coarse grained bird's eye view identified patterns and trends in the coded event data.

Such an interpretive approach relies on the discourse of the text, which refers to the meaning derived from the framing of concepts in the archival materials and the language of the interview respondents. The discourse analysis requires a qualitative approach in order to uncover the meaning derived from the text (Fiss and Hirsch, 2005; Gephart, 1993). Other analytical approaches of text enumerate the frequency of word occurrences. However, the frequency of the word occurrences does not allow for full interpretation of the generative mechanisms within an in-depth case study. For example, the use of the word competition could indicate different meaning. Competition in one sense may refer to the industry concentration of the firms, therefore alluding to the evolutionary motor. However, competition may also be explained in terms of goal setting. For example, the statement 'our goal was to compete against 3M,' indicates a teleological motor. The coding framework was interpreted in terms of the theoretical mechanisms underlying the text, rather than the presence of the words alone. Thus, in employing the coding framework during the analysis, definitions for the codes and their interpretation were provided using the framework provided by Poole et al. (2000)[3].

In order to ensure reliability, the transcripts and archival material were coded by two independent researchers as suggested by Poole et al. (2000). Given the vast number of events, a random sample of 200 interview and weekly report events were used to calculate agreement. Inter-rater agreement was calculated using Cohen's Kappa as recommended by Poole et al. (2000). A matrix was developed to calculate the agreement across the events. A vector of the codes was placed on the top and the side of the matrix. The codes of the author were placed under the columns of the matrix, and the codes of the independent coder were placed according to the rows of the matrix. When both coders agreed on a code

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[3] See pages 104 through 111

for an event, the value 1 was placed in the appropriate cell on the diagonal (e.g., context, context). If the coders disagreed then the value 1 was placed in the appropriate off diagonal (e.g., goal, context)[4]. Landis and Koch (1977) propose that a Kappa greater than 0.80 indicates an acceptable level of agreement. Cohen's Kappa was calculated using SPSS. The equation for Cohen's Kappa is $\kappa = \frac{(overall\ agreement - chance\ agreement)}{(1 - chance\ agreement)}$ where chance agreement equals $\sum (R_i\ C_i / N)/N$ where R_i is the sum of all the codes in row i, and C_i is the sum of all of the codes in column i. The level of agreement was 0.945, which met the criteria for the acceptable level of agreement in similar process studies. Informants were also asked to interpret and verify incidents following their recollection of the sequence of events.

Matrices were constructed from the data in order to identify patterns, comparisons, trends and paradoxes (Maxwell, 2005). Qualitatively, the findings were placed into theoretical categories and compared against rival explanations (such as life cycle, dialectical, teleological and evolutionary explanations) following Yin (2003). Each interview was reread in order to develop short summaries. These summaries were used to develop the patterns across the interviews. This created the linkages needed to use quotes from the interviews representative of the coding framework. These quotes are filed in a database based on the categories. Table 2 provides the matrices created to identify the four archetypal motors based on keyword search using the coding

[4] Poole et al (2000) suggest including an additional category if the coders did not identify any codes for the event. In the present study such a category was not required.

framework. For example, I identified the evolutionary motor by using a query based on multiple firm codes and context events. Table 4 provides the matrices created to compare the combination of motors against other possible combinations of motors. For example, the conjunctive progression of teleology and evolutionary motors involves both a single actor's goal setting and a context event that applies to multiple actors.

I applied Denzin's (1970) concept of triangulation in order to compare the weekly industry reports with the events described from the interviews. This procedure assisted in building a timeline for the events. Appendix A provides a table of the 119 events derived from the weekly archival reports that directly pertain to the interview responses. The quotes included in the following sections are cross-referenced to Appendix A by a reference following the quote.

3.0.6 Threats to Internal, Statistical, External and Construct Validities

A number of relevant threats affect the design of this study. Firstly, is the narrative plausible? Pentland's (1999) five features of a story aim to address concerns of internal, external and construct validity concerns for a single case study. This study is based on a single case – it is not robust to alternative explanations. Thus, the results could be due to chance. However, if similar patterns emerge to the patterns from earlier process studies, this will provide some evidence that this case is not an idiosyncratic incident. In order to address internal validity issues, the queries were used to identify patterns and address rival explanations. The initial matrices were drawn from theory rather than inductive coding framework. This facilitated identification of processes that were not supported by the data.

Construct validity is also an issue for this study; the completeness of information shared by the key respondents may be a problem. The historical nature of this study may lend itself to ample sensemaking by the interview informants. Weick's (1995) emphasis on retrospective interpretation, "how can I know what I think until I see what I say" is highly applicable for the respondents asked to reflect on what happened in their past rather than in real-time. Yin (2003) suggests that multiple sources of evidence and close adherence to the selected measures can mitigate these risks. The interviews involved informants from diverse roles and experiences in the industry. These responses converged in terms of the interpretation of events despite such diversity. Moreover, the archival records included speculation and real-time reaction to the events so I could verify reactions and sentiments at the point of the incidents.

The methodology used for this research involved an in-depth single case study of the events leading up to and following the alliance termination from a utility industry. Qualitative interviews with key respondents and textual analysis of archival industry reports were used as sources of data. Coding schemes were developed abductively using a combination of deductive and inductive codes. The deductive coding framework identified categories tied to the theoretical life-cycle, teleological, dialectical and evolutionary change motors used by Van de Ven and his colleagues in the Minnesota Innovation Research Studies. Inductive codes that emerged from the data create a novel theory for explaining the events surrounding the termination. The next section describes the industry selected for the case study and describes the timeline for the events.

3.1 RESEARCH CONTEXT

3.1.0 Loring's Dominance and the Creation of the Logistics Network

In 1880 the Loring Company was founded as part of the Loring system throughout the continent. Up until 1956, the Loring Company was controlled by a firm called Nicollet in a neighboring country, but it remained federally regulated by Loring's national government. After 1956, it became Loring Enterprises which held Loring and an equipment supplier. Initially, its logistics network extended from the far west to the far east of the country. Remote areas were served by smaller companies that developed based upon regional needs, yet these initial independent providers were not connected to the larger Loring system (Babe, 1990). These interconnections would eventually require cooperation amongst firms.

Due to the vast geographic areas that the service was required to cover, the firms created a logistics system in order to provide economies of scale across varying population densities that could make the networks economically feasible. The location points were classified based on their proximity to the end user, the traffic they handled, and the interconnections between the different regions. In Loring's national market, only two of the most critical interconnection points were established: one in a city in the middle of the country with a population of

200,000 and supported by a regional firm called Alexandria and the other in the eastern region with the greatest proportion of the nation's population which was supported by Loring. At the time of the inception of the logistical framework, Loring controlled the switch in the nation's most populous city. This network hierarchy lasted into the 1980s when competition began across the continent in a service where the firms traditionally held a monopoly.

With the pre-1980s logistical architecture in place, Loring focused on serving the eastern markets and abandoned its western operations early on in the establishment of the industry. The eastern market holds the two largest cities in the nation, as well as the capital city where the main regulatory agency and the agency for industry and trade are also located. In the early 1900s, Loring's western region operations were purchased by the regional governments to form Whittier Government Company (known later as Whittier), Alexandria and Hopkins, all named after the states in which they are headquartered. This divestiture was due to Loring's lack of attention and development to the region as it grew (Babe, 1990). Further east, Loring maintained a stake in ownership in each of the four island-based regional companies even after it divested these small regional service providers. The rest of the nation was served by smaller region-based utilities. In 1987, the smaller players in the state on the western border of the nation and the furthest from Loring's main operations, merged to form the Plymouth Company.

While metropolitan centers were particularly profitable, most rural areas which cover the majority of the nation must operate at a loss. Most players were able to balance the expenses of serving their rural regions through cost-averaging and cross-subsidization by using the profits from urban areas to subsidize the losses from the rural areas. Loring's position in the most populous area of the nation was not simply borne out of its lucky geographic placement. Babe's (1990, p. 52) historical review of the industry concludes that Loring's advantageous position, "was certainly not 'thrust upon' it. Rather, the imperium it attained and currently enjoys was an outcome both of government privilege and of aggressive and frequently predatory business practices." Loring had successfully enacted its institutional environment to confer its positional advantage. At the time Babe wrote his book, Loring's holding company Loring Enterprises was the fourth largest company in the nation and held the monopoly supplier of industry equipment[5]. Loring's revenue accounted for 55 percent of the industry revenue. Furthermore, servicing most populous areas of the nation meant it serviced 62 percent of the nation's population.

3.1.1 The 'Phantom' Alliance

The logistical network needed to cover an enormous territory, which required interconnection and cooperation, to provide national service. In 1931 the implicit agreement of the Titan System was incepted. Babe (1990) describes it as a "phantom" due to the absence of formal arrangements. He states that the Titan

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[5] At one time, the supplier was a flagship company for the nation. By the early 2000s it became embroiled in accounting scandals. [82a]

System was non-existent in the law but fulfilled a variety of duties. The federal court judge defined its role as follows: “Titan System engages in planning for the construction and operation of the overall inter-regional network which is comprised of each member’s facilities; sets technical standards; establishes terms and conditions under which services will be provided by the members; performs a joint marketing function; determines rates; acts as the pivotal entity for negotiating and implementing agreements for the provision of international services; and operates a system of revenue sharing through the Titan System clearing house” (Babe, 1990, p. 94). Both national and regional governments could not get involved in Titan System’s activities because it lacked legal recognition.

By 1989, the regulatory body’s government investigations into Titan System’s implicit practices led to full national jurisdiction over the alliance activities. At the same time, the regulator separated which carriers would be protected as network-based service providers that provided the economies of scale for the necessary service across the nation. The separation defined the incumbent firms and the competitive firms, those that would provide competitive services encouraged by the regulatory body [1].

The revenue-sharing arrangement that was provided through Titan System as regulated by the regulatory body required that the Titan System member companies share their inter-regional transfer revenues. The revenue-sharing structure was based on the estimated costs of each of the member firms. Loring collected just over 50 percent of the overall pie of inter-regional transfer revenues.

By 1992, after a brief stint as Network Nation, the alliance was formalized into Perseus [3a]. The industry was consolidated around the alliance (Rugman and D'Cruz, 2000). Loring was the dominant contributor of resources and employees to the alliance. There was a unified voice to the regulatory body, technology acquisition and development, and market offering terms. In 1993, Perseus' revenue accounted for 78 percent of all of the industry's revenue in the nation. By then Perseus was formally run by a council that involved the chief executive officers from the incumbent network providers. Through Loring's own market power, it was able to control half of the seats on the council. Perseus consisted of three organizations that provided research and development; expedited the delivery of new innovations to the market; formed national network and service standards; managed and monitored the inter-regional network; administered the revenue-sharing plan for the inter-country interconnections; and provided a unified voice and single point of contact to the government. By 1998, Whittier began merger talks with potential competitors [29]. Loring's monopoly on the supply of network equipment priced it well above competitors (Rugman and D'Cruz, 2000). The other alliance members challenged Loring's industry leadership and questioned the survival of the alliance.

By early 1999 [Figure 1] Perseus was disbanded [35]. In mid-October of 1998, Whittier had entered into merger talks with Plymouth, another member of the Perseus alliance [36, 37]. One archival news source stated this arose from frustration from the recent negotiations with Loring over the launch of a new national network, leading Plymouth to seek a way out of the implicit agreement amongst the alliance of incumbent companies. Now Plymouth and Whittier could compete against the other Perseus member firms. Plymouth was rumored to believe that Loring was going to allow competitors into its own territory. Along with the plan to merge, Plymouth and Whittier quickly arranged for new competitive partners [64, 67a, 74b, 78b, 97]. The new arrangement would eliminate the newly merged company’s dependence on Loring’s national network and enable it to route its own services through its own national network in order to compete directly against Loring. In the media, the break-up of Loring is directly attributed to the fallout between Loring and Plymouth and its subsequent merger with Whittier. “Analysts say Loring has only itself to blame for creating a formidable new competitor. ‘Loring forced Plymouth into the hands of Whittier.’”

3.1.2 The Evolving Technology Infrastructure

Technological change is nothing new to this industry. Over time, managing these changes ushered in new opportunities that were either enacted cooperatively amongst the incumbents or competitively through new entrants. Intercommunity connection was typically provided through electrical components that were overseen by the alliance. Prior to the 1950s, the alliance leased lines from the other industries for interconnection. New technology was introduced in the 1950s and quickly became the most efficient technology for sending services over logistics networks, and by the end of the decade the alliance had developed an advanced network, using novel technology that stretched across the nation.

By the 1970s, the industry conceived of another type of service that would enable them to handle greater volume and offer other services, which developed into a new logistics network (Ogle, 1979). The national government was embroiled in inter-regional connection decisions for the alliance's network that allowed potential competitive service providers to compete in the 1980s [1]. A new platform installed in the late 1980s offered a potential opportunity for new competitors.

In 1992, regional connections for competitive firms were allowed to the main logistics network, and competition officially began in the nation [3a]. The incumbent network providers relied on the newer technology to deliver more services to consumers using the existing network, with further enhancements using technology that could handle greater volume and service requirements into the late 1990s [3b]. By 1996, entrants from another industry were able to use a similar technology on their own logistics networks to compete for the same service [15]. The two infrastructure-based industries were suggested to converge by being able to provide nearly the same services. Today, Loring, Whittier and others have full networks stretching across the nation [Figure 2], enabling competition against all incumbents and competitive firms in all regions. Interestingly, what lies between the technological and regulatory changes is the termination of the alliance.

3.1.3 Conclusion

This section has outlined the history of the critical infrastructure industry companies' physical and social networks. Over time the alliance encountered technological and institutional change, and tensions between the competing goals for growth amongst the individual partner firms. Yet it is unclear why the alliance could not sustain itself through the last iteration of change, and why the firms would move toward the organizational forms that they did and selected the inter-firm relationships that followed. The past literature on alliance formation suggests the most prominent firm enjoys a position of control, enabling the firm to seek out optimal patterns of relational benefits (Gulati and Gargiulo, 2003). Yet Loring continued to decline, and the other firms continued to shift their inter-firm relationships away from Loring. Thus, the next section systematically assesses the presence of the change motors surrounding the termination in order to understand how the change in the industry happened.

CHAPTER 4: RESULTS AND GENERATIVE MECHANISMS

4.0 Introduction

This section presents the findings and results from the archival materials and interviews. The first section develops the results of the change processes according to the four archetypal motors, leading up to and following the termination. Representative quotes from the interviews are included in tables and discussed within the text. The following section reports on the intersection of the generative mechanisms in order to develop novel theory.

Archetypal Motors of Organizational Change Surrounding Alliance Termination

4.1 Introduction

The results of the change processes surrounding the termination are organized using Van de Ven and Poole’s (1995) typology for organizational change. Each of the four theories for change processes, life cycle, teleology, evolutionary and dialectical, are present in the findings with weak support for the life cycle motor. The dialectical and teleological motors had strong support throughout the events surrounding the termination. Evolutionary mechanisms are also present and served as enabling and disabling forces for the alliance and the firms. Quotes that provide evidence for each of the change motors are captured by the queries noted in Chapter 3. The exemplary quotes that support the respective change motors are included in Table 3.

4.1.1 Life Cycle

The life-cycle motor of change is a linear prescribed mode of change and occurs at the level of analysis of a single entity. The early organizational research was characterized by such processes where alliances began through a phase of commitment formation, establishment and the decision to grow the purpose of the alliance or terminate (de Rond, 2003). Life-cycle processes are prescribed, occurring as expected without missing a phase of change. The process involves a single entity, whether a firm or the alliance. Alliance terminations within the life-cycle motor case are expected, after a process of formation and execution of its purpose. However, the life-cycle models are criticized for the lack of empirical evidence to support their predicted linear sequences (de Rond, 2003). In Murray and Mahon (1993), the life-cycle process represents the convex relationship of the investment of resources into the alliance over time. The alliance progresses in a linear sequence through courtship, negotiation, start-up, maintenance and termination. Termination appears as a final stage of the process.

The events showed weak support for the life-cycle motor. Negotiation was present throughout the existence of the alliance, rather than simply as a stage before start-up. Similarly, firms tried to maintain the operation of activities following the alliance termination that had once occurred within the alliance. The evidence suggests that the processes surrounding the termination were not presented in a linear sequence (see Table 2).

4.1.1.1 Courtship, Negotiation and Start-Up

According to Murray and Mahon (1993), the courtship, negotiation and start-up phases for alliances are linear. For Perseus, the start-up phase existed in parallel to the courtship and negotiation phases. Perseus already was performing shared engineering tasks for the logistics network and revenue distribution in its earlier incarnation as the Titan System. Courtship and negotiation happened simultaneously, between CEOs Mike Smith of Loring Enterprises and Bob Jones of Plymouth, “The organization was really started by this mind meld or bonding between Mike Smith and Bob Jones.”[CD] Due to the dominant positions of Loring and Plymouth, convincing the other firms happened relatively easily:

> “I would say the genesis for Perseus was a conversation that my then boss Mike Smith had with Bob Jones. It was very clear that something needed to be done to provide more seamless national offerings. It was launched with much fanfare at the start. My sense is that it was Bob Jones and Mike who willed it into existence. Their bonding was critical. They were by far and away the key players. The eastern companies were pretty much controlled by Loring. They were so much in the Loring camp that they would go along under certain circumstances. The other western companies basically came along as well.” [CD] [3a]

So the structure of the activities was planned almost simultaneously with the new form of the alliance. Perseus consisted of three divisions. The logistics network division evolved from the legacy Titan System alliance and managed the logistics network engineering. The policy division handled regulatory issues. The largest division managed the whole alliance, marketing plans and technology development. In terms of starting up the alliance, Loring committed nearly its entire marketing team and the high level engineering of the logistics network. Yet each of the member firms dedicated resources and employees according to their distinctive competencies.

> “The concept of Perseus had three facets. The first was to incorporate into Perseus the network engineering associated with the Titan System. They were administering the national logistics network, and their most important role was dividing up the money because they had the settlement process, so that was one organization. The network management group was headed by a fellow from the eastern islands. The second one that was put in was the government lobbying organization, and that became the Perseus Policy Division. The Perseus Policy Division was headed by a lobbyist from Plymouth. The largest organization by far was Perseus Central Inc. The first two divisions were a couple of hundred employees. When Perseus Central was put together it was a significant size with a couple of thousand people. Loring contributed its entire corporate marketing and technology development organizations. Who had headed that division in Loring came in to be the head of Perseus Central. They were the head of Perseus and then each of the members contributed various marketing or technology groups where they had expertise. They all became part of this umbrella organization. The head of Perseus Central was given the job of running it and organizing it.” [CD]

The formation of Perseus began successfully. However, the resource commitments made by Loring and the firm’s influential role in founding the alliance placed the firm in a dominant position. From Loring’s perspective, the member firms simply complied.

4.1.1.2 Maintenance and Termination

The prominent position of Loring was present from Perseus’ inception, given the number of resources Loring dedicated to the alliance. Loring had roughly a 55 percent stake in the alliance. Due to the number of activities carried out by the alliance, decision making and negotiation were ongoing. A council of CEOs from the member firms met regularly in order to make decisions.

Plymouth’s CEO Bob Jones was the chair of the council of the CEOs. One of the largest challenges for Perseus Central at the start up was to move Perseus away from the consensus system of decision making used for logistics network decisions under the Titan System. In order to maintain Perseus’ activities, Perseus Central invested in consultants to develop a system of controls and culture in order to treat the member firms as the customers of the alliance. Unlike the Titan System, the alliance was too complex for the member firms to simply comply and execute tasks. The alliance became an organizational entity with its own culture.

While the formation of Perseus was sudden, the member firms gradually withdrew their support of the alliance over time. In support of Murray and Mahon’s (1993) argument, the resources dedicated to the Perseus alliance were slowly withdrawn over time. “Perseus was gradually reduced in size over about three years.” [AB] Yet there were still reasons to keep the alliance going, and negotiations continued amongst the member firms in order to deploy new services. Just five weeks before the alliance was dissolved, a public announcement went out for a new partnership with a foreign service provider for new business services “Calhoun and Perseus will provide continental one-stop-shopping for businesses for a range of their respective services and will enable businesses to consolidate their bills for volume discounts.”

There was also evidence that the regulatory and competitive environments could still support the existence of the alliance. On the regulatory side, “there was a very clear sense that the government didn’t want to handicap the companies so that they wouldn't be effective national champions. From 1993 to 1995 we were stick handling the case, which went very well and very much in the Perseus companies' favor."[CD][15] On the side of competition, "The thing though that kept Perseus together was the fact that Nicollet Nation was actually doing pretty well at that time, and there was a clear need to keep a national offering. The second thing was that it would have been politically suicidal for Loring to have said 'no we want to wrap the whole thing up,' so basically we had to make do with it."[CD][29] Despite these reasons to keep the alliance going, there were other challenges that seemed too difficult for the alliance to overcome.

By 1998 the CEO of Perseus Central saw signs that activities within the alliance were slowing and encouraged the member firms to dissolve the alliance. However, the members of the alliance did not achieve consensus to dissolve the alliance. This point also does not support the life-cycle motor which would suggest there is consensus that the alliance terminated at its natural end. Due to the vast number of activities that occurred within the alliance, the negotiations and planning for the dissolution took several months:

> "So it took me many months to try to convince them that they should do this, and I think it was partly because they weren't ready because they had become reliant. If you could imagine the number of agreements that there were, there were all of the interconnection agreements, and the national products events. We dissolved in 1999; I started the dissolution in the beginning of 1998. Then I guess it took about six months of negotiation just to unwind all of the agreements, pension plans; it was a big job to unwind it." [AB] [35, 39a]

By July 1999, Perseus Logistics Network Division was the last component of the alliance's structure to dissolve [69]. Despite the dissolution, many of the activities and routines of the alliance were sticky and remained well after the termination (Szulanski, 1996).

4.1.1.3 Post- Termination

Even after the Perseus alliance dissolved, many firms and employees took time to adjust to the new competitive structure. In the past, employees at the member firms sought positions in Perseus in order to signal their potential for promotion within their home organizations. Perseus had adopted progressive management techniques, carefully planned the organizational culture, and used cross-functional teams to handle the member firm needs. Some of the member firms, in contrast, used heavily hierarchical structures and bureaucratic control systems. As part of the dissolution, most of the employees found their way back into their home organizations. At the time of dissolution, the CEO of Perseus Central reflected on the unique culture of Perseus:

> "The culture that was created at Perseus was something that I never experienced before, and it was a great company to work for. We changed a lot of the ways in which we worked, and people really worked well in teams. So I think people were sorry to leave. They all said it was one of the best experiences that they ever had. So it was kind of mixed blessings that they were glad that they worked at Perseus. We had a big party at the end called 'Hasta la Vista' Perseus. Big blow out." [CS, 40a/b]

A former manager at Perseus recalled:

> "After the formation emerged the most amazing organization that I've ever experienced in my life, and everyone that was part of that transformation it's almost like we were all part of a fraternity. It's like you can't explain to other people how good it was, particularly in the incumbent network companies. In Perseus we really took seriously getting the culture right. So what emerged from that was just an amazing organization where people were so motivated and produced such innovative things, and you know for a period of time it was just amazing." [OP]

For many employees such an organizational environment was difficult to move away from, and many of the employees continued to interact following the dissolution.

After the dissolution employees tried to cooperate in whatever areas they still could. Moreover, because of the nature of the industry, interconnections in the logistical network were still a problem. Many of the firms kept separate divisions to handle sales, competitive firms for interconnection, and the logistics network. For Whittier, it took until November 2001 to finally adopt a completely separate logistics platform from the one used by Perseus [117]. In the meantime, former Perseus employees found a variety of ways to cooperate:

> "After the dissolution? Well in some ways some of them kind of floundered because they had grown to rely on others to do things for them. And what I heard was that they would call the people that they had worked with before and get on the phone and try to solve problems together. Even though there wasn't a Perseus they would work together on things that weren't competitive. They'd try to replicate Perseus to figure things out."[AB]

Thus despite the fact that the alliance had terminated, many of the activities continued for a significant period of time following the termination.

In sum, while the termination event itself was singular and did not iterate, many of the other alliance processes did not follow unitary sequential stages. There was a lack of consensus on the termination of the Perseus alliance that spurred on intense negotiations well until the dissolution.

Given the persistence of the alliance routines following the dissolution, the psychological contracts where individuals developed a shared understanding of one another's purposes and expectations may in fact withstand alliance dissolution. Ring and Van de Ven's (1994) influential paper on the processes of interorganizational processes argues the commitment to an alliance becomes socially embedded in the individuals who interact, and their interactions reinforce the commitment to the alliance. They argue these cooperative interactions come to an end following a breach or lapse of commitment to the alliance. Yet even in the absence of the alliance structure following the termination, such social embeddedness remains after the crucial role relationships end, as long as the individuals from the alliance continue to be employed within the same sector. Most importantly, the termination did not end the processes of the alliance; activities in the industry continued to be shaped by the alliance well after the termination, illustrating a lack of support for the alliance life-cycle motor of change.

4.1.2 Teleology

The teleological motor of change is not a linear mode of change; it is constructive and occurs at the level of analysis of a single entity. The majority of organizational research dedicated to alliance processes emphasizes the teleological motor, where alliances iterate through negotiation, commitment and execution are maintained through a sense of equity and efficiency (Ring and Van de Ven, 1994; Doz, 1996). Alliance terminations in this case result from a lapse in commitment through the completion of a goal, or dissatisfaction with a shared goal through a failure to achieve equity and efficiency amongst the entities participating in the alliance. Termination appears as a final stage of the process;

even in past teleological studies of firms learning from termination, researchers compare a failed alliance to a successful alliance in parallel rather than sequentially to show how the failure changed the subsequent routines (e.g. Arino and de la Torre, 1998; de Rond, 2003). Teleological processes – unlike prescribed life-cycle processes – may produce constructive or seemingly unexpected change. The process remains within a single entity, whether a firm or the alliance. At the firm level, firms establish goals and strategy based upon their level of satisfaction with the strategy; they may be compelled to reassess the strategy and the subsequent goals and initiate a new period of change.

In this section I develop the evidence for the teleological processes that surrounded the termination. The member firms, in addition to the alliance, displayed changes in purpose that involve the termination of the alliance. Unlike the life-cycle motor, these shifts in goals were not sequential but iterative as firms gained feedback. Throughout the time periods surrounding (precdeding, during and following) the termination there was strong support for the teleological motor.

4.1.2.1 Alliance level Teleology

The complexity of the Perseus alliance required it to execute a variety of tasks which mandated the council of CEOs continually negotiate and commit resources to the alliance. The firms required this collaborative effort to reap cooperative rents from the alliance. The iterative process Perseus undertook is characteristic of teleological processes in alliances. At formation, the purpose for Perseus evolved from the “mind meld” of Loring and Plymouth’s CEOs in order to share logistics network engineering, marketing and regulatory activities, spurred on by the presence of competition from Nicollet Nation. The presence of a common competitor provided a sufficient purpose for a strategy to grow the activities of the alliance. Heider's (1954) balance theory proposes "an enemy's enemy is my friend" reinforces the incumbent firms' commitment to the alliance. The entrance of competitive firms kept the incumbent firms loyal to the alliance. A former manager from Perseus recounted,

> "Competitors didn't have to contribute to the local services in the same way that the incumbent companies did. This really gave the competitors a business model to offer big discounts on their logistics network service. This really scared the incumbent companies because competition on the logistics network service was the golden goose that was under attack. Plus the new companies had one big thing that the other established companies did not have, they were national whereas you had these individual companies that were the incumbents. So that was the essential logic to create Perseus. Our golden goose is under attack, we're a whole bunch of regional players, and we're competing against national players. We need to band together and operate like a national player."[OP]

The underlying teleological processes that shaped the alliance were driven by perceptions that the alliance was the most efficient form for coping with competition. The member firms remained committed to the alliance as long as each member believed that the competition was a credible threat.

4.1.2.2 Firm Level Teleology

The differences in goals and leadership amongst the focal firms Whittier, Loring and Plymouth became critical to the events leading up to the termination and what unfolded afterward. Despite the member firms' commitment, each firm simultaneously was developing its own strategy shaped by the firm's geographical market region.

In order to balance the needs of cooperating in the alliance and the losses due to the entrance of new competitors, several of the member firms had to enter international markets for growth [33, 38]. Yet some of the member firms were too small and lacked the economies of scale to make such a strategy viable. One of Whittier's executives recalls:

> "We wanted to find a way to get into a much broader market. We weren't really all excited about going internationally, because we would be competing against large companies from other countries. We were a pretty small company, so we were not interested in tangling with those guys, and we certainly didn't have the internal resources or the internal knowledge to do that."[SA]

Whittier had started early on in the Perseus alliance to actively construct its opportunities. As one executive from Loring and Perseus recalled at the time of the Perseus formation: "The real wild card was Whittier, and it had just gone public, the CEO there at the time was fairly national in his thinking."[CD][2] Whittier began to shift its regulatory strategy, seeking growth in the national market. Whittier also actively recruited a new CEO Sam Adams, who came from Nicollet's holding company in the neighboring country to help enact these new goals. Sam Adams remembered,

> "My issue as the new CEO was to, you know, try to help the company continue to grow and I questioned the recruiting firm that brought me in, 'Why me?' The board of Whittier decided that they didn't have anybody internally who could take the company to where they wanted to go, so they started to looking south to someone who had had experience in going from a monopoly to an unregulated business and came up with me. So I

> had a mandate from the board to help the company grow to make it more competitive.”[SA][4]

In order to make the company more competitive, Sam Adams developed Whittier’s capabilities for managing the regulatory authorities by hiring the former head of the competition bureau. The new member of the executive team previously had tried finding evidence that could dissolve Perseus as a cartel in his former role as head of the national anti-trust bureau. The new executive vice-president of Whittier shared the goal of making the company competitive by growing its activities within the nation. The new executive vice president explained,

> “The three of us were planning the evolution of Whittier and how we wanted it to behave in the market and grow. We decided it was in the best interest of Whittier and its shareholders to basically pull out of Perseus, and when we did that Perseus effectively disintegrated. Whittier decided that it wanted to pursue opportunities outside of the region in other parts of the country.” [PH][14]

At the same time, such a move would require more effort than changing the national regulatory policy. Whittier faced other constraints; they would also need to expand their logistics network and gain national expertise.

Whittier required the assistance of other firms in order to execute its strategy. The firm considered a variety of alternatives, eventually settling on the pursuit of acquiring the major competitor of Perseus at the time, Nicollet Nation. In particular, Whittier sought to compete in the lucrative eastern market directly against Loring, the most powerful member of Perseus. In the end it was the pursuit of this goal which produced the constructive change associated with the teleological motor.

> "Whittier was the predominant incumbent in its region and for the company to continue to grow it had to go outside of the region. To do it on its own ticket required acquisitions or mergers. Our belief was that we could do a better job on our own from outside of the region, particularly in the east where the bulk of the population is, than for us to go deeper into the west or somewhere else to provide growth opportunities from our shareholders. We had to move out from the region, and we decided to move east and the moment we did that, and frankly reflecting on it now I think that move was one of the most significant things for the logistics network industry in decades. I'm convinced that had we not done that you would not see Whittier in the east competing head to head with Loring and vice versa. Such a change just wouldn't have happened."[PH][29, 67a]

Whittier examined a number of possible alternatives from acquiring a competitor to merging with another member of the alliance [29, 34, 36].

As Whittier was executing its growth strategy, Loring also developed its own strategy that put the two firms ideologically at odds with one another. Loring was often referred to as the "flagship firm" of the country. This was due to the vast scope and scale of Loring's activities that were so much larger than the other firms. In the interviews, Loring was often referred to using a parental metaphor, "Loring in my terms, they were a pretty benevolent mother. I mean they took care of the Perseus member companies, and those companies were pretty small potatoes."[SA] Similarly, "Loring was the biggest, and they wanted everyone to follow them. It was like the big brother and the rest behaved as though 'I'm not going to do what the big brother says.' So it was quite a group of companies that had their own personalities."[AB] During the period of investigation, Loring experienced more lawsuits, executive changes and restructuring, and larger acquisitions and divestitures than any of the firms in the industry.

Loring's influence, however, provided the initial impetus for the member firms' commitment to the alliance. It was the affinity between Bob Jones of Plymouth and Mike Smith of Loring that allowed the expansion of the purpose of the original Titan System agreement into the Perseus alliance, but shortly after formation Mike Smith left Loring to head up and rescue its equipment division. It was suggested that the new CEO and president of Loring did not share the same working relationship with Bob Jones. [8]

> "I think, in fact, the only reason why Perseus got off the ground was that Jones and Smith hit it off and they trusted each other. So clearly one of the big lessons here is personal relationships really matter. Loring was going through a very big catharsis. The old line Loring guys, for us it was clear that maybe we should go on to other challenges, and the Loring people were starting to bring in people from outside. As a result they brought in a new president and before too long there was an interim CEO. The real player was the president of the company. It was clear almost from the get go that this president and his team were not sure that they liked all of the engines of their success being operated by people outside of their direct control. So that immediately started to put on some pressure, and I'm not sure whether the new president and Bob Jones, the chair of the Perseus executive council, got on as well as they should."[CD]

By 1997, Mike Smith was back at the helm of Loring [25]. As one former executive at Loring remembers, Smith had a clear set of goals to turn Loring around, "Loring did a couple of things, by then the former Loring management was hoovered out. Smith was now back in charge, and he had some very clear agendas."[CD] Smith was known for his capability as an architect of business deals, "The other thing with Mike Smith was he was a deal maker, if you knew him as a CEO, he was at his best when he was making a deal."[AB][26, 32, 38, 39b, 61, 75, 98] Loring moved to pursue growth in the international market and develop a convergence strategy by acquiring other firms across the sector.

Loring had two international ventures, Logistics Netglobe, and Loring International. Logistics Netglobe participated in the Perseus alliance and was responsible for all logistics network interconnections between countries. The company had a monopoly on the interconnections that ended in 1997 [27]. Loring International was a conglomerate of all of Loring's international activities. Before Mike Smith rejoined Loring, the previous president, through Perseus, had initiated a project to expand its network across the world [17]. An industry analyst commented, "The last President at Loring was there to lead something which was to network up the world, and it was a Perseus initiative."[MN]

In order to pursue a global strategy, Loring needed an influx of capital to satisfy its goal to fully acquire Logistics Netglobe.

> "We had to go more international, and that led us to the acquisition of Logistics Netglobe. We recognized that in order to do the Logistics Netglobe deal, and to invest in supplies, and launch new technology, and to bring out all of the new services, we didn't have the financial capacity. So we sold 20 percent of the company to a company in the neighboring country, and we saw that as an opportunity to one get money. We got a couple of billion dollars for that. We also recognized that they would have the expertise in foreign ventures." [CD] [32, 61, 65, 85]

Loring's strategy was aimed at developing growth internationally. Yet Loring had to secure the domestic market in order to manage the new risks that the company took on.

4.1.3 Dialectic

Dialectical generative change mechanisms develop from partisan interdependent groups with conflicting and opposing views that represent a thesis and antithesis that confront one another in order to produce a new synthesis (Hargrave and Van de Ven, 2006). Dialectical approaches often involve institutional change through social movements. For example, questions related to the dialectical motor ask, "How do institutions emerge to facilitate or constrain social movements?" (Hargrave and Van de Ven, 2006, p. 967). Actors are distributed in a network and are embedded in a political process of enacting a new institutional arrangement.

There is strong support for the dialectical motor driving change associated with the termination. The institution in this study refers to the industry regulation that shapes the nature and structure of competition in the industry. The dissolution of the Perseus alliance marked a dramatic shift in the context of competition in the industry. The dialectical thesis was formed on the backbone of the Perseus alliance – a unified front of the incumbent network firms to compete against competitive network firms such as Nicollet Nation. The anti-thesis was represented by Whittier's goal to become a national competitive firm. Whittier held the opposing view to implement competition throughout the country for all firms on all services. The two sides represented mutually exclusive ideologies. The firms involved confronted each other and engaged in conflict which produced novel change.

In 1992, the vision for competition in the country had been to separate the incumbent and the competitive network firms, with the understanding that incumbent firms would remain in their respective regions. This duopoly of competition between incumbent and competitive firms characterized the thesis. By 1998, the seeds were planted for a new concept of competition where all firms could compete against one another in all regions, thus representing an antithesis. In other words, incumbents would now compete against other incumbents. After the Perseus dissolution, the head of the regulatory commission recalled,

> "It came down to the big players Whittier and Loring. I've talked to the people, who worked at Whittier not long after the Whittier-Plymouth merger, and they told me that working inside that environment, public enemy number one was not Nicollet Nation and the other competitive firms. Public enemy number one for Whittier was Loring because Loring was moving out west and stealing away their customers, and their attitude was, 'We're going into the east and we're going to steal their customers.'" [CD][67a, 68]

Conflict and confrontation supported by both sides of the dialectic. Both sets of actors and firms acknowledged their opposing views over the nature of competition as an institutional problem.

4.1.3.1 Thesis

The thesis was represented by Loring, which following the 1992 regulatory decision to introduce competition and the convergence hearings in 1994, was able to successfully protect the incumbents from national competitors. The alliance paved the way for the formation of Perseus and Loring's convergence strategy that would enable the alliance members to compete against new network technologies developed by the competitors in the future. Unlike other nations, the regulatory framework introduced competition without breaking up Loring into smaller firms as an attempt to control a monopoly. The Perseus firms could exist in their current form and compete against firms classified as competitors. Nicollet Nation provided sufficient competition so the regulators would allow for an alliance amongst Loring. The industry was structured as a duopoly, Perseus members primarily were in competition with Nicollet Nation.

Loring's logic to the national market remained the same throughout the century. The ideal of having one integrated logistics network where firms could compete in different regions on other services was an extension of this vision. The Perseus firms would resell their integrated national network to the competitors. The competitors would compete in each of the various regions, and Perseus would distribute the rents from the resale of the network.

For Loring, the duopoly regulatory framework worked as long as the incumbent firms seemed to know their place. However, executives from Loring remarked on the opposition they received from Whittier,

> "The other incumbent players, particularly the smaller ones, they were used to a clubby type of atmosphere. Everybody kind of knew their place, knew their place in the universe. Sam Adams from Whittier had some trouble with that, so I believe with Mike Smith leaving and with Sam Adams coming in the dynamics started to shift off course. I have no idea what the tensions were or whatever issues that Bob Jones the head of the Perseus executive council was facing, both with Sam Adams who was his next-door neighbor, and with Loring's president. Those relationships were important, and what really made the alliance go at the start was this sense that there was absolutely a common enemy, there were common interests, but there had to be a lot of mutual trust and respect." [CD][4, 8]

Yet Sam Adams was brought into Whittier with a mandate to become nationally competitive. For Loring, this threatened the informal contract established through Perseus that assumed the firms would not compete against each other in their respective regions. While Loring was successful in managing the regulatory environment into 1994, the arrival of Sam Adams threatened the existence of alliance by directly confronting the members of Perseus.

> “The negative was there was a change in the management at Whittier, and the chap who came in was imported from the neighboring country, a fellow by the name of Sam Adams, not a bad guy, but he clearly had a mission to make Whittier a much bigger player than it was, and he very quickly started to snipe at the alliance. He had a major problem because he had been a part of the Nicollet world, but our partner in the neighboring country in those days really was Calhoun who was the arch enemies of Nicollet. Sam Adams really had great difficulty with that, and so that started to sow what I will call the seeds of discontent.”[CD][61]

The personalities and perceptions of discontent became particularly difficult for the leadership at Perseus to manage. At the same time, Loring struggled with attaining the necessary capital that would maintain a scope and scale for the firm that would continue Loring’s position as the industry leader and global competitor.

The introduction of Sam Adams to Whittier’s leadership presented a difficult opponent for Loring and Perseus. “I wouldn't just put it on Sam Adams, but Sam Adams was the catalyst. On an interpersonal basis, he wasn't the most tactful person, and he was brought in to make change, so I can understand what he did.”[AB] Loring’s thesis assumed that the competitive threat would exist outside of the alliance. Instead, the firms faced a different threat of conflict from within the alliance’s own members and divided the Perseus member firms.

4.1.3.2 Antithesis

Prior to Sam Adams arrival, the tension between ideologies began when Whittier and Loring engaged in confrontation over the regulatory frameworks. When Whittier began to file its rulings separately, Perseus contacted Whittier.

> "I remember there had been a call from someone at Perseus to someone at Whittier saying, 'How could you have filed that agreement without telling us first and getting our permission?' So on the regulatory front there was tension building there." [IJ][3]

Whittier's ideology was to construct a different framework that would allow them to compete nationally outside of the Whittier region.

> "When Whittier filed the evidence in 1993 for the regulatory framework, it was Whittier that requested that the regulatory body open up the whole network for competition. So that was in Whittier's 1993 submission, not in Nicollet Nation's submission and not in any of the competitors' submissions and certainly not in Perseus' submission. Everyone else's regulatory framework submission assumed that there would be a natural monopoly of Loring and Perseus. Whittier did not make that assumption and assumed instead that there would not be a monopoly and proceeded to move ahead with competition. I was told by the national regulatory staff that they basically adopted Whittier's proposal to go with one approach, but they would take Loring's approach for a different issue and a one last revenue requirement prior to that. So we essentially had ourselves going into another disagreement with Perseus."[IJ]

Whittier began enacting a regulatory approach of competition for both incumbent and competitive firms. Competition for all firms was antithetical to the Loring and Perseus' duopoly competition thesis.

Although the regulatory body had accommodated Whittier's proposal, Whittier was unable to pursue its approach single-handedly. An executive from Perseus had referred to Whittier as an "identity crisis" as they viewed Whittier's filings as only slightly different [AB]. Whittier, on the other hand, saw these filings as an opportunity to shape the future of the industry and improve its chance of survival.

> "So there was still some cooperation between the regulatory departments, but there was always some tension because Whittier always had these different views, and Loring would say, 'Well you can't file that the filing; is not good for us or the Perseus companies.' But we would say, 'It's the best thing for the industry, and if as a whole we don't do that, then in five or six years we're going to be in big trouble. So at the regulatory level there were all of these battles between Whittier and Loring and the other Perseus companies. A number of times New Brighton would pipe up and be on our side, but they were beaten back."[IJ]

Loring's position was challenged incrementally, but Whittier had yet to establish itself as a legitimate threat. For a period of time New Brighton was seen as a more innovative firm than Whittier, yet neither of the firms could yet compete directly against Loring.

When Sam Adams arrived, the executive team decided that the Perseus arrangement was preventing Whittier from achieving its goal of competing nationally. Sam Adams described this decision,

> "As I saw it the Perseus arrangement was too stifling. I used to say, 'We're in a regional jail,' we can do what we want in our region. But if you are a monopoly or basically having 90 plus market share having the only path to growth is just by how fast the industry in that region can grow, I was unsatisfied with that. Well, that was basically the motivation for us to start looking around for some alliance, realizing that it would likely upset Perseus a lot, if not destroy it, and as we analyzed it said well it's probably worth it so off we went."[SA]

Another member of the Whittier executive reflects,

> "I guess it wasn't a friendly parting of the ways in the sense that relationships seem to be working well in the minds of certain members in the way that it was, you know, a comfortable known relationship. Parties were not competing physically in each others' territories, and it was relatively stable. So when Whittier decided that it wanted to pursue

> opportunities outside of our region, in other parts of the country, it was met with obvious resistance, and to be able to do that we had to withdraw from Perseus."[PH]

Whittier's decision to withdraw from the alliance moved their competition framework from an "identity crisis" to a legitimate threat.

4.1.4 Evolutionary

Evolutionary motors of change represent change through competition for scarce resources caused by exogenous constraints in the external environment. While the meta-narrative for the industry during the period of study was competition, the actors and firms were actively involved in harnessing both technological and regulatory change. As such, I argue that there is moderate evidence for the evolutionary motor throughout the period of investigation but the events gave primacy to the teleological and dialectical motors. The evolutionary motor most often appeared in conjunction with the other motors. The evolutionary mechanism, in its purest sense, acted as an exogenous shock and was most clearly evident in the events following the September 11, 2001 terrorist attacks on the World Trade Center and the economic recession associated with the deepening of the dot-com bubble [112]. Several firms began to struggle in 2000. Milton, Translucent and Logistics Netglobe were all facing financial difficulty [96, 105]. Accounting scandals also were prevalent. Loring's alliance partner in the neighboring country became known for one of the largest accounting scandals of its time [76]. The supply division of Loring, which Loring divested in early 2000, was under investigation for financial mismanagement [82]. These events seemed to escalate Whittier's success and Loring's problematic attempts to raise capital.

Firms were actively engaged in shaping these evolutionary forces. Whittier was actively shaping the institutional framework that would define how and on what services the firms would compete with one another. New technology also was readily available, which created another opportunity for Whittier. The costs of building a network across the nation had decreased. However, the executives interviewed downplayed the importance of the new technology in the termination of the alliance and the events that ensued.

4.1.4.1 Regulatory

Change to the regulatory environment can also be treated as an exogenous shock (e.g. Khanna and Pelepu, 1999; Wade, Swaminathan and Saxon, 1998). The regulatory environment surrounding the alliance termination was in transition. Globally, critical infrastructure firms were being split into smaller companies and faced an influx of competitors due to regulatory shift favoring anti-trust. The Perseus companies feared the introduction of competition would be approached in the same manner. In 1992, Loring was concerned the competitors would be unfairly protected, so Loring advocated for a duopoly framework.

> "At that stage, the national logistics network scene was highly fragmented. We were having difficulty both in the marketplace and with regulators because the regulators were really looking to foster competition and unfairly protect them. More to the point probably handicap us, and it was becoming apparent that the offering of our competitors and the main one in those days really was Nicollet Nation, and it became apparent that they were going to have a national offering."[CD][2b]

After Perseus was established to cope with national competition, Loring coped with the new regulation by pursuing its global strategy for growth.

> “Unless the government changed it’s regulatory and industry views the regulatory and allowed for a single national company, we were all going to get marginalized and ultimately just be picked off. So that we felt if we couldn't expand more nationally, we had to go more international.”[CD]

Loring’s approach assumed the existing regulatory framework would remain as the status quo. Throughout the period of investigation, in each round of regulatory hearings, Loring was primarily concerned with protecting its market from positive policy in favor of Loring’s competitors. In July 2001, Loring launched a public relations campaign:

> “Loring published full-page ads in five newspapers, arguing that government policy should rely on market forces to determine which companies succeed or fail. The ads are part of a campaign to counter Nicollet Nation's lobbying for new rules favoring competitive firms.”[94b]

Yet the competitive structure of the industry was about to change due to an influx of new technology. Competitors could bypass Perseus’ logistics network by simply building their own. The decreased cost of the network and the potential for new services also were about to create change for the competitive structure industry.

4.1.4.2 Technological

Technological change is treated as a disruptive evolutionary force that punctuates two different periods of equilibrium (Schumpeter, 1934; Romanelli and Tushman, 1994; Tripsas, 1997). Surrounding the alliance termination, an influx of competition was reducing rents on the traditional services of the industry [18]. Some executives had suggested since the attractiveness of the competitive logistics network services had been reduced by competition so significantly, the financial incentives to continue the Perseus alliance had also ended. At the same time, new technology that could expand the services on the logistics network and a service that could substitute the physical network offered potential opportunities to evolve the alliance as it had in its earlier incarnations. Also, the presence of the new millennium and the prospects of future services developed on novel platforms created excess production of key network supplies, driving the costs of the new technology down. Yet the influx of the new technology did not facilitate a new cooperative agreement on different logistical network services for Perseus' members. Instead, a number of new competitors entered the environment, providing opportunities for Whittier when the new entrants struggled and failed.

Loring had tried to negotiate a new network using the newer technology that could be shared by the Perseus firms, but the network did not materialize until after the termination [39b, 60]. Whittier was already moving ahead with plans for its own national network [69a]. Interestingly, the dissolution of Perseus was not attributed to the negotiations surrounding the implementation of the new logistics network that would allow for expanded services. As one executive recalls, "Once Whittier had bought Plymouth, there was no Perseus. I think it was more about that than it was about negotiating the building of the new network across the country."[MN] Also, in terms of Whittier's competitive entrance into the eastern market, the technology was not seen as a barrier nor was it viewed as a driver of its strategic intent.

> "Well we, Whittier, obviously we put that new network in, but that's the easy part. The hard part is really cracking a market because that's what we knew was very difficult to come into, and that's why our initial intent was either Nicollet Nation or Milton because they had the people that knew

> how to do it, and they had been through that. We were all brand new at that sort of thing."[SA]

Establishing Whittier's own competitive network further legitimated its attempt at becoming a national competitor.

> "We knew that if we were going to get together and go into competition with Loring, we had to get our own network. We had to be credible in the market; the people who had their own networks other than Perseus were Nicollet Nation and Milton. So we said, 'Well we need a logistics network and at the time it was a lot of money but on the scale of things putting in a new network at least until the most populous city was not all that difficult.' There were companies very happy to do it. So we said, 'Just for credibility sake we needed to get a network out there to show that we were serious,' and we'd run it into the most populous city, which was of course the biggest business center in the nation, to show that we had credibility. So there was really not that much negotiation on that. We all said we had to do that and it was just a matter of fact."[SA]

The dissolution of the alliance was not directly attributed to the technological or regulatory change. Whittier was actively leveraging opportunities created by the technological and regulatory change. On the other hand, Loring made heavy investments that put the firm at an evolutionary disadvantage, particularly in the onset of the recession following the dot-com bubble.

Interaction of the Motors of Organizational Change Surrounding Alliance Termination

4.2 Introduction

The previous section disclosed the evidence that adheres most closely to each of the archetypal motors. In the narrative that unfolded, the teleological, evolutionary and dialectical processes, rather than appearing in isolation appeared in conjunction, linking the events leading up to the termination to the events that followed the termination. These results suggest the termination is an important event to subsequent relationship formation decisions embedded within multiple organizational change processes.

Figures 4 and 5 represent the mapping process of the events to the change processes drawn from the queries and the theoretical model abstracted from the narrative. Moving from the left of the diagram to the right, the change process unfolds through the interaction of evolutionary and teleological forces of change to iterations of the dialectical and teleological forces of change. The last period from 1999 to the beginning of 2002 marked another period of teleological and evolutionary change, heavily shaped by the earlier dialectic. Initially, the evolutionary and teleological motors, through regulatory change and the teleological goals of Whittier, led to questions of the equity of the Perseus alliance, building up to the dialectical opposing forces. The influx of competition and lack of growth opportunities induced Whittier to seek growth nationally. Whittier executed these goals by using human capital to shape the regulatory framework in its favor. As the teleological process iterated, the dialectic between Whittier and Loring grew. Loring became increasingly entrenched in its strategic position. The confluence of the dialectical and teleological processes was punctuated by the alliance termination. The dialectical pressures became so conflicted that the other Perseus member firms also had to question the efficiency of the alliance. Whittier's position as the antithesis was legitimated by the event. As Whittier continued to enact its goals, the evolutionary environment rewarded Whittier's decision making through market growth in the substitute network technology. On the other hand, the interaction of the evolutionary environment and Loring's goals proved detrimental for Loring. Loring was overcommitted to many underperforming ventures highly susceptible to the economic recession.

The following sections highlight the interactions of the change motors. Exemplary quotes provide the evidence of the conjunctive change processes creating novel change in the critical infrastructure industry through the framing of the termination event used as a change mechanism in the critical infrastructure industry.

4.2.1 Equity and Regulatory Change 1997 to 1998

The first period, leading up to the termination emphasized the evolutionary motor through regulatory change and the teleological motor through equity, one of the necessary conditions for firms to maintain commitment to an alliance. From 1992 to 1998 the Perseus firms adjusted to the influx of competition and regulatory change. While the Perseus alliance was established in response to regulatory change emerging from the late 1980s, the regulatory changes continued into the mid-1990s. In order for an alliance to continue, the parties must maintain a perception of equity, where the benefits are distributed fairly based on each firms level of input (Van de Ven and Ring, 1994). However, Whittier's strategy co-evolved with these regulatory changes, as the firm discovered potential growth opportunities and put the equity of the alliance in question.

> “Whittier had just gone public, so I think in 1992 a couple of years before I arrived and also the regulatory authorities had decided to introduce competition into the market. So the people on the board of Whittier decided that they didn’t have anybody internally who could take the company where they want to go.”[SA][1]

The Perseus companies had to cope with evolving their legacy payment systems in order to handle competitive logistics network traffic. The legacy payment systems existed since the 1950s. The other member firms were not interested in Whittier’s approach.

> “It was changing public policy and regulation that started to nip away at this whole system that had been erected in the 1950s. So the Perseus companies were naturally opposed to any change. The previous contribution system paid up for the lack of revenues on services. The companies were not interested in sitting and talking about how we were going to introduce competition into their services.”[MN]

While Loring resisted the threat of preferential regulatory treatment for the competition, Whittier saw other opportunities. The regulatory framework created uncertainty concerning regulation that could privilege the competition.

> “If you didn’t have to contribute to the local service as the local incumbent companies did, this really gave the competitors a business model to offer big discounts on your logistics network service for the competitors. This really scared the incumbent companies.” [OP]

Important to the purpose of the Perseus alliance was the distribution of inter-regional logistic network connection revenue. Higher traffic regions were capable of earning greater revenue and supporting more advanced distribution systems, but less populated regions required transfer payments to remain profitable. The remote networks also were needed as components of the logistics network in order to maintain national coverage. As the environment changed, the perception of equity of the revenue-sharing system came under duress. Initially the ability to cooperate in the alliance was in part driven by “how much do I get” which resulted from the initial need of basic interconnection of the logistics network:

> “The Titan System was created with the responsibility of payment distribution. It was not an incorporated company; it was just an association of companies. They managed the network, and they managed the contribution from one company to another. So the richer companies paid the less endowed companies a contribution. Alexandria was a net beneficiary of that, as was Hopkins and Whittier. They got a net contribution from that, and so Plymouth and Loring were largely the paymasters here to the rest of these companies. So when the whole attack on the payment system came to get rid of this payment system, this awful system of the rich guys pay the poor guys system. So the whole Titan System was quite glued around contribution, ‘How much do I get?’”[MN]

The former head of the regulatory board recalled a similar tension,

> “There were a lot of strains within that alliance even back then long before like the nineties if you will back in the – I’d say in the mid-seventies and even into the eighties – there were a lot of strains on or tension within the system. Part of it had to do with the various payment agreements and so on, where some companies felt that they were paying out more than they got back in transfer payments from companies like Alexandria and Hopkins for carrying traffic across the country.”[KL]

Once Nicollet Nation entered the market and Perseus was formed, the focus of the payments shifted to those received from the competitors. Perseus’ Policy Division was to manage the regulatory decisions related to the interconnection payments from competitor firms such as Nicollet Nation.

Early on in the Perseus alliance, Whittier viewed Perseus’ policy arguments as ineffective in order to sustain the industry. As the head of the regulatory commission recalled,

> "I can remember on a number of occasions where my colleagues at Whittier had come up with great ideas for new products and services to offer, most particularly because of the regional natural resource endowments in Whittier's region, largely driven by what was going on in the major industry that Whittier served. So those companies were looking for particular services to be able to utilize. We'd have these meetings with Loring in front of all of the Perseus companies, and the folks from Whittier would say, 'Well look, we think we should be doing this,' and it became what we all characterized as 'the not invented here syndrome' with Loring. If Loring hadn't thought of it and did all of the product development work on it then they weren't interested in it. If they weren't interested in it, then we couldn't get anything moving. So, I think Whittier – and I think largely because of the nature of its business customers – they were getting very frustrated by lack of cooperation from Loring. I think it is fair to say that some of the strains within the alliance went right back to that and then later on as competition started to grow." [KL]

Such inequity in terms of outcomes of service development and opportunity for future growth spurred Whittier to recruit outside counsel and file its arguments for the payment agreements separately. In some instances Perseus agreed they would handle one set of arguments, and Whittier would handle the other. Whittier's strategic position continued to materialize. One of Whittier's former legal counsel recalls:

> "I got a call from Whittier in the fall of 1992, and I was asked if I could help them with their payment agreement. It caused all sorts of furor across the country because everyone across the country liked the 1985 agreement. So already we were in the bad books with the Perseus people. They didn't like the fact that we wanted to go our own way on those. Whittier started to say 'We don't agree with Loring,' that called the shots for Perseus on regulatory matters. So Whittier started to go on its own. All of the other Perseus companies led by Loring had one submission with the regulatory body. Whittier at that time had its own submission to the regulatory body. Then it was Whittier and Perseus dealing with how we were going to handle with two major proceedings at the same time as price caps and the regional competition case. It was agreed that Whittier would be the lead company on the competition case, and Loring would focus its attention on the price caps. It was good that Loring had backed off and let Whittier do that case. At the same time Whittier couldn't agree with

> Loring on what to do or what should be done on the price cap case, so Whittier filed its own price cap evidence as well."[IJ][3, 15]

In terms of both technology development and the distribution of revenue in the regulatory framework, Perseus member firms were unable to commit to a course of action that was deemed equitable for all of the alliance members. While the purpose of Perseus was meant to provide a united front to competition, the foundation for commitment to the alliance based on a sense of equity was under stress from the inception of the alliance and exacerbated by the changing environmental conditions.

4.2.2 Efficiency, Empire Building, Confrontation and Termination 1998 to 1999

From 1998 to 1999, the dialectical forces took hold as conflict and confrontation ensued amongst the alliance members stimulated by the entrenched teleological forces that divided the alliance members. The second condition required to maintain commitment to an alliance is efficiency. The alliance as an organizational form has to satisfy the condition where the joint profits also maximize the individual wealth for each of the member firms (Van de Ven and Ring, 1994). In other words, maintaining the alliance is a more attractive strategy than all of the other possible strategies for each of the member firms. Initially, Whittier was the only firm to question the efficiency of the alliance. However, the burgeoning dialectic between Whittier and Loring through Perseus eventually caused all of the members to question the efficiency of the Perseus alliance. Ultimately, the commitment from the alliance members was no longer sufficient to maintain the alliance. The Perseus alliance terminated at the apex of the dialectic and teleological change processes.

Leading up to the tension, competitive firms were taking away market share and revenue from their logistics network. Originally, the competition through the presence of a mutual goal kept the Perseus member firms' interests aligned. However, Whittier sought an alternate solution and began developing an alternate strategy. Instead of pursuing growth outside of the country, Whittier enacted policy that would attempt to protect the industry from price wars. The policy would enable the firms to compete against one another and allow Whittier to compete against Loring. Despite the fact that the remaining member firms typically followed Loring, each firm had a unique identity shaped by their regional cultural and market differences. Loring and Perseus faced the challenge of maintaining commitment amongst all of these partisan actors and firms.

4.2.2.1 Empire Building

Extant literature on cooperative interorganizational relationships suggests as firms interact with one another, their identity becomes more similar and cohesion will increase over time (Ring and Van de Ven, 1994; Gulati and Gargiulo, 1998). The necessary level of shared identity failed to materialize amongst the alliance members. In several of the interviews, the firms as well as the personalities of the CEOs diverged. The personality of the CEOs and the organizational culture of the member firms also perpetuated distinct firm level strategies. The personality differences amongst the CEOs and the firms affected the negotiation and execution of Perseus' tasks creating inefficiency.

> "It was interesting. You had such different personalities in the companies. You had the small member firms that were extremely innovative like New Brighton and Whittier. We used to call Whittier the 'identity crisis' because even if they wanted to be the same they had to be slightly different and do it on their own." [AB]

Coordinating these different organizational cultures within the Perseus alliance was particularly challenging.

> "The member companies were spread around the country, so initially it was pretty challenging because not only did we have people coming from different cultures, but we didn't have any processes in place. It was rather chaotic."[OP]

The geographic and market differences that shaped the organizational cultures as well as the individual differences amongst the CEOs, which some participants referred to as "egos," began to push the levers of dialectical change.

> "By then personalities were just generally starting to get in the way. In particular the Loring people were very resentful that given that their marketplace was under huge attack – although Plymouth was also experiencing this as well – Loring felt too many of the shots were being called. Too many of the resources were being sucked up trying to be responsive to also the needs of the eastern island companies and the Hopkins and Alexandria companies. So Loring always felt that they were not getting what they needed in support. At the same time the non-Loring companies were very afraid that they would be totally marginalized, and that they would not get the support that they needed. So tensions were very, very high. In fact it was the Perseus management team, whose job it was to keep all of the dogs at bay." [CD]

The Perseus management team faced incredible difficulty mitigating these conflicting personalities of the CEOs from the member firms. Whittier's CEO, Sam Adams, encouraged the tension.

"I think that it was more personalities. Bob Jones had been the chairman

> of the council of CEOs, and so his job was to get people aligned. Sam Adams was always a problem child. Bob Jones used to tear his hair out, 'What's the matter with these guys?'"[AB]

Both Loring and Whittier had few incentives to cooperate. The CEOs for both of the companies, one manager argued, were simply empire building, "It was all about their egos and who could build a bigger company." [EF]

4.2.2.2 Whittier's Teleology

Meanwhile, Whittier built the legitimacy of its strategy and antithetical position by pursuing alternate strategies that would satisfy the firm's goal as a national competitor. Whittier was forced to reconsider its goal of acquiring a national competitor when its attempts to acquire Nicollet Nation and then Milton failed. Whittier even considered merging with New Brighton, a firm that also was a member of the Perseus alliance. New Brighton possessed a similar proactive culture and was known for its capabilities in new technology development. New Brighton could complement the knowledge Whittier lacked in the eastern market. However, Whittier rejected the strategic alternative of acquiring another Perseus company.

> "At one point we thought the best thing that we could do was buy a national logistics network competitor and buy New Brighton, because New Brighton was so forward looking. New Brighton was quite different, and by buying New Brighton we would have a presence on the other side of the country. We'd have a bilingual company, and we didn't think we'd ever get Plymouth Corporation because that was owned by Woodbury, as was Plymouth."[IJ]

> "We did not initially consider an alliance with another Perseus company because that just made our jail bigger."[SA]

Instead of pursuing the acquisition of another Perseus firm, Whittier actively pursued negotiations to acquire Nicollet Nation.

> "So we looked first at acquisitions, and the first one we looked at was Nicollet Nation. It had grown up and, of course, I had connections there from my former life. It looked really good because they had been up there for quite a while, and it wasn't dominated by its namesake in the neighboring country. They were only using the Nicollet name. They were doing a fairly good job of making life unpleasant for Perseus. They were more broadly based and were operating pretty much throughout the nation. So that looked like a good place to go if we could buy them and we would get that foothold. We would also get some very talented people who had experience going into a competitive market which Whittier really didn't have."[SA]

When the potential acquisition was announced, the dissolution of Perseus became a realistic alternative for the Perseus members. Nicollet Nation's presence as a competitor was one of the core strategic threats that had united the Perseus firms. The official announcement in the industry weekly report appeared with a direct response from Loring:

> "Following a report published in the national newspaper, Whittier confirmed that it is 'in discussions with Nicollet Nation that could lead to a possible business combination.' Whittier may acquire the two-thirds stake in Nicollet Nation logistics network now held by three banks.
>
> Loring replied to the Whittier announcement with a statement that Perseus members are discussing how to realign their alliance 'to serve our customers and to look for new business opportunities.'"[29]

Sam Adams recalled Perseus' direct response:

> "Then we were looking around to acquire Nicollet Nation, and of course Perseus had heard about it. Perseus was very unhappy with us, and so they didn't know how Perseus could go along. We were then at all Perseus gatherings treated like we were 'skunks at the picnic,' which is very understandable. They of course didn't like Nicollet Nation. The fact that a Perseus company would purchase Nicollet Nation and go into business against them was not their idea of a good time."[SA]

Perseus began to simultaneously pursue steps to terminate the alliance. Sam Adams confronted Loring directly at the Perseus council meeting.

> "The reason that Whittier didn't like Perseus was that it was very, very restrictive. At one point I questioned the CEO of Loring, I said, 'You believe that Whittier cannot open any kind of business outside of its region,' and he said, 'that is absolutely right.' I said, 'so if I wanted to open a gas station in the east you guys would come against that and would call that a violation of the Perseus agreement?' and he said, 'Absolutely.'"[SA]

However, the successful execution of Whittier's strategy was yet to happen. The negotiations with Nicollet Nation lasted four months but then hit stumbling blocks.

After Whittier revealed its intentions to Perseus, Nicollet Nation withdrew from the deal. The head of the regulatory agency thought that this deal had the potential to advance competition in the industry and create novel change. Unfortunately for Whittier, the deal was blocked by the negotiations over who would lead the newly merged company:

> "They started talking with Nicollet, and I always was intrigued by the fact that the deal, had it gone through, I think would have made a huge difference to the competitive landscape. It came down to the personality of individuals involved. In that situation you had two strong-minded former Nicollet managers from the neighboring country. Sam Adams with Whittier and the CEO of Nicollet Nation at the time, who both agreed that this merger should take place, but who each wanted to run it. Since they could never get an agreement as to who was going to run it, the deal just fell through. So while in theory this merger would have been a huge boost to the competitive landscape because Whittier would have all of the sudden got the national network, which Nicollet Nation had and a fairly strong management team at Whittier. I had always considered Whittier's management team a pretty forward-looking team to manage and be a true competitor against Loring and the other companies. So as a result of personality conflict between the two CEOs it just never happened." [KL]

Whittier found the lapse in the deal a huge setback to the firm's strategy:

> "We were in talks for approximately three to four months and there was no doubt in anybody's mind that this was a good deal. But at the last minute I got a call from the CFO of Nicollet Nation that said, 'we're taking a different strategic direction – the talks are off we are not going to do the deal.' The news of course came like a thunderbolt to us. It was pretty embarrassing because while we hadn't announced that we had the deal it sounded like it was going to happen and then it just didn't. So that was a setback of fairly significant proportion."[SA]

Now that the survival of Perseus was under question, Whittier began to pursue other strategic alternatives and revise its strategy. The teleological motor of change for Whittier was being revised and updated.

Whittier moved to acquire another competitive national company, Milton Nation. Milton was also a nationally competitive firm that possessed a national network. Unfortunately for Whittier, Milton pulled out of the deal.

> "We were at loose ends that the deal with Nicollet Nation didn't work out. So what are we going to do now? The next thing we did, which was not public to my knowledge, now there might have been rumors, I mean rumors were everywhere. We initiated talks with Milton, and they were good. They were involved around the country. They had had bought a substitute network company. They were a reasonable second to Nicollet Nation in terms of being competitive against Perseus. We said, 'Okay let's try those guys.' So the talks went on with them for a much shorter time. We traveled down to Milton in the neighboring country and they loved it. They said, 'Although we don't control Milton. We support it, and we'll give you all of the support that you need if you do buy Milton Nation. We'll treat you as well as we treat them.' So those talks were quite in depth. They got past the philosophical and then into the financial. Then those talks broke down and the CEO finally decided. He said, 'Nah, I don't want to do this deal. I want to stay independent. I think it is better for the company.' So that cratered. By that time we were out of options as far as a fully competitive company goes."[SA][31, 63]

Whittier was now out of competitive alternatives and would once again have to revise the firm's strategy. Whittier achieved unexpected change through the next iteration of the firm's strategic course. The next step was to court another member of Perseus [36]. Such a move gained Whittier the positive feedback it needed to take the necessary steps forward to compete nationally.

Whittier then looked to its nearest neighbor, Plymouth. The two firms combined could provide the greatest market power needed to enter the eastern market. The regional proximity between Plymouth and Whittier also meant the two firms shared the most network interconnection with one another. The employees were used to working together, which would help speed up the post-merger implementation of the strategy. Sam Adams recalls the potential synergy in the deal with Plymouth:

> "So then we started looking around. We said, 'Well now what, we still didn't want to be in our regional jail.' The water at Perseus had been poisoned. So then we initiated talks with Plymouth, who we had a good relationship together.
>
> We all had pretty much the same technology thanks to Perseus. So it was more of a question of: 'Who do our people enjoy working with the most closely? Who have we got the most relationships with?' As our next-door neighbor obviously there were a lot more connections with them. We did a lot more business with them because there was a lot of Whittier-Plymouth business. So it seemed like a natural fit. Psychologically they seemed more like a fit too because they seemed to resent Loring and their domination of Perseus. So it didn't take a lot of talking to get them to consider getting together. We could go nationwide and go into competition against everyone else, and so obviously those talks were more productive than the talks with Nicollet or Milton."[SA][37]

The deal was announced one month after the dissolution of Perseus in the fall of 1998.

What provided the impetus for such an improbable union? Earlier, Plymouth had denied any interest in being acquired in the spring of 1998 and suggested “a merger would be inconsistent with its goals.”[31] Two weeks after Plymouth’s announcement, the company followed up with an announcement stating it was considering national and international growth opportunities [33]. Traditionally, Plymouth was viewed as supportive of Loring’s strategy. Other executives argued that Plymouth was more similar to Loring. Plymouth faced similar threats to Loring since Plymouth occupied the second largest market in the nation.

> “So people now had to pick dance partners. The alliance was done and it was okay, ‘Who’s got to pair up with whom.’ So it was not an easy decision for Plymouth because in a sense we were totally different. In the Perseus days we had more affinity with Loring than Whittier. It was very much in play at the time that Plymouth might merge with Loring. There were different options being considered.”[OP]

Yet the deal between Plymouth and Whittier moved forward and produced constructive change. One executive from Perseus recalled, “If anything it was: ‘You've got to be kidding,’ was the reaction, just because they were such unlikely partners.” [AB]

For Plymouth, a number of factors helped shift the company’s strategy. Environmental change concerning the regulations on foreign ownership was looming. [27] Plymouth and Grimsby were both partly owned by Woodbury Corporation located in the neighboring country.

> “I think really it was the price that was offered to the Plymouth shareholders that was really what drove the deal. They were partly owned by Woodbury, so there was a foreign investment issue that they were dealing with. The merger, in part, resolved the foreign investment issue.”[MN]

> "One thing that drove the Plymouth-Whittier merger was that Plymouth had a very large ownership from Woodbury. Woodbury decided it wanted out of foreign ventures, it had wanted out for some time. I think we even tried to help them figure it out. So Plymouth had always benefited from the Woodbury technologies which were relatively weak but not trivial. When Whittier and Plymouth came together they became very much an independent national entity." [CD]

Whittier entered into a merger of equals. The newly merged company could now compete nationally as a credible competitive threat to the other Perseus firms.

4.2.2.3 Whittier's Support from Unexpected Sources

Whittier was also able to gather support from unexpected sources. An important source of change from the dialectical motor is the network effect of bringing together distributed actors around a movement to create institutional change (Hargrave and Van de Ven, 2006). The chair of the regulatory board at the time was also in favor of expanding competition across the nation. He started his career at Loring in the early stages of Nicollet's presence in the market and worked on highly competitive services. From this experience the chair of the regulatory agency learned,

> "How much harder those of us worked at this whole exercise than our colleagues who were working on the monopoly side of this business. It seemed there was no sort of aggressive behavior in terms of really working hard to get this project done, because it is hard to get this competitive nature. So I jokingly tell people later on, while many people think of Loring as just being the big monopoly company, it was Loring the monopoly company that instilled in me the sort of competitive attitudes and the sort of comparative benefits of competition and what it meant in terms of your work ethic."[KL]

From this experience, the chair of the regulatory body learned in a duopoly setting the competitor did not possess the type of ingenuity competition was supposed to engender. During his time at the regulatory body, he insisted that Loring's approach, which supported a duopoly framework, was insufficient to truly establish competition across the nation.

Whittier benefited from the competitive frameworks implemented both internationally and within the country. Nationally, the inquiry taken against Perseus as a cartel supported Whittier's belief that the alliance should no longer exist.

> "The thing that calls to me and the Whittier folks to consider doing something different as a good thing was because it was virtually, I would hesitate to call Perseus exactly this, but it was a monopoly. It had actually been investigated a couple of times by the competition bureau; for whatever reason they never could find enough evidence to actually take them to court. The national anti-trust laws are much less stringent than in the neighboring country. Had they been in the neighboring country there is no question that the alliance would not survive."[SA]

In addition to the growth of anti-trust cases, there was also an increase in nationalism. The pressures related to limitations on foreign ownership placed a strain on Plymouth and Grimsby's ownership structure. The merger of equals with Whittier had offered Plymouth and Grimsby a way out of this regulatory problem. Importantly, Whittier was observing the problems with deregulation in the neighboring country. Whittier tried to avoid regulatory pitfalls.

> "We had set out to create the competition framework. We searched out the economics of competition law principles that should guide us in doing that. So it should have gone to the national jurisprudence, and there is hardly any national guidance on competition and the economics of competition, but we live right next door to the heart of free enterprise with more competition law and economics and 200 year history. So we went to

> the neighboring country to find all of these principles, and we applied them. We got this great decision. Then the neighboring country's industry act in 1996 came out and their government had cast aside 200 years of its development of free enterprise."[IJ]

Whittier enacted its regulatory environment to create a competitive environment where it could thrive. Sam Adams had experienced the introduction of competition in the neighboring country prior to joining Whittier. Paul Henry led the investigation against Perseus as a cartel on behalf of the competition bureau. Whittier also consulted with the foremost economists on competition policy for the industry. The regulatory environment played an important role in shaping the competitive context amongst the firms in the industry. Yet the regulations were not exogenously developed. The regulations co-evolved with Whittier's teleological process. Whittier took an active role in constructing a favorable regulatory environment.

Sam Adams also captured resourceful expertise when he hired the former head of the competition bureau. Paul Henry was unsuccessful at establishing evidence to suggest that Perseus was a cartel over a three-year investigation launched at the request of competitor firms.[14] Paul Henry joined the Whittier executive team to finish the work he had started in the competition bureau:

> "I remember I looked for documentation on Perseus' implicit agreement, when I was at the Agency I looked for it. It didn't exist. It struck me as anti-competitive, and I never found evidence when I was at the agency that would allow me to prosecute or take any judicial action against them. So what I couldn't do from the outside I could do from the inside."[PH][7]

Whittier also consulted with other experts on enacting a successful competitive framework, after observing regulatory problems in other countries.

Whittier contacted a prominent economist who helped them develop the best possible submissions to the regulatory body that would develop Whittier's proposed competitive structure. No matter what the outcome, Whittier believed these submissions would create a competitive environment consistent with its strategy.

> "Except for the group of us that worked on the regional competition case that got along very well with Perseus guys, it was only close to the end that the Loring guys wanted to back away from what Whittier was proposing in the regional competition case. They didn't think that we'd ever win. That was the difference between the regulatory approach that Whittier had which we always wanted to ask for what we thought was the right thing to do, you could disagree with what we did, but we always tried to apply those principles as faithfully as we could to ask for what we thought was the right thing. The response we got from Loring was 'Oh, well, you'll never win, so we should do this,' and be able to hold up the flag and say we won. Whittier always wanted to ask for what the right thing to do was, whether we won or lost, it wasn't important. We wanted to win, but we didn't want to ask for the wrong thing, which is what we found with Loring."[IJ]

Whittier successfully persisted with its competitive framework. However, it took the merger of equals with Plymouth for Whittier to find a partner with the capabilities to compete against the "benevolent mother."

Plymouth was an unlikely partner for Whittier from the perspective of Loring. Sam Adams had opposed the chair of the Perseus council. Bob Jones also was the CEO of Plymouth when he acted as the chair of the Perseus CEO council.[21] Yet Bob Jones' relationship with Loring was also uneasy, especially following Mike Smith's first departure from Loring. "Before too long Mike Smith is gone from Loring, and Bob Jones is the chair of Perseus, but he distrusted

Loring."[CD] The social capital lost through the CEO moves impeded the survival of Perseus and favored the position of Whittier. Despite the departure of Sam Adams and Paul Henry in 1999, the strategy and routines continued to develop Whittier's competitive presence in the eastern market through Bob Jones' leadership as the Chairman of the newly merged company. [74] In sum, Whittier continued to maintain its strategic objectives despite the departure of executives who were heavily involved in initiating the termination with Perseus.

The dialectical generative mechanisms were present between the two opposing forces – Loring and Perseus versus Whittier – that shaped the institutional framework for competition for all firms in the nation. Loring's reaction was to repress, deny or ignore the conflict. Loring continued to file the same regulatory submissions supporting the duopoly and enhanced its national presence by integrating the remaining members. Whittier had used the termination of Perseus to ignite change and gain legitimacy as a national competitor. Yet even after the alliance termination, Loring continued its national integration strategy. Loring's resources dedicated to the heavy integration of the network, as well as its capability as "the benevolent mother," prevented it from pursuing other strategic alternatives. In the weekly industry reports following the termination, the alliance seemingly existed in another form with Loring and the remaining firms dubbed the "Loring alliance" or "Loring camp."

Whittier, on the other hand, had broken free of the alliance and became a national competitor. The firm was now capable of fully executing a nationally competitive strategy. In order to manage the dialectic, Whittier initially had to decouple its activities of cooperating within the alliance and competing with other firms in order to gain support in determining the regulatory framework. Whittier's regulatory submissions were used carefully to develop a framework for its competitive strategy. Moreover, Whittier's political actions fed the termination of the alliance, which allowed for Whittier to have a legitimate position as a national competitor.

4.2.2.4 Perseus Inefficiency and Dissolution

As discussed earlier, the intersection of the evolutionary and teleological motors motivated terminating the alliance but the dialectic through the use of conflict enables the members to reach a decision to dissolve the alliance. In the meantime, the Perseus firms had to adjust their own strategies to face a new national competitor without the support of the alliance. In the early half of the nineties, Perseus' member firms began to enter international markets in order to maintain growth. This strategy enabled the firms to buffer any potential losses due to the influx of national competition in 1992[2]. By pursuing opportunities internationally, the implicit agreement amongst Perseus' members not to compete in each other's regions was upheld. Yet challenges to the global economy in the late 1990s, as well as new regulation related to foreign ownership and foreign competition, put pressure on international opportunities. [27] The alliance was no longer the superior strategy in the competitive environment enacted by Whittier. Now each Perseus firm would have to compete against each other. The former head of the regulatory body recounts the difficulty in maintaining the alliance given the member firms need for growth.

> "I think the problem for these companies was that they kept sending these filings in and saying 'In order to maintain market share we need to do x.' Finally, I called one of them into my office and said 'Read my lips, we want you to lose market share. You have to lose market share. The whole point of this competition is that some new entrant in this market is going to gain business, and you are going to have to lose some.' Of course if you've got 100 percent of the market and you are going to lose some of that market share, from a business point of view, you've got to say, 'Well our business is shrinking, so how to do we grow this business? We said we are going to have real competition here, and it should be open entry, and anyone should be able to get into this business and should be able to fail.' So with that prospect, I think a lot of the Perseus member companies said, 'Well we've got to look for other avenues to grow our business and to sustain ourselves. So let's see what those opportunities are,' and the opportunities they saw were outside of this alliance." [KL]

The member firms began to look outside of the alliance for growth opportunities. The alliance activities subsequently ground to a halt, particularly leading up to the termination. The alliance was inefficient as the former CEO of Perseus Central recalled,

> "The obvious indication of what was happening was that things just slowed down, nothing was happening, nobody was cooperating with anybody; what was needed to get done in the marketplace wasn't done. Things just ground to a halt. So my point to the members was that they weren't using the resources. This is ineffective, nothing is getting done, why do this?"[AB]

The inefficiency in use of the alliance processes motivated the CEO of Perseus Central to convince the member firms the alliance should be dissolved. The alliance was no longer fulfilling its purpose. [35]

The merger of equals between Plymouth and Whittier also meant the market power between the two companies enabled them to capture enough of the eastern market without sacrificing huge losses in their own region.

> "The geographic proximity seemed to make sense. The other reality is if you get together with Whittier, we accounted for a little less than 25 to 30 percent of the national market. Well that meant that we had 70 percent of the market to invade. So even if the rest of the country was twice as good as us at invading our territory as we were in theirs, we would still make more money. We had a bigger territory to invade."[OP]

Once Plymouth was on board, Whittier could move ahead with its entry into the Eastern market.

4.2.3 Recession, Partial Synthesis and New Strategic Positions from 1999 to 2002

The firms in the period following the termination of the alliance faced new evolutionary forces and teleological strategic positions heavily influenced by the Perseus dissolution. Loring struggled to maintain its industry leadership. The growth in the international market had declined. Loring was invested heavily in acquisitions based on a convergence strategy. The convergence strategy tied up any slack resources Loring may have used to face new competitors in its domestic market. Moreover, the remaining Perseus members were unsure of how to cooperate. Whittier, on the other hand, capitalized on several opportunities that allowed Whittier to enter Loring's most lucrative market.

4.2.3.1 Whittier's Lucky Streak: Excess Supply

Whittier's implementation of the merger of equals with Plymouth faced two key constraints – the CEO of the merged entity and the plan to create an independent logistics network. Much of the earlier leadership from Whittier departed within a year of the merger with Plymouth, due to employment conditions written into their contracts. Bob Jones from Plymouth, who formerly chaired Perseus' council of CEOs, became the chairman of the board for the newly merged company that retained the name Whittier. Sam Adams was initially announced to remain as the CEO, but he departed in the fall of 1999. [73, 74]

The new executive team continued to implement Whittier's strategy. Whittier acquired Grimsby in the eastern region as a remaining component of the Plymouth deal. [78a, 88] Whittier carried out a series of small acquisitions aimed at building its presence in the eastern market. [64, 78b, 107, 109] The most significant acquisition, announced in the summer of 2000, was of a competitive firm with a substitute network technology that would eventually become the growth engine for the industry. [97]

> "Very quickly it became a substitute network play. So that was how they looked at their purchase of Translucent, which was a clear signal loud and clear that they were coming into the east. Everybody knew they would, but this just made it absolutely possible. So Whittier's deal really was to substitute the network, and then it was becoming relatively easy to bring the logistics network into other parts of the country just as Nicollet did. Whittier also brought in a logistics network, but they were less in that field and more for the substitute network."[CD][100]

Whittier's strategy had benefited from both technological and evolutionary forces. Advances in logistics network technology were decreasing the costs of building networks. Leading up to a new millennium, suppliers speculated the demand for logistics networks would surge. A recession combined with excess supply made Whittier's entry into the eastern markets feasible. Moreover, the competitors who anticipated market growth and made costly investments early were now facing bankruptcy. Whittier could similarly afford to buy these firms. In the case of the substitute network technology, demand surged, and Whittier benefited. By the end of 2001, Whittier announced it had moved its logistics network to a new platform independent of the Perseus companies [117]. The growth of Whittier remained strong, and the company had established a competitive presence in the eastern region.

4.2.3.2 Loring's Unlucky Streak: Recession and Cash Crunch

Following the termination, Loring's entrenched strategy left the company susceptible to the evolutionary changes that unfolded. Loring tried to make the remaining Perseus companies more competitive by gaining capabilities through an alliance with Calhoun. Unfortunately the deal led to unexpected results, the company in the neighboring country that was supplying the capital was sold to Loring's competitor, Nicollet, in the neighboring country.

> "Unbeknownst to us the company in the neighboring country sold itself to Nicollet within six months of the alliance. So we never got anything from that. Basically what happened was that as the tech bubble ground to a halt, Loring found itself in a position that it had strengthened in national presence substantially. What we had had we needed nationally, but we had put ourselves in considerable jeopardy through the adventure through Logistics Netglobe, and there was a part of a transaction through the potential equity alliance partner which eventually turned into Nicollet. At the end of five years, there was both a put and a call so we could wind this all up at then market value. So then we decided that we were going to do that, and we were going to have to come up with a lot of money in order to do that. So that Loring's whole foreign venture plan ground to halt."[CD]

[60, 61, 75, 85, 93,114]
Loring had tied up significant capital in other investments domestically aimed at maintaining its industry leadership as a result of the dissolution of Perseus.

As a response to Whittier launching a competitive presence in the eastern market, Loring increased its stake in the companies located in the eastern islands and launched a competitive presence in Whittier's market by acquiring a 20 percent stake in Hopkins. The investment was worth roughly $700 million [68]. When the merger talks between Whittier and Nicollet Nation surfaced, Loring announced its national upgrade to the logistics network, which would require the cooperation of regional firms in the east and the west. The absence of Whittier and Plymouth from this network needed the support of another western regional company. Loring used Hopkins to facilitate an expansion into Whittier's market. The announcement in the weekly report read, "Loring also announced its intention to develop a national service delivering new services from coast to coast."[29]

Loring's duopoly ideology prevented the firm from adapting to change in the last period. Furthermore, Loring deepened its commitment to its strategic position in the sector by acquiring firms in related industries. Loring sought growth internationally and across industries to make up for its loss of market share from Nicollet's domestic competition. In 1998, Loring bought the remaining shares in a technology company that allowed it to expand globally. [38] By 2000, Loring would spend $2.3 billion dollars for a television station and form an alliance with a national newspaper. [98]

However, the recession dampened access to capital and a cash crunch from the Logistics Netglobe deal lead to significant problems for Loring.

> "The deal was a disaster, and that ultimately was the biggest single mistake that we made because for all sorts of reasons, not the least of which was the end of the economic bubble and equipment being priced to zero, that adventure basically put the company in significant jeopardy."[CD]

By 1999, Logistics Netglobe's share price had fallen, and it lost $2 billion worth of market value, which only continued to decline with investors alleging fraud.[93,95a] In 2000, Loring reduced its stake in its flagship supply company to 2 percent and reorganized its upper executive ranks.[82] By the end of 2001, Loring announced that it must "push cost-cutting."[118]

Loring's western joint venture with Hopkins was also in trouble. At the end of 2001, Hopkins announced greater losses and lower revenues than expected. The CEO of the western division also changed. [113] Loring announced that it "is negotiating more control" over the western venture [118]. Mike Smith retired in early 2002.

> "Mike retired a year later in part because he felt that he was the one to blame for Logistics Netglobe, and at that stage Loring then very much refocused itself on domestic business and deemphasized convergence except for a few services, and then hunkered down to become a cost effective national logistics network player, and that's where we are today."[CD]

Loring's position suffered from the evolutionary change motor triggered by the recession.

How could this happen to such a longstanding industry leader? Since its inception, Loring had received special national attention, and its goal of achieving a national network was viewed as part of Loring's "manifest destiny." When Whittier was privatized from its regional government in the early 1990s, Loring had appealed the decision. Loring argued that it should have first right of refusal to purchase Whittier based on the original agreement from the beginning of the century. One former executive even suggested Loring's troubles may have been avoided if it acquired all of the incumbent firms, "In some ways it would've worked better if Loring just bought everybody."[OP] Others viewed Loring's creation of Perseus as simply a non-equity take-over, "I think at the operations level, Loring's really, really heavy network integration was a cashless takeover of the member companies by Loring through technological or technical integration."[IJ]

The critical piece of Loring's duopoly strategy was to create convergence across all logistics network services to one network. The vision for some had been to create a consolidated network for all firms, incumbents and competitors,

> "The objective was to basically monopolize the logistics network and have everybody, whether it was Milton or Nicollet Nation or whoever, going off of the same network. There was an element in Loring and some of the other Perseus companies that still thought that the one big national logistics network would be the best way to go. So that was the theme, it was never debated in public. But there was a thread of it parts of the Perseus companies."[IJ]

The dissolution of Perseus and the merger of Whittier and Plymouth forced Loring to revisit its strategy but the firm was too entrenched in its position. Instead of moving towards more flexible organizational forms, Loring moved toward hierarchical ownership of the member firms rather than the using of alliances and contracts. In essence, Loring's strategy did not change significantly to the demands of the new competitive environment. Loring increased its stake in the eastern island companies and Hopkins as remaining Perseus firms, but the end result was dramatically different.

> "I used to say the thing that upset Loring the most about Whittier and Plymouth merging was their manifest destiny was destroyed. From my perspective Loring always believed that eventually it would become once again the national carrier." [IJ]

Loring no longer had the de facto position as the industry leader.

What is clear from the evidence presented surrounding the evolutionary mechanisms for change is that the evolutionary motor of change did not operate in isolation. Firms were using their strategic intentions to guide these changes in the external environment, representing a conjunctive process amongst the motors. Moreover, the termination of Perseus was unilaterally planned by Whittier, irrespective of the regulatory or technological opportunities that may have supported an evolution of the purpose of the alliance.

In sum, the change motors from the previous period influenced the firms' ability to survive the economic recession and heightened the level of competition. The divergent goals of Whittier to become a national competitor and the goal of Loring to maintain a unified national presence prevented the necessary sense of equity and efficiency required to maintain the commitment and execution of tasks in the Perseus alliance. The termination of the Perseus alliance marked a significant loss to Loring's goal of national integration. The dialectical change from the conflict between Loring and Whittier legitimated Whittier's strategy.

Evolutionary and teleological forces contributed to strengthen Whittier and weaken Loring, as the final arrows in Figure 5 illustrate. Loring suffered from setbacks in the convergence strategy and its international strategy; each goal took away resources from Loring's ability to revise its strategic course of action. Loring attempted to recover from the dissolution of Perseus by maintaining its ownership in the eastern islands and Hopkins. However, Loring faced a formidable new competitor in Whittier. Whittier had successfully enacted its goal of competing nationally.

In conclusion, there was evidence of the evolutionary mechanisms of change inducing competition over the scarcity of resources in the industry. However, the strategic positions of the firms involved in the Perseus alliance shaped the effects of these potentially exogenous forces from 1997 to 1998. In the next time period, from 1998 to 1999, Whittier actively created an environment in which it could compete successfully by guiding the regulatory framework; pursuing competitive opportunities in the eastern market through new technology; and using the dialectic to gain legitimacy. Loring's attempts to preserve the regulatory framework were met with opposition. The difficulties for Loring were further enhanced by the evolutionary forces in the last time period from 1999 through 2001. Loring's earlier investment in international logistics networks weakened Loring's position domestically, leaving the firm cash-deprived. The firm no longer possessed the necessary resources to survive an environment moving towards a recession and increased competition amongst all firms in the industry.

4.2.4 Conjunctive Processes where Termination is a Mechanism for Change

The previous sections developed evidence for the interaction of teleological, dialectical and evolutionary motors of change surrounding the alliance termination. The goal of the termination served as a unifying force for the antithetical firms and actors. Once the termination was achieved, the event shaped the subsequent events by legitimating the position of Whittier as a competitive firm. The process that unfolded surrounding the termination involves a conjunctive process of three motors. The model illustrating the interaction of the mechanisms and the related events are shown in Figures 4 and 5. Figure 6 summarizes the theoretical relationship amongst the motors and the termination.

Conjunctive progressions of processes suggest the elements of the process mechanisms may be related (Van de Ven, 2007). Events are causally intertwined, where mechanisms from one process may be related and influence mechanisms from another. The strategic intentions and environmental context of the firms became incorporated into the conflict between the strategic alliance members, which was then incorporated into the termination. The outcome of the termination event became incorporated into the subsequent strategic intentions and competitive struggle amongst the firms. The model also represents a recurrent progression where parts of the mechanisms may repeat over time. The model presented a recurrent progression through the interaction of the teleological and evolutionary change mechanisms. The teleological force iterated throughout the change process. Actors received negative feedback and revised their goals. Moreover, co-evolutionary forces in the first period continued to affect the outcomes of the firms in the final time period. Whittier found opportunities that continually complemented its strategy. In contrast, Loring's assumptions about the external environment continued to deplete the firm's resources.

The incorporation of the firms' strategic intentions using the teleological motor of change into the dialectical motor of change created conflicting partisan political actors. I argue the incorporation of the teleological motor and the dialectical motor facilitated the belief that the termination event legitimated Whittier's issue with the competition framework as an institutional problem.

In the early period of investigation, Whittier was viewed as a "problem child" through the trivially different stance it took on regulatory activities. The crucial move for Whittier was to recognize that terminating the alliance would invoke a series of political and rhetorical strategies stimulating a dialectic to usher change. Such an approach proved successful in achieving its strategic intention to compete nationally. By initiating the termination of the Perseus alliance, Whittier gathered significant support and was perceived as a real threat to the established Loring and Perseus paradigm. At this point, the interaction of the personalities from the partisan actors of Whittier and Loring contributed to a fury of empire building supported by the firms' proposed regulatory frameworks. In this framework, Whittier could be viewed as a national competitor rather than simply a regional player. Whittier gathered support from unlikely sources of power.

Loring, on the other hand, became further entrenched in its position by escalating its commitment to national network upgrades and its ownership of the remaining supportive firms. These actions expanded the sense of conflict and confrontation associated with the termination.

The actions on the part of Whittier can be viewed as means to gain support from key stakeholders – particularly potential mergers and acquisitions and the regulatory commission. Legitimacy is gained when actors affected by the same externalities endorse and support the organization's strategic intentions (Elsbach and Sutton, 1994)[6]. The dissatisfaction shared by Whittier's supporters for Perseus' goals and activities contributed human and social capital and moved Whittier closer to executing its strategic intentions[7] thereby creating the partisan actors who fuelled the dialectical motor. In the interviews, the personalities of the CEOs involved continued to drive the conflict between the two groups. The termination of the Perseus alliance represented a critical event that unified the key stakeholders supporting Whittier's approach to national competition. In order to

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[6] The dialectical process can also be described from the social movement literature. The social movement literature reflects four characteristics of institutional change processes (Hargrave and Van de Ven, 2006). Firstly, framing contests refer to the process whereby opposing actors, each seeking to achieve its goals, struggle against one another to frame and reframe the meanings of relevant issues and technologies. Secondly, institutional entrepreneurs enact the organizational fields in which their actions take place, by doing so they construct networks of complementary players. Institutional arrangements are enacted through the actions of the institutional entrepreneurs. Van de Ven and Garud (1993) provide a framework for such a component of institutional arrangement that can be enacted. In this case, they include institutional regulations which are sources that legitimate, regulate and standardize the nature of competition. Lastly, the collective action process reflects the political process of mobilizing campaigns for cognitive and sociopolitical legitimacy. For this study, the political process of the mobilizing campaign is deeply embedded in the alliance termination.

[7] The sentiment was so strong that a new competitive firm indicated they received substantial financial support because the industry stakeholders wanted to support any firm that would reduce Loring's monopoly [GH]

bring about the termination, Whittier pursued a seemingly illegitimate event by entering into merger negotiations with competitive firms. The legitimacy of these actions was based on the implicit agreement Perseus members had established not to compete within the other member's territory.

Termination events represent a particularly salient event for the actors involved. When termination is associated with conflict, the termination may have an even greater impact on interorganizational outcomes (Labianca and Brass, 2006; Greve, Baum, Mitsuhashi and Rowley, 2010). In this case, the events that led up to the termination involved the confluence of strategic intent and conflict, which was a mobilizing force that moved the alliance towards termination. Elsbach and Sutton (1994) found that illegitimate actions of marginal stakeholder groups actually served to legitimate the actions of other more mainstream partnerships. In essence, while the merger with Plymouth seemed highly unlikely, by the time the negotiations had failed with Nicollet Nation, Whittier's merger with Plymouth seemed justifiable. The confluence of the firms' actions to carry out their strategic intent fed the legitimacy of the positions of the two conflicting views of the institutional structure of competition.

Thus, the teleological mechanisms through the strategic intent of the firms – particularly for Whittier to dissolve the alliance – mobilizes and drives the dialectical force of conflict facilitating recognition of the institutional problem. The alliance termination served as such a mobilizing force through the creation of partisan political actors as well as a rhetorical strategy.

The evolutionary mechanism of change was also influenced by the confluence of dialectical and teleological forces through the alliance termination. Past literature (e.g. Rowley, Baum, Rao, Greve and Shipilov, 2005) assumes that alliance termination is the outcome of environmental selection rather than part of the political process of mobilizing change. The evidence from this research reveals the evolutionary mechanism weakened the position of the dialectical thesis of Loring and strengthened the position of Whittier as the antithesis. Importantly, the fit and adaptability of the firms in the presence of the environmental forces was shaped by the firms strategic initiatives and the human and social capital possessed by the firms.

The literature on business strategy, particularly from the evolutionary economics perspective by Nelson and Winter (1983), has embraced the influence of strategic choice and managerial action in evolutionary change. Lovas and Ghoshal's (2000) work on guided evolution suggests an internal ecology for organizational change where human and social capital – through the capabilities of particular managers and their relationships – drive the variation, selection and retention of particular strategies. In a similar form, the interviews provide evidence that the human and social capital played an important role in shaping the strategic intent of the member firms in order to deepen the dialectical conflict. Executives' affinity or distaste for cooperating with one another facilitated and destroyed potential deals. Moreover, the nature of the human and social capital, particularly the personalities and the ability of these individuals to commit and cooperate with one another, shaped the ongoing forces of evolutionary change.

In contrast to Lovas and Ghoshal (2000), the evolutionary process was across firms rather than within firms. Exogenous evolutionary change existed as a meta-narrative punctuated by the termination of the Perseus alliance. Initially the changes to the regulatory environment induced variation in the industry that compelled Loring to develop a strategic intent to provide a national integrated logistics network, a unified regulatory voice, and integrated national marketing campaigns. These requirements led to the formation of Perseus and facilitated its early adaptive fitness to the environment. However, Whittier also recognized a national opportunity. Yet the network technology was relatively unimportant to the formation of Whittier's goals. Whittier was more concerned with shaping the regulatory framework upon which it would compete. Human capital, through the personalities and skill sets of the partisan executives, and social capital, through the network of relationships possessed by the executives, produced a legitimate threat to the adaptive fitness of Perseus by creating an antithesis that destabilized the alliance. Only after the termination of the alliance did the new technology and changes in the environment exhibit a preference for Whittier's position as a national competitor.

To sum up, termination events are a guided component of evolutionary change shaped by firms' strategic direction. The termination punctuated an ongoing variation, selection and retention cycle because the termination event thrust the firms into a new period of change. Following the termination, firms entered a phase of "picking dance partners," where firms adjusted and revised their strategic intentions to conform to the termination event. The environment induced challenges for the firms, replicating the routines from the alliance, and strengthened the position of Whittier as the firm moved ahead to develop a competitive stance. Without the termination of the alliance, many of the Perseus member firms and Nicollet Nation, the main competitor, seemed prepared to continue their course of action regardless of the new technology or environmental threats at hand. The termination produced a new equilibrium in institutional arrangement on which firms would compete.

Thus, I argue that termination should not be viewed as the end of an evolutionary cycle, but as an important bridge between evolutionary and teleological cycles that increases the rate of change between one evolutionary cycle and the next. In order for this change to happen, the teleological and dialectical forces operate in an integrative fashion to move the firms towards the next cycle of evolutionary change.

CHAPTER 5: DISCUSSION AND CONCLUSION

5.0 Introduction

The findings from this study suggest alliance terminations act as important mechanisms to conjunctive change processes. In this study, three archetypal change processes were observed. The evolutionary change motor shaped the adaptive fitness of the firms' strategic intentions driven by the teleological change motor. Yet it was the firms' strategic intentions that brought about distinct change by engaging in confrontation and conflict propelled by the dialectical motor over the institutional mechanisms that produced the rules and guided the way the firms would compete. Thus, to answer the question raised at the outset of the research study, 'how do change processes unfold surrounding termination?' The change processes unfolded in a conjunctive interaction of three change motors each influencing and being shaped by the others. The change process exhibited goal-driven conflict which shaped the adaptive fitness of the alliance member firms. Thus, the time periods surrounding the termination invoked the teleological, dialectical and evolutionary change motors.

The next section discusses the theoretical implications of such findings. The results of this study contribute to the emerging literature on dialectics and social movements, which incorporate social network processes into organizational change (Hargrave and Van de Ven, 2006). The findings also are discussed in terms of their implications for the existing body of literature in the field of strategy based on evolutionary economics (Nelson and Winter, 1982), which emphasizes the teleological and evolutionary change motors. The next section addresses the managerial implications for understanding change processes surrounding a termination event. Finally, the chapter concludes with a brief summary of findings.

5.1 Discussion and Theoretical Implications

5.1.1 Dialectics and Social Movements

Institutions are the humanly devised frames, norms and regulations that enable and constrain individual behavior and make social life predictable and meaningful. Change is defined as an observed difference in form, quality or state over time in the institution being examined. Social movements are broadly understood as collective action. The collective action perspective emphasizes technology innovation and social movements (Hargrave and Van de Ven, 2006). In the collective action perspective researchers ask, “How can actors change institutional arrangements?” Collective action focuses on the construction of institutional arrangements. This perspective allows us to observe the collective action of an institutional arrangement among multiple actors at the industry, population or interorganizational field levels of analysis. By adding the collective action perspective, Hargrave and Van de Ven (2006) are able to introduce a model that views institutional change as a dialectical process in which partisan actors with conflicting views confront each other and engage in political behaviors that change institutions. The conflict between Loring and Whittier represented the stimulus for an institutional change to the rules of the game by which incumbents would compete in the industry following the termination of the Perseus alliance. Furthermore, the collective action view allows us to relate the findings to existing literature on alliances and networks which suggests termination is the end rather than an important event within conjunctive processes.

The collective action view of institutional innovation is supported by the literature on social movements. The social movement literature provides support for the collective action view of institutional innovation as used in Hargrave and Van de Ven (2006). Rucht (1999) defines social movements as “an action system comprised of mobilized networks of individuals, groups, and organizations which, based on a shared collective identity, attempt to achieve or prevent social change, predominantly by means of collective protest.” As McAdam et al. (1996) argue this process is dynamic and recursive through the interactive nature of relationships among macro and micro processes in social movements that are linked together by mechanisms such as trust networks. In the case of Perseus, the micro actions of Loring and Whittier, through their strategic intent, had profound effects on the alliance and the institutional rules related to national competition.

Using Alinsky’s (1971) “rules for radicals,” or the very similar Fligstein’s (1997) social skills of an institutional entrepreneur, we can point to where Loring failed to confer the benefits of its industry leadership position as an institutional entrepreneur. Loring had gone outside what the alliance could support by weakening its own position through its global and convergence strategies, rather than continuing to meet the technological needs of the alliance members. Unable to meet the needs of the Perseus firms, Loring failed to keep the pressure of Nicollet Nation relevant in order to unite the incumbents – in essence they failed to freeze the target and polarize it as Alinsky (1971) and Fligstein (1997) suggest. This created the opportunity for Whittier to court Plymouth and rally support around the dissolution of the alliance. Thus, the collective action approach through institutional change points to the importance of organizations endogenously enacting upon the external environment to induce institutional change.

Yet so far the social movement literature has not addressed alliance terminations as an important aspect of the change process. Past literature on collective action attempts to understand what increases actors' incentives to act (Chwe, 1999; Andrews and Biggs, 2006; Passy and Giugni, 2001). This body of work has emphasized the actors' proximity to the movement and the extent to which the movement is conveyed in the media. The findings of this research build on this body of work to suggest the termination itself can increase actors' thresholds to engage in collective action. The rhetoric of termination was present three years prior to the actual termination event and brought together human and social capital from unlikely sources. The presence of these actors facilitated the legitimacy of the conflict and change in institutional rules concerning national competition. At the point of the termination, Whittier was viewed as a legitimate threat and a national competitor.

5.1.2 Harnessing Evolutionary Processes through Termination

The findings of this research suggest that future studies of evolutionary economic processes need to incorporate termination into the formation of strategic intent, not simply as an outcome. The events surrounding the termination redefined the competitive landscape; for Loring the competition had shifted from Nicollet Nation to Whittier. Past competitive firms were now possible collaborators. Yet the termination dictated the availability of potential partners. For Whittier, the acquisition of Translucent, a competitive substitute network carrier, gave the firm a sustainable competitive advantage and adaptive fitness against the changing evolutionary forces.

Much of the social network literature on alliance formation and termination has taken an evolutionary stance. The integration of the evolutionary and institutional change perspectives allows us to understand “which structure” (in this case the alliance and its termination), “for which goals” (dealing with the enacted threat of competition), and “for whom” (the shift of the window of opportunity from Loring to Whittier) (Leenders and Gabbay, 1999). The changes that unfolded by incorporating the termination allow for us to understand how the termination affects the subsequent performance and fit of the firms.

Interestingly, the findings from this case study suggest that past work in strategy termination using evolutionary economics find the overlap in routines was not an important factor leading up to the termination (Nakamura, Shaver and Young, 1996). Whittier moved to terminate, despite its lack of national network capabilities and its expertise competing in the national market. Loring increased its ownership in the remaining Perseus companies following the termination, which contradicts Kogut’s (1991) non-significant finding related to firms increasing hierarchical structural forms following termination. Thus, a more nuanced understanding of firm level routine-based variation is needed. By understanding and including the termination in future research as an antecedent rather than as a consequent, and by considering the social capital of the firms involved in the termination, we will be able to understand the nature of routines and which routines matter for which firms.

Finally, this study is one of the first to propose a conjunctive process of the three evolutionary, dialectic and teleological motors of change. Van de Ven and Poole (1995) argue in their typology of organizational motors that no study had yet proposed such a change process. In the relatively nascent work on the dialectical motor for change, previous research has emphasized the presence of two motors – either the dialectical and evolutionary motors (de Rond, 2003) or the dialectical and teleological motors (Simmel, 1908).

5.2 Managerial Implications

The key finding of this research for managers is the importance of termination as a rhetorical strategy to drive change. Managers must be prepared for more than simply the termination event but also the use of the termination event as a polarizing force in creating institutional change. Firms facing constraints that limit growth may seek termination in order to restructure their industry. Such an approach uses the rhetoric of termination for the firm to gain support for its cause. Firms in an industry leadership position facing opposition from partnering firms should opt to accommodate rather than repress or deny the requests for change. By accommodating the requests of the strategic partners the industry leader preempts the ensuing conflict and biases that detract from its position.

5.3 Conclusion

The in-depth case study proposes an integrative framework of change surrounding alliance termination. The actions associated with the termination served as a legitimating force, stimulating collective action related to institutional change of a competition framework and shaping the subsequent evolution and competition amongst the firms. The confluence of evolutionary, dialectical and teleological motors of change suggests termination should be incorporated into research on alliance evolution. Rather than treating alliance termination as the end of the process, the termination also can be viewed as an antecedent. The social movement literature would benefit by viewing the termination as a rhetorical mechanism to legitimate political actions associated with institutional change. The existing work on alliance evolution and performance should similarly consider the impact alliance termination has on the establishment and replication of routines. Firms initiating termination may be less constrained by their existing routines than previously thought, while surprisingly, the larger firms that seem to have the most strategic alternatives available may become too constrained by dedicating resources to a failing strategy.

The findings of this case study suggest a novel approach is required in the literature on alliance processes and social movements by incorporating alliance termination as an antecedent rather than an outcome. However, there are also limitations to this study, given its case study approach. External validity is sacrificed to the extent of developing new theoretical insights in investigating such a theoretical anomaly (Van de Ven, 2007). In this case, it is best to compare and contrast the findings with existing process studies (Bunderson et al, 2000; de Rond, 2003). Bunderson et al.'s (2000) study of the relationships surrounding the innovation and diffusion of cochlear implants presents a similar non-linear conjunctive process between the evolutionary and teleological motors. However, their study did not involve an alliance termination; instead it was the loss of 3M's industry leadership position as the dominant design in the diffusion of the cochlear implant innovation. Interestingly, where the narratives of this study and Bunderson et al.'s (2000) study diverge is in the role of the context events. The evolutionary forces in their study mediate the teleological actions. In the case of the Perseus dissolution, it is the termination that mediates the dialectical and teleological actions, while the evolutionary forces moderated the extent to which the firms' strategic intentions provided grounds for success following termination.

Building on de Rond's (2003) process study on alliance processes, we similarly find support for a dialectical perspective and the presence of teleological and evolutionary forces. Yet the two studies diverge in the emphasis on the termination event as an agent for change. In de Rond's work, the termination is part of the inevitable alliance instabilities rather than a systematic part of the process that may influence firm and future alliance outcomes. The present study proposes the termination is more than an externality of alliance processes because it plays a systemic role in firms' strategic intent and relationship processes.

To sum up, the findings from this in-depth case study reveal a theoretical process framework where termination mediates a conjunctive process, whereby strategic intentions shaped by evolutionary forces stimulate a dialectic struggle. Termination is suggested to be an important aspect of the change process. By including termination as an antecedent to firm action, both the social movement and institutional entrepreneurship and the literature on alliance processes can benefit from understanding how termination may shape firm routines and relationship formation.

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FIGURE 1

The Industry Network at the Beginning of 2000

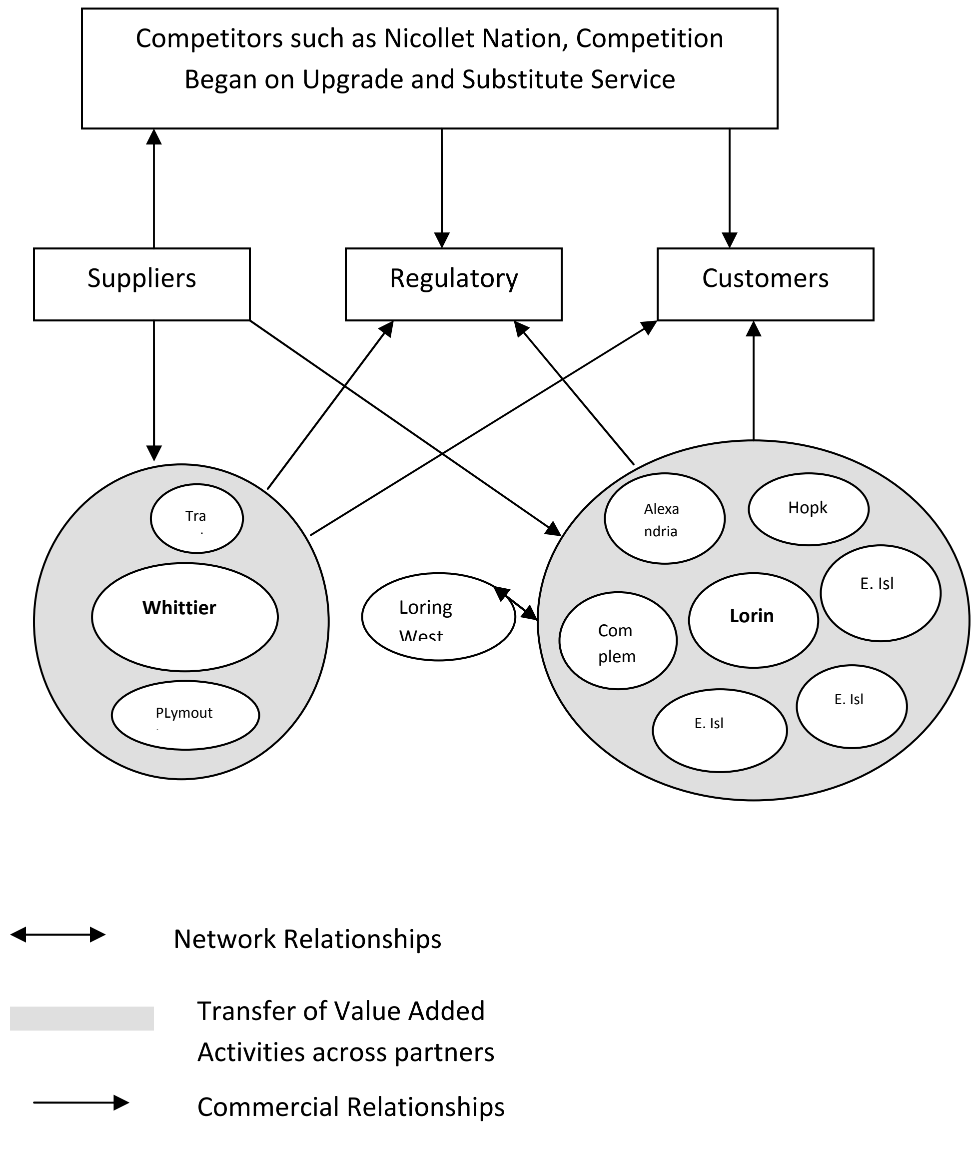
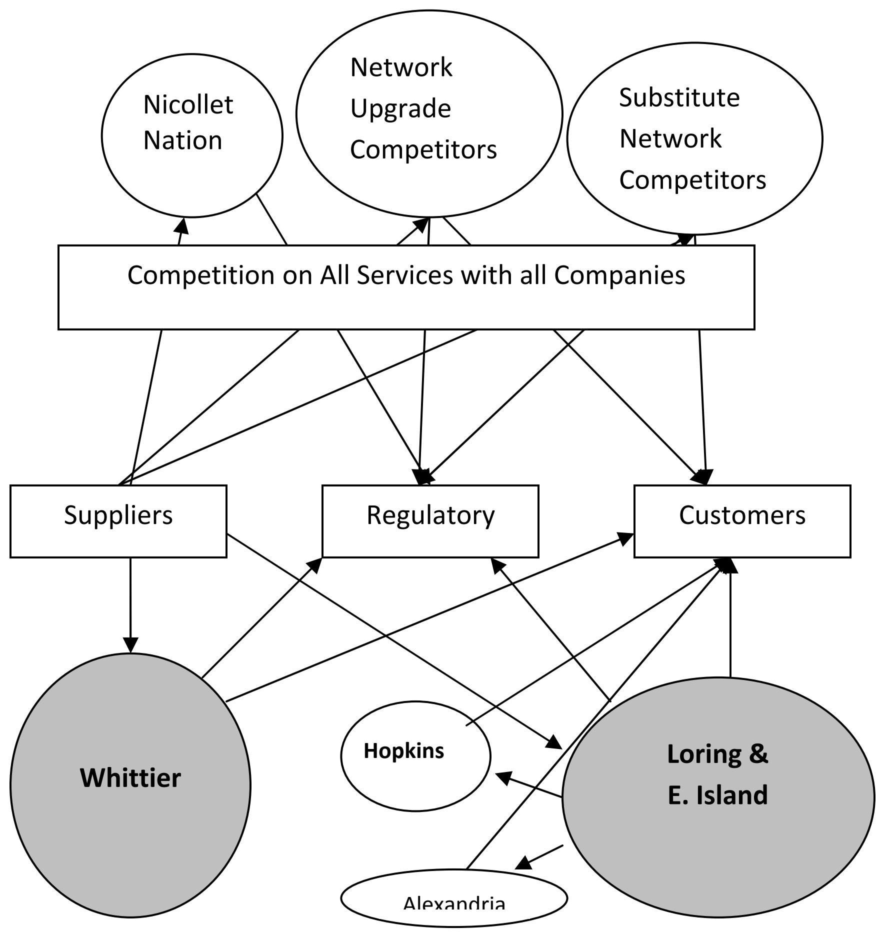
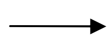


FIGURE 2

The Industry Network In 2002





Commercial Relationships

*Alexandria was the only incumbent
to remain a crown corporation.

FIGURE 3 Mapping Events to Processes: Events Surrounding the Termination

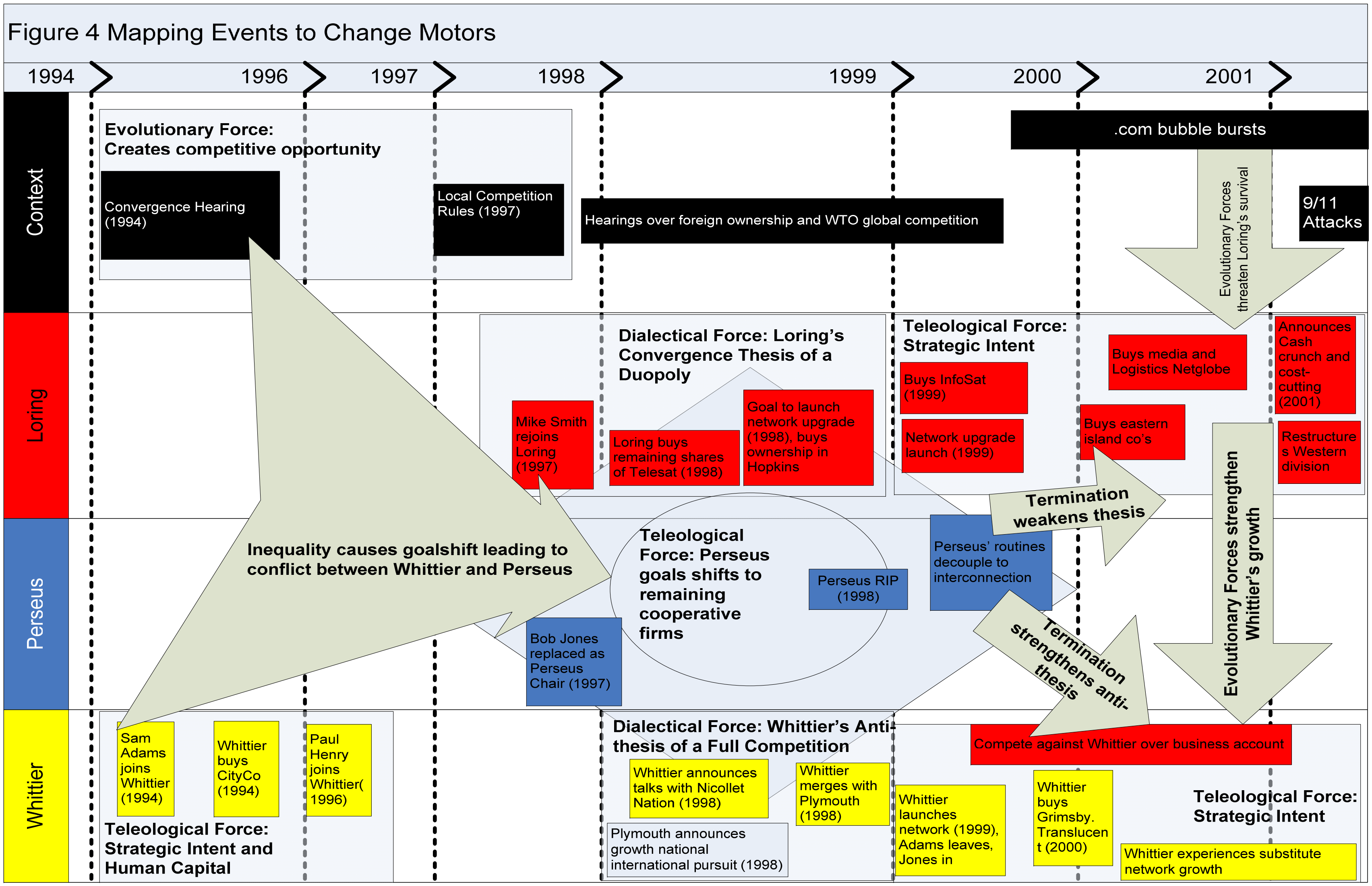


FIGURE 4 Conceptual Framework of Change Processes Surrounding Alliance Termination

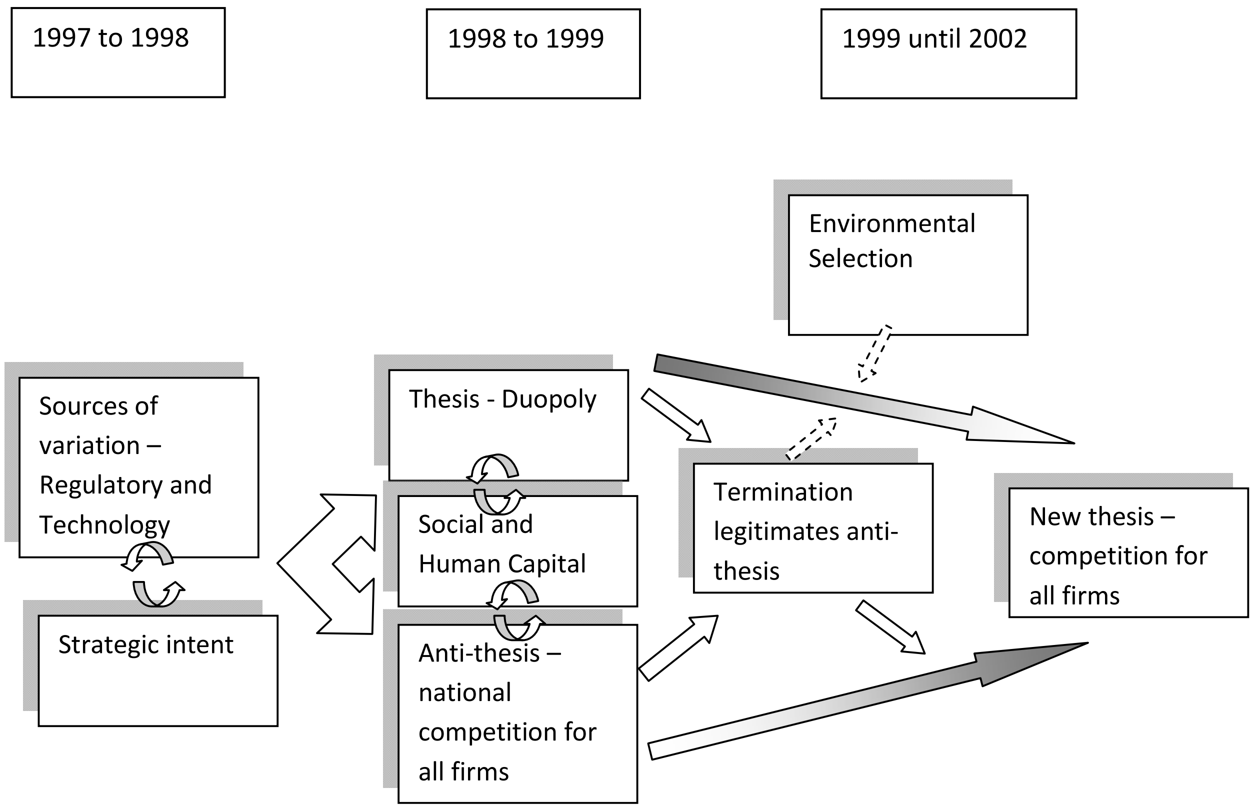


FIGURE 5 Change Processes Surrounding Alliance Termination

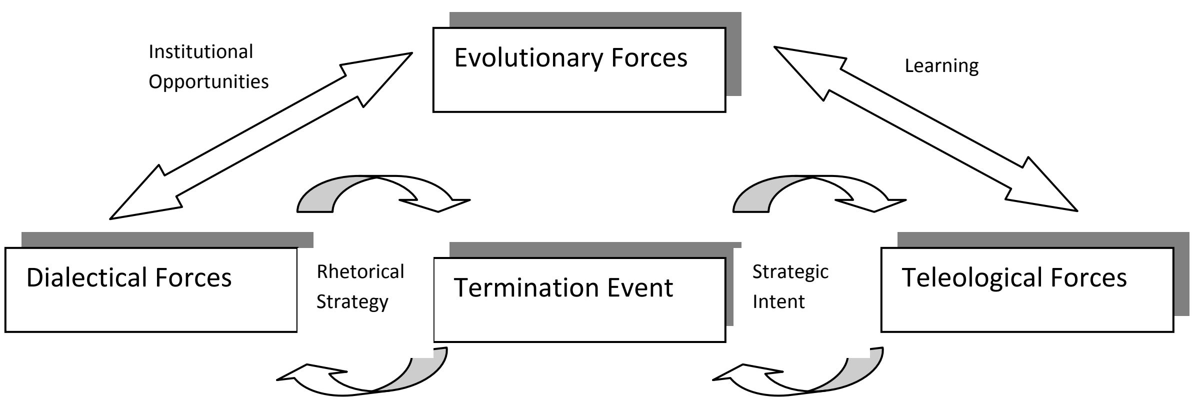


TABLE 1 WORKSHEET FOR DESIGNING THIS PROCESS RESEARCH STUDY

Issues	**Process Research Study**
Process Study Design	
1. State your process research question	Surrounding alliance termination, how do the change processes unfold?
2. Whose viewpoint is featured?	Focus on the incumbent firms
3. How define process - as variable or event?	Process refers to the events that change the social relations during the alliance termination
4. What process theories do you examine?	Equal consideration of the four process theories
5. Deductive, inductive Or abductive?	Abductive – using an indepth case study I will iterate between deduction and retroduction
6. Real-time or historical observations?	Historical Observations – with the assumption that it is in alliance termination that the network shifts, I am seeking out a case where termination has already happened. This relies upon archival records and in-person interviews.
7. What units examined within & over time?	The firm level and the alliances of interfirm relationships
8. Sample diversity in what dimensions?	The theoretical sample will focus on the critical infrastructure industry, specifically the incumbent firms in the Perseus alliance. There is one central firm,

	Loring and 9 alters in the alliance
9. Sample size: # of events and cases?	The sample involves a summary case study, where many events occur in few cases, there is one alliance, that consists of 9 firms – with many events surrounding negotiation, commitment and execution at the dyad level and new relationships at the network level
Measurement & Analys	
1. Define your process concepts.	Termination (Ring and Van de Ven, 1994) – the needs of the relationship have gone unfulfilled resulting in a lapse of motivation and commitment to the relationship. Commitment – reflects the agreement of the respective obligations in the relationship Execution – commitments and rules of action are carried into effect Negotiations – the development of joint expectations about motivations, investments, And uncertainties in the business venture. See Table 2
2. Define indicators of process concepts	Following Bunderson et al (2000) – Sensemaking events – evidence that parties are attempting to understand or reduce uncertainties of their own or the other party's perceived motivations, proposals, roles, capabilities, and behaviors in their relationship with respect to the Perseus and the logistics network network. (no interaction with each other) Bargaining events – parties directly interact with each other by proposing, persuading, discussing, or haggling over possible expectations, terms and procedures of their relationship. (interaction with each other) Commitment events – joint decision or agreement was made about what one or both of the parties will or will not do with respect to their relationship. Execution events – actions or behaviors undertaken that carry out or administer the formal or informal commitments existing between the parties. Assessment events – the affective response to an event: a) positive (satisfaction, pleasure, good news), b) negative (dissatisfaction, displeasure, bad news) or c) mixed (neutral, ambivalent, ambiguous news) Context events – mention of an external environment incident beyond the control of the parties to the relationship.
3. What is an incident or event (a datum)?	**Relationship events** are any changes that occur in the interactions of the focal firm with its alters. These changes may be evident in the bargaining, commitment, execution, understandings, or assessments among parties to the inter-firm relationships. These relationships include cooperation, competition, regulation, accommodation, conflict, or consensus among the parties. The event must involve some give-and-take mutual influence to be coded as a relationship event. **Network events** are any changes that occur in network of the focal firm Loring

	through mergers, acquisitions, joint ventures and alliances. **Context events** include any changes in the competitive environment, legal or regulatory environment, or social context that has implications for logistics network firms' network, but which are beyond the direct control or influence of logistics network firms.
4. How measure & verify incidents?	Using archival and interview data – the transcripts and archival material will be coded by two independent researchers. Their interrater reliability coefficient will also be reported (Kappa's interrater reliability coefficient). Informants will also be asked to interpret and verify incidents.
5. How tabulate and organize process data?	Coding will be accomplished in an iterative, inductive manner. A cycle between fine-g specifics of each case and coarse grained bird's eye view to identify patterns and trend the coded event data. Following Poole and Van de Ven, the cumulative number of eve will be shown graphed to show the frequency of the different relational processes quantitative techni such as time series regression can also be used to show quantitatively. Qualitatively, the findings will be placed into theoretical categories and compared aga rival explanations.
6. How develop a proces Theory or narrative?	Sequence in time: From 1997 to 2001: Follows the emergence (beginning), Termination (middle) and reemergence (end) Focal actor or actors: Protagonist – Alliance, antagonist – incumbent firms Identifiable narrative voice: Alliance Frame of reference: Termination embedded in change mechanisms Indicators of context: Description of the regulatory environment to differentiate the discussion from other network industries thus the behavior is reflective of endogenous actions not exogenous shocks

TABLE 2. CONSTRUCT CODE CATEGORIES AND REPRESENTATIVE MATRIX QUERIES

Theoretical Construct	Code Categories	Key Words	Example Matrix Query
Life Cycle	Formation, execution, termination	Single entity, prescribed or typical	Alliance entity: Formation*Execution, Execution*Termination, Formation*Expected, Execution*Expected, Termination*Expected
Teleological	Negotiation/ bargaining, commitment, execution, strategy/goal, sensemaking,	Single entity, goals, satisfaction or dissatisfaction, constructive	Alliance Entity, Firm entity: goal * negotiation/bargaining, goal*commitment, goal*execution, goal*sensemaking, goal*positive, goal*negative, goal*unexpected
Evolutionary	Context event: Technological, Regulatory, Macroeconomic	Multiple entities, adapt, external change that affects all entities, prescribed	Alliance members/multiple firms/industry: Context – technological, context – regulatory, context – macroeconomic, context*expected
Dialectical	Conflict, tension	Multiple entities, Opposing forces, conflict, struggle, confrontation, constructive	Firm*Firm, Alliance*Firm: Conflict, tension, conflict*unexpected, tension*unexpected

TABLE 3. GENERATIVE MOTORS AND REPRESENTATIVE QUOTES

Life-cycle

(Formation, Maintenance, Termination)

Note: The life-cycle motor was weakly supported. Formation was unitary but the remaining maintenance stages were not linear. In particular the termination did not operate as the final stage. The quotes presented here for the life-cycle motor are evidence for each of the coding categories in isolation.

Formation:
The organization was really started by this sort of mind meld or bonding between Mike Smith and Bob Jones.[CD]
I would say the genesis for Perseus was a conversation that my then boss Mike Smith would have had with Bob Jones. It was very clear that something needed to be done to provide more seamless national offerings and it was launched with much fanfare at the start. My sense is that it was Bob Jones and Mike who willed it into existence. Their bonding was critical they were by far and away the key players. The eastern companies were pretty much controlled by Loring. [CD]
So the Titan System was the precursor to Perseus and the reason why they changed it from Titan System to Perseus was largely because of the regulatory body decision 92.12 and in that whole process they saw a change in the industry. [MN]
That was a fairly interesting alliance when Logistics Network competition was introduced the phone companies realized that they were not national carriers. If they were going to be able to compete with the new entrants who were national they needed to do something national but they didn't want to give up their identities. They didn't want to give up their face to the market so they put together Perseus which was to produce all of the national marketing programs and launch the national network. [MN]
The golden goose now that was under attack plus the new companies had one big thing that the other companies did not have. The established companies were national whereas the incumbents were these individual companies. So that was the

essential logic to create Perseus. Our golden goose is under attack. We're a whole bunch of regional players. We're competing against national players. We need to band together and operate like a national player now initially it was pretty challenging [OP]

Eventually when logistics network competition came in 1992 Perseus was formed as a response to Nicollet which was a national logistics network carrier so that you could have one set of national services. So that's really how Perseus got started as an alliance because they needed to have some response to a national logistics network carrier and that was getting the Perseus companies together to offer common business services across the country so one person could buy all of the services. [IJ]

Termination:

PERSEUS R.I.P. On September 19, Perseus president announced the dissolution of Perseus Central., which develops and supports national logistics network services for the nation's major logistics network companies, and Signature Service Central, which handles national business accounts. Their functions and staff will be transferred to the individual companies by January 1. The future of Perseus Policy Inc, the lobbying arm, will be decided by Perseus' CEO Council in November. All that remains is Perseus Network Management, which manages the cross-nation logistics network.

We dissolved in 1999. I started the dissolution in 1998, it took about six months of negotiation just to unwind all of the agreements and pension plans it was a big job to unwind it. [AB]

We said we are going to have real competition here it should be open entry and anyone should be able to get into this business and should be able to fail so with that prospect I think a lot of the former monopoly logistics network companies said well we've got to look for other avenues to grow our business and to sustain ourselves so let's see what those opportunities are and the opportunities I think they saw was outside of this alliance. [KL]

We decided it was in the best interest of Whittier and its shareholders to basically pull out of Perseus and when we did that Perseus effectively disintegrated. [PH]

So it was actually Whittier that really split up the alliance because they went and tried to buy one of the competing logistics network companies and when that became known Loring was totally freaked out. [OP]

Teleological Motor

(Goals, Sensemaking)

Perseus Goals:

The golden goose now that was under attack plus the new companies had one big thing that the other companies did not have the established companies were national whereas the incumbent companies were individual. So that was the essential logic to create Perseus. Our golden goose is under attack. We're a whole bunch of regional players. We're competing against national players. We need to band together and operate like a national player. [OP]

Eventually when Logistics Network competition came in 1992 Perseus was formed as a response to Nicollet which was a national Logistics Network carrier so that you could have one set of national services. So that's really how Perseus got started as an alliance because they needed to have a response to a national logistics network carrier and that was getting the Perseus companies together to offer common business services across the country so one person could buy all of the services. [IJ]

The concept of Perseus was three facets. The first was to incorporate into Perseus the network engineering associated with the Titan System. So that became Perseus Logistics Network Division and that was largely the old Titan System but it was stripped out of any sort of marketing so they were basically doing network administration. [CD]

I would say the genesis for Perseus was the conversation that my then boss Mike Smith had with Bob Jones. It was very clear that something needed to be done to provide more seamless national offerings and it was launched with much fanfare at the start. [CD]

That was a fairly interesting alliance when Logistics Network competition was introduced. The logistics network companies realized that they were not national carriers and if they were going to be able to compete with the new entrants who were national they needed to do something nationalized but they didn't want to give up their identities and they didn't want to give up their face to the market. So they put together Perseus which was to produce all of the national marketing programs and launch the national network. [MN]

Whittier Goals:

The three of us were planning the evolution of Whittier and how we wanted it to behave in the market and grow. After a little while when I was at Whittier, we decided it was in the best interest of Whittier and its shareholders to basically pull out of Perseus.[PH]

I wouldn't just put it on Sam Adams, but Sam Adams was the catalyst. Sam Adams on an interpersonal basis, he wasn't the most tactful person and he was brought in to make change.[CD]

My issue as the new CEO was to try to help the company continue to grow and I questioned the recruiting firm that brought me in, ‘Why me?’ Whittier had just gone public in 1992 a couple of years before I arrived and the regulatory authorities had decided to introduce competition into the logistics network market. So the people on the board of Whittier decided that they didn’t have anybody internally who could take the company to where they wanted to go. So they started looking south to someone who had had experience in going from a monopoly to an unregulated business and came up with me. So I had a mandate from the board to help the company grow to make it more competitive.” [SA]

Whittier decided that it wanted to pursue opportunities outside of the region in other parts of the country. They were interested in empire building.[EF]

Whittier was the predominant incumbent in its region. For the company to continue to grow it had to go outside of the region. It could do it on its own ticket through acquisitions or mergers etc. Our belief was that we could do a better job from on our own outside of the region particularly in the east where the bulk of the population is than for us to go deeper into the west or somewhere else to provide growth opportunities from our shareholders. We had to get out and move out from our region and we decided to move east. The moment we did that, and frankly reflecting on it now, I think that move was one of the most significant things to the logistics network industry in decades. [PH]

Whittier had been looking for ways to break away from the Perseus alliance all through the 90s. The reason was the local competition decision as a proposal in 1993 was part of this wanting to break away from Perseus and wanting to have the ability to grow outside of the region.[IJ]

There was a fellow that headed up Whittier at the time and his comments to me, he was wanting to kill Perseus, and here’s what he said to me, he said, ‘this is an old clique that still smokes cigars in paneled offices and talk about the past. We need to talk about the future and they are unwilling to talk about the future and so I’m going to lead the future.’ [MN]

Sam Adams was the President of Whittier. He was talking with the folks at Nicollet about a possible merger between Whittier and Nicollet and I believe this was purely and simply if we are going to survive as a company we have got to compete on a national scale. That doesn’t mean competing against Nicollet or others who are in this Logistics Network voice data business but it means competing against Loring. [KL]

Loring Goals:

Loring was going through a very big catharsis. The old line Loring guys, Mike and maybe none of us got fired, but it was clear that maybe we should go on to other challenges. The Loring people were starting to bring in people from the outside. As a result they brought in a new president and before too long there was an interim CEO but the real player became the president of the company. It was clear almost from the get go that the president and the team he organized were not sure that they liked all of the engines of their success being operated by people outside of their direct control.[CD]

Loring did a couple of things, by then the former Loring management was hoovered out. Smith was now back in charge and he had some very clear agendas. The other thing with Mike Smith was he was a deal maker, if you knew him as a CEO, he was at his best when he was making a deal.[CD]

He was the last President at Loring who was around during Perseus. He had to lead something which was that they were going to network up the world and it was a Perseus initiative. [MN]

We had to go more international and that led us to the acquisition of Logistics Netglobe. We recognized that in order to do Logistics Netglobe and to invest in supplies and launch new technology and to bring all of the new services, we didn't have the financial capacity. So we sold 20% of the company to a company in the neighboring country and we saw that as an opportunity to one get money. A couple of billion dollars for that and be in a position that they would have the expertise they were operating in foreign ventures.[CD]

In some ways the national convergence strategy would have worked better if Loring just bought everybody. [OP]

I think at the operations level this really really heavy integration. We used to call it the reverse or the cashless takeover of the member companies by Loring through technological integration. [IJ]

The objective was to basically monopolize the logistics network and have everybody whether it was Milton or Nicollet Nation or whoever using the same network run by Loring. There was an element in Loring and some of the other Perseus companies that still thought that the one big national logistics network was the best way to go. So that was the theme. It was never debated in public. This one big network but there was a thread of it in some of the Perseus companies.[IJ]

March 30, 1998:

...AND LORING RESPONDS: Loring replied to the Whittier announcement with a statement that Perseus members are discussing how to realign their alliance "to serve our customers and to look for new business opportunities."

* Loring also announced its intention to develop a national service delivering upgraded network capabilities from coast to coast.

Dialectical Motor
(Tension, Confrontation, Conflict)

I can remember on a number of occasions where my colleagues at Whittier had come up with great ideas for new products and services to offer. Mostly because of the regional natural resource endowments where Whittier's is located that their client companies were looking for particular services to be able to utilize from Whittier. We'd have these meetings with Loring in front of all of the Perseus companies and the folks from Whittier would say 'well we think we should be doing this'. It became what we all characterized as the not invented here syndrome with Loring. If Loring hadn't thought of it and did all of the product development work on it then they weren't interested in it. If they weren't interested in it then we couldn't get anything moving. So, Whittier because its business clients was getting very frustrated by lack of cooperation from Loring in being able to develop and offer services. It is fair to say that some of the strains within the alliance went right back to that and then later on as competition started to grow.[KL]

It just came down to the big players that were Whittier and Loring. I've talked to people who worked at Whittier not long after the Whittier-Plymouth merger and people have told me that working inside that environment, public enemy number one was not Nicollet Nation, not the other competitive firms, but public enemy number one for Whittier was Loring.[KL]

Sam Adams was always a problem child and Bob Jones used to be tearing his hair out, 'What's the matter with these guys?'[AB]

One of the biggest tensions that I remember for us was from Whittier and it was how quickly they took pricing decreases. So at that point Whittier wasn't interested in competing with Loring, they just liked to do things differently. [AB]

The negative was there was a change in the management at Whittier. The chap who came in was imported from the neighboring country. A fellow by the name of Sam Adams. He was not a bad guy, but he clearly had a mission to make Whittier a much bigger player than it was. He very quickly started to snipe at the alliance. He had a major problem because he had been a part of the Nicollet world but our partner in the neighboring country in those days was Calhoun who was the arch enemies of Nicollet. Our relationship with Calhoun was pretty up and down because Calhoun was a very different kind of organization than what we were all used to. I mean it was an attack dog. We were always the incumbents and so we chose them particularly for that fact. Loring did that on purpose because we thought it was better to learn from the attack dogs than to learn from someone who was like us. But Sam Adams really had great difficulty with that and so that started to sow the what I will call the seeds of discontent.[CD]

So there was still some cooperation between the regulatory departments but there was always some tension because Whittier always had these different views. Loring would say, 'well you can't file that. That is not good for us or you can't file that because it is not good for the Perseus companies.' But we would say, 'but it's the best thing for the industry and if as a whole we don't do that then in five or six years we're going to be in big trouble.' So there were all of these battles at the regulatory level between Whittier and Loring and the other Perseus companies. A number of times New Brighton would pipe up and be on our side but they were beaten back.[IJ]

I guess it wasn't a friendly parting of the ways. The relationships seem to be working well in the minds of certain members in the way that was a comfortable known relationship. Parties were not competing physically in each other's territories and it was relatively stable. So when Whittier decided that it wanted to pursue opportunities outside of its region, in other parts of the country, it was met with obvious resistance. In order to be able to do that we had to withdraw from Perseus. [PH]

I remember there had been a call from someone at Perseus to someone at Whittier saying, 'How could you have filed that agreement without telling us first and getting our permission?' On the regulatory front there was tension building there. [IJ]

The reason that Whittier didn't like Perseus was that it was very very restrictive. At one point I questioned the CEO of Loring 'I said you believe that Whittier can not open any kind of business outside of its region?' and he said, 'that is absolutely right.' I said 'so if I wanted to open a gas station in the east you guys would come against that and would call that a violation of the Perseus agreement' and he said, 'absolutely.'[SA]

I remember I looked for documentation on Perseus' implicit agreement when I was at the Agency. I looked for it. It didn't exist. It struck me as anti-competitive and I never found evidence when I was at the agency that would allow me to prosecute or take any judicial action against them. So what I couldn't do from the outside I could do from the inside at Whittier.[PH]

So when Whittier started in its new format as a private company it was totally opposed to the whole Perseus thing. They started agitating that they were going to pull out and that's when it really began. [MN]

Plymouth as well as the other companies were angry at Whittier when it was discovered that they had gone outside the alliance and tried to buy one of the competitors.[OP]

Loring was a bully and at that time competition was welcomed because everyone wanted to get back at Loring [GH]

ANOTHER PERSEUS SHOE DROPS: There's been no public announcement, but Perseus Policy Inc. will cease operations at year end. A majority of its 17 members favored continuing it on a reduced scale, but opposition from Whittier and Plymouth doomed the national policy arm of the nation's major logistics network companies and their affiliates.

Evolutionary Motor

(Industry, Competition, Context: Regulatory, Technological, Macro-Economic)

Regulatory:

So the Titan System was the precursor to Perseus and the reason why they changed it from Titan System to Perseus was largely because of the regulatory body decision 92.12 and in that whole process they saw a change in the industry [MN]

At that stage the national logistics network scene was highly fragmented. We were having difficulty both in the marketplace and with regulators because the regulators were really looking to foster competition so we felt to unfairly protect the competitors. More to the point, probably handicap us and it was becoming apparent that the offering of our competitors and the main one was Nicollet Nation that they were going to have a national offering.[CD]

Unless the government changed it's regulatory and industry views of a single national company. We were all going to get marginalized and ultimately just be picked off. We felt that if we couldn't expand more nationally then we had to go more international.[CD]

23-Jul-01

Loring published full-page ads in five newspapers, arguing that government policy should rely on market forces to determine which companies succeed or fail. The ads are part of a campaign to counter Nicollet Nation's lobbying for new rules favoring competitive firms.

It was changing public policy and regulation that started to nip away at this whole system that had been erected since the 1950s. [MN]

The thing that calls to me and the Whittier folks to consider that doing something different was a good thing because it was virtually was a monopoly and it had actually been investigated a couple of times by the competition bureau. For whatever reason they never could find enough evidence to actually take them to court. The national anti-trust laws are much less stringent than in the neighboring country. Had Perseus been in the neighboring country there is no question that they would not survive. [SA]

Technological advancements:

We knew that if we were going to get together and go into competition with Loring then we had to get our own network. We had to be credible in the market. The people who had their own networks other than Perseus were Nicollet Nation and Milton. So we said, 'well we need a network'. At the time it was a lot of money but on the scale of things putting in a new network at least until the most populous city was not all that difficult there were companies very happy to do it. [SA]

I think Whittier was hugely intelligent when they bought Translucent and became a very strong substitute network player. In my day the substitute network was still a side show but obviously it was the real growth engine. [CD]

It very quickly became a substitute network play. Everybody knew they would invest in a substitute network but this just made it absolutely possible. It was becoming relatively easy to bring bigger logistics networks into other parts of the country and across just as Nicollet Nation did, Whittier did also. They brought in bigger logistics networks but they were less I believe in that field and more really coming in for the substitute network services.[CD]

After I had left, we did the deal with Translucent and that expanded the substitute network opportunity. We felt pretty sure the Plymouth deal with the substitute network was the engine. We have subsequently been proven right that the Translucent deal allowed Whittier to move ahead on the substitute network side. So not only were we offering business services in the east, we, from the get go were able to offer substitute network service.[PH]

I used to comment that we made more money from our substitute network operation than did all of the rest of the company combined. It was growing in the teens or 20% every year and Translucent had done a very good job of going against the Perseus companies. So I think that was a very key acquisition. [SA]

Macroeconomic conditions:

The deal was a disaster, and that ultimately was the biggest single mistake that we made because for all sorts of reasons, not the least of which was the end of the economic bubble and equipment being priced to zero, that adventure basically put the company in significant jeopardy.[CD]

September 17, 2001:

AN APPALLING TRAGEDY: Last week's terrorist attacks on the United States have appalled the world. The weekly report publishers' extend their deepest sympathies to the victims and their families, and we salute the bravery and dedication of the thousands of emergency service workers who have responded so heroically in this crisis.

NETWORKS DAMAGED: Southern Manhattan has been described as "the most logistics networks-intensive area in the world." The largest logistics network company has five interconnections serving some 500,000 logistics network lines south of 14th Street. More than six million private lines pass through the interconnection centers in or near the World Trade Center.

Nicollet and Milton centers in the WTC were destroyed. A major neighboring company lost two WTC-specific center in the towers, and two nearby interconnections were knocked out by debris, fire, and water damage.

Ten substitute network cell sites were destroyed in the attack; one company lost six and Milton lost four. Power failures interrupted service at many other substitute network facilities.

The combination of damage and loss of power shut down all logistics network service in and around the disaster area. It is very likely that underground networks were badly damaged, and no one can yet provide any estimate of when anything approaching normal service will be restored.

January 4, 2000

Y2K BUG VANQUISHED: With a handful of very minor exceptions, the logistics network industry's entry into 2000 was glitch-free. (Pause for a collective sigh of relief.)

October 9, 2001

GLOBAL UPGRADE NETWORK GROWTH SLOWS: International Upgrade Network capacity has grown 174% since a year ago; compared to 382% during the previous year, according to a study by Geography Inc. Cross-border traffic grew fastest in Latin America, slowest in Africa.

April 30, 2001

A SUPPLY COMPANY TO CUT STAFF 20%: Supply company will vacate 25 buildings and cut 5,000 staff, half of them in the nation, in response to an industry "near-term downturn." January-March sales of $920 million were down 1% from the previous quarter. (See Logistics network Update #273)

April 16, 2001

MANAGING IN TOUGH TIMES: The editorial in the April issue of the industry magazine discusses how to prepare for the possibility of a downturn or collapse of your company's logistics network or equipment suppliers.

March 12, 2001

ANOTHER SUPPLIER TO CUT STAFF UP TO 17%: A major supplier says that in response to the slowdown in capital spending, it will cut 3,000-5,000 of its 44,000 full-time jobs and most of its 5,000 temporary positions by May.

December 4, 2000

A COMPETITIVE COMPANY CANCELS SHARE OFFERING: A Competitive Company, which provides Upgrade Network access and Substitute Network cable TV, has withdrawn the share offering it announced November 3, citing unfavorable market conditions. The company says it is "currently reviewing its strategic alternatives."

TABLE 4. INTERACTION OF CHANGE MOTORS AND REPRESENTATIVE MATRIX QUERIES

Interaction	Code Categories	Key Words	Example Matrix Query
Teleological* Evolutionary	strategy/goal, sensemaking Context event: Technological, Regulatory, Macroeconomic,	Single entity, goals, satisfaction or dissatisfaction, constructive Multiple entities, adapt, external change that affects all entities, prescribed	Alliance Entity, Firm entity: goal * context (Industry wide), sensemaking*context (Industry wide)
Teleological* Dialectic	strategy/goal, sensemaking Conflict, tension,	Single entity, goals, satisfaction or dissatisfaction, constructive Multiple entities, Opposing forces, conflict, struggle, confrontation, constructive	Firm*Firm, Alliance*Firm: Goal*Conflict, Goal*tension,
Evolutionary* Dialectic	Context event: Technological, Regulatory, Macroeconomic Conflict, tension,	Multiple entities, adapt, external change that affects all entities, prescribed Multiple entities, Opposing forces, conflict, struggle, confrontation, constructive	Alliance members/multiple firms/industry: Context – technological*conflict, context – regulatory*conflict, context – macroeconomic*conflict Context – technological*thesis, context – regulatory*thesis, context – macroeconomic*thesis
Lifecycle*Evo	Formation,	Single entity,	Alliance entity*multiple

lutionary	execution, termination Context event: Technological, Regulatory, Macroeconomic	prescribed or typical Multiple entities, adapt, external change that affects all entities, prescribed	firms: Formation*Execution*Termination*Context
Lifecycle*Dialectic	Formation, execution, termination Conflict, tension	Single entity, prescribed or typical Multiple entities, Opposing forces, conflict, struggle, confrontation, constructive	Alliance*firm: Formation*Execution*Termination*Conflict, Formation*Execution*Termination*Tension
Lifecycle*Teleology	Formation, execution, termination strategy/goal, sensemaking	Single entity, prescribed or typical Single entity, goals, satisfaction or dissatisfaction, constructive	Alliance, firm: Formation*Execution*Termination*Goal, Formation*Execution*Termination*Sensemaking

APPENDIX A: TIMING AND ARCHIVAL EVENT RECORDS

1*	1989	Legislation also existed in each of the regions regulating the activities of logistics network carriers subject to their jurisdiction. This situation persisted until the national court's landmark decision in *Whittier Gov. Co v. regulatory body* in 1989 precipitated unified federal jurisdiction over interconnected logistics network companies
2	1990	Whittier Government Company becomes Whittier following privatization
	June 12, 1992	Logistics network Decision REGULATORY BODY 92-12, *Competition in the Provision of Public Logistics Network Services and Related Resale and Sharing Issues*, 12 June 1992, Attachment
3	1994	In its 1994 decision on *Review of Regulatory Framework(94.19)*, the Commission established a blueprint for addressing the cross-subsidy issue, for eliminating barriers to entry into the logistics network market, for opening all remaining segments of the logistics network market to competition including the logistics network market, for encouraging open and reciprocal access among logistics network service providers including a requirement for the logistics network companies to unbundle tariffs to facilitate interconnection, for splitting the logistics network companies' rate bases into "utility" and "competitive" segments, for removing competitive services from the regulated rate base and introducing incentive-based regulation of the local "utility" rates in lieu of traditional rate of return regulation, for establishing criteria to forbear from regulation in markets that were found to be sufficiently competitive, and increased safeguards to prevent opportunities for anti-competitive practices by the logistics network companies
4	November 1994	Sam Adams joins Whittier as CEO
5	1995	Whittier acquires a municipal logistics network company in its region
6	October 2, 1995	NICOLLET, BANKS RESCUE COMPETITIVE PROVIDER: NICOLLET and three banks will invest $250 million to shore up by the terms of a deal that will increase Nicollet’s equity and give it effective control of the ailing company. Former co-owners will abandon their investment and end involvement. The agreement must still get the government’s OK.
7	February 26, 1996	ANTI-TRUST BUREAU CLEARS PERSEUS: The federal bureau has decided that Perseus is not a cartel. The ruling ends a three-year investigation, launched in response to competitor complaints that the logistics network companies were abusing their dominant position in the market.
8	March 4, 1996	* Perseus: Perseus' CFO has been named President of the company. He replaces the President, who will continue as Chairman and CEO.

9	April 9, 1996	PERSEUS SEEKS PROBE OF NICOLLET DEAL: Perseus has asked the regulatory body to hold a public hearing into the deal expanding Nicollet's stake in a competitive company and to adopt rules on what constitutes foreign "control in fact" of carriers. Milton Nation previously made a similar request.
10	May 6, 1996	HOPKINS TO BE PRIVATIZED: The Hopkins government will sell the provincially owned Hopkins system this year. Hopkins Minister says Hopkins residents will be given the first opportunity to purchase shares, and no one will be permitted to buy more than 15% of the company.
11	May 13, 1996	MAJOR CHANGES AT PERSEUS: The nation's three largest companies have decided that they alone should determine policies and plans for Perseus Central., the R&D arm. On January 1, 1997, six smaller members, while remaining members of Perseus Central, will be dropped from its Board of Directors; Loring, Plymouth, and Whittier Ltd. will control the organization and provide all of its funding.
12	June 3, 1996	LORING REORGANIZES AGAIN: Seventeen months after its last restructuring, Loring is at it again. Starting January 1997, Loring will be divided into a marketing and sales unit and a product development unit. This replaces the current split, dating from January 1995, into divisions handling competitive and regulated markets.
13	June 24, 1996	The president and CEO of Perseus Policy will leave Perseus September 1.
14	July 22, 1996	HENRY JOINS WHITTIER: Paul Henry, who resigned as head of Anti-Trust Bureau last month, will become Executive Vice-President and Chief Counsel of Whittier on September 1.
15	September 9, 1996	LOGISTICS NETWORK COMPETITION HEARINGS COMPLETED: The regulatory body hearings on local interconnection and network component unbundling ended September 4, after 12 days of hearings. Although the Commission told Cabinet last year that it hoped to issue a decision by November, Vice-Chair Kelly Lanoway now suggests a decision can be expected in early 1997.
16	September 16, 1996	NICOLLET NATION LOGISTICS NETWORK SERVICES MAKES DEBUT: NICOLLET Logistics Network Services has launched a promotional campaign to publicize its new identity, featuring a new portfolio of savings plans bearing Nicollet's "True Choice" trademark.

		* Loring's CEO, welcoming the entry of Nicollet's brand into the national Logistics Network business, used the occasion to again urge the regulatory body to reconsider "regulatory protection which currently favors Nicollet Nation."
17	October 7, 1996	LOGISTICS NETGLOBE GETS U.S. LICENSE: The Federal Commission has given Logistics Netglobe the okay to own and operate overseas Logistics Network facilities to and from the United neighboring country. Logistics Netglobe's monopoly on overseas traffic is expected to end in 1997.
18	November 18, 1996	LORING'S LOGISTICS NETWORK SLIDE SLOWS: Loring reports that its share of the Logistics Network market slipped less than one percentage point between June and September, to 71%. That is the slowest quarterly drop since logistics network equal access began in 1994.
19	November 25, 1996	PERSEUS -- DEREGULATE LD NOW: Perseus' submission to REGULATORY Body's proceeding on logistics network forbearance argues that Logistics Network competition is thriving, so deregulation of Perseus companies' logistics network services will benefit consumers and strengthen logistics network innovation (see Logistics network Public Notice 96-26).
20	December 9, 1996	NEW PERSEUS LOBBY HEAD NAMED: The new President and CEO of Perseus Policy Inc. is the former Deputy Minister of Transport.
21	December 16, 1996	EXECUTIVE SHUFFLE AT WHITTIER: The former municipal company and WHITTIER segments of Whittier are now headed by a single executive team. The total number of officers drops from 13 to 8; PLYMOUTH CEO TO RETIRE: Bob Jones has announced he will retire as CEO of Plymouth; he will continue as Chairman of the Board of both companies and -- for now -- as Chairman of Perseus' council of CEOs.
22	January 20, 1997	Loring BUYS INTO MEDIA CO: Loring Media, a new subsidiary of Loring, has purchased 10.3% of Media Co, the third-largest newspaper chain in the nation, and 40% of an online news service.
23	May 5, 1997	REGULATORY BODY SETS LOGISTICS NETWORK COMPETITION RULES: On May 1, the REGULATORY BODY laid out the rules for logistics network competition, set upper limits on rates, and announced the start date for entry into complementary industry services. The "Decision Blitz" included: * Logistics network Decision 97-8: Competition

		* Logistics network Decision 97-9: Price Cap Regulation and Related Issues * Logistics network Order 97-590: Scope of IX Contribution Paying Services * Logistics network Order 97-591: Responsibility for Carrier Specific Costs for the Provision of Local Portability * Public Notice 1997-49: Applications by Logistics Network Companies to Carry on Complementary Undertakings HIGHLIGHTS OF THE REGULATORY BODY RULINGS: * Logistics network companies must allow resale of their services, but are not required to offer discounted rates to competitors. * New entrants can lease local connections at cost plus 25%. * All service providers will share the toll-to-local subsidy, based on the number of lines they provide in high-cost areas. * Upgrade and Substitute Network Logistics traffic must now contribute to the toll-to-local subsidy. Upgrade Network access services remain exempt. * Providers will compensate each other for traffic termination by a "bill and keep" method. * On January 1, 1998, the Perseus companies' rates will increase by up to $3. For each of the following four years, annual rate increases cannot exceed inflation. * Rules for co-location of competitors’ facilities in transfer centers will be announced by mid-June. Logistics operators are resolving final details. * Logistics network companies may apply for complementary service licenses as of June 16, to offer services beginning January 1, 1998.
24	July 14, 1997	LOGISTICS NETGLOBE SEEKS NEW DEAL WITH TELCOS: Logistics Netglobe says its 1992 interconnection agreement with the Perseus companies is "no longer appropriate nor legally effective or binding." Logistics Netglobe has proposed a new agreement; Perseus says there will be no new deal unless Logistics Netglobe cuts its prices.
25	September 29, 1997	SHAKE-UP AT LORING: Former Equipment Supply Company CEO Mike Smith will become Loring's President October 1 and its CEO May 6. Loring's present CEO, will continue as Chairman. Loring’s

		President becomes CEO and President of Loring Nation, replacing the previous President, who has retired.
26	November 24, 1997	NEW CHAIR FOR PERSEUS COUNCIL: The President and CEO of an Eastern Island Co, has been named Chairman of the Perseus Council of CEOs. He succeeds Plymouth's Bob Jones, who has retired. LORING, NEW BRIGHTON FORM JOINT VENTURE: Loring and New Brighton have formed a new company, two-thirds owned by Loring and one-third by New Brighton.
27	December 9, 1997	LOGISTICS NETWORK ACT REVISIONS PASSED: On December 9, Bill C-17 passed third reading in the House of Commons. It amends the Logistics Network Act to authorize the Regulatory Body to license international logistics network service providers and to administer national resources. It also repeals sections of the Logistics Netglobe Reorganization and Divestiture Act to pave the way for ending Logistics Netglobe’s overseas monopoly in 1998. The Bill still requires Senate approval.
28	February 2, 1998	Logistics Network Price War Amongst Competitive and Incumbent Firms Announced
29	March 30, 1998	Whittier confirms it is in merger talks with Nicollet Nation Loring responds that it will discuss this with Perseus member as to how to realign the alliance and announces its intention to develop a national broadband and upgrade network service
30	April 20, 1998	Whittier ends talks with Nicollet citing issues “could not be resolved in the best interests of our shareholders”
31	May 4, 1998	Whittier announces it is still seeking a partner. Plymouth announces that it is not for sale and this would be inconsistent with its goals. Perseus’ ability to survive is questioned.
32	May 11, 1998	LORING BUYS THE REST OF SATCO: Loring has paid $158 Million to purchase the 42% of SATCO held by other members of Perseus and by AerospaceCo. Loring acquired the other 58% of SATCO in 1992.
33	May 19, 1998	PLYMOUTH CONSIDERS NATIONAL, INTERNATIONAL GROWTH: Plymouth's new Senior Vice-President of Strategic Business Development will be responsible for "identifying and pursuing growth opportunities for us both nationally and internationally."
34	August 24, 1998	WHITTIER, NICOLLET TALKING AGAIN? According to the national news, Whittier and Nicollet Nation have renewed talks about a possible merger. (See Logistics network Update #129)
35	September 21, 1998	PERSEUS R.I.P. On September 19, Perseus president announced the dissolution of Perseus Central., which develops and supports national logistics network services, and handles national business accounts.

		Their functions and staff will be transferred to the individual companies by January 1. The future of Perseus Policy Inc, the alliance's lobbying arm, will be decided by Perseus' CEO Council in November. All that remains is Perseus Network Management, which manages the national network. LORING DELAYS NEW NETWORK DEBUT: The launch of Loring's new national company and upgrade network has been delayed from October to January.
36	October 13, 1998	WHITTIER, PLYMOUTH MERGER RUMORED: Whittier and Plymouth are refusing to comment on reports that the two western companies may be planning to merge. The rumors were strengthened when Plymouth held an unscheduled two-day board meeting last week.
37	October 19, 1998	WHITTIER, PLYMOUTH ANNOUNCE MERGER: It's official -- Whittier and Plymouth are merging. The deal, which requires a shareholder vote and Competition Bureau approval, is expected to be completed in January. Woodbury, which owns 51% of Plymouth, will own 26% of the combined company. The merged company's first major move will be to launch a national upgrade network using technology provided by Woodbury.
38	November 16, 1998	LORING INCREASES LOGISTICS NETGLOBE STAKE: In connection with the closing of the Logistics Netglobe merger, Loring is exercising its option to increase its stake in the combined company to 20%. (See Logistics network Update #156)
39a/b	December 7, 1998	ANOTHER PERSEUS SHOE DROPS: There's been no public announcement, but Perseus Policy Inc. will cease operations at year end. A majority of its 17 members favored continuing it on a reduced scale, but opposition from Whittier and Plymouth doomed the national policy arm of the nation's major companies and their affiliates. LORING'S NATIONAL NETWORK SIGNS A NATIONAL BANK AS FIRST CUSTOMER: Loring has won a five-year; $120-Million contract to provide the network for a national bank.
40a/b	December 14, 1998	BROOKFIELD LEAVES PERSEUS: Abby Brookfield has resigned as President of Perseus Network Management (PNM) and President/CEO of Perseus Central (PCI). She has been appointed President and Chief Operating Officer of the new Business Services Division of Loring Satellite Division, effective January 4. * PCI will cease operations at year end.

50a/b	December 21, 1998	WHITTIER ANNOUNCES BOARD: Plymouth and Whittier have announced eight nominees each to the Board of their merged organization, Whittier. Chairman designate is Plymouth's Bob Jones; Sam Adams of Whittier is to be CEO. EAST ISLAND COMPANIES JOIN LORING'S NATIONAL NETWORK UPGRADE: Four companies have agreed to participate in Loring's new national company. This will give the new company access to facilities in the four island regions. Loring is the largest shareholder in all four companies.
60	January 27, 1999	LORING'S NATOINAL NETWORK STARTS MOVING -- HOPKINS GETS THE WESTERN FRANCHISE: Announced today.... * Loring's new company is to be called Loring West. The company will provide services to national business customers, starting next week. Loring West is in the final stages of negotiating an alliance with Calhoun. * Hopkins Service and Loring have formed a strategic alliance to expand Loring West, competing directly with Plymouth and Whittier. * Hopkins and Loring will create a new company, initially called NewCo, to offer local, Logistics Network services to businesses in the western regions. The new company will also provide access facilities and customer support to Loring West's national customers in those regions. * Hopkins will own two-thirds of the new company, which will be launched in the 2nd quarter. Hopkins CEO will be Chairman, and Hopkins will lead in its "creation, operation and management." * Loring will buy 20% of Hopkins for $336 Million and will receive seats on Hopkins's Board. * Hopkins will offer Loring West's services in the Hopkins region.
61	March 8, 1999	LORING ALLIES WITH CALHOUN: Loring West will be the exclusive provider of Calhoun's service to business customers across in the nation under a new strategic alliance announced March 3. The deal replaces the previous Calhoun-Perseus agreement, but existing customer contracts will be honored.
62	March 22, 1999	EAST ISLAND COMPANIES TO MERGE: The four island Logistics Network companies have agreed to merge on May 31. The regional companies themselves will continue as separate entities and keep their current names. Loring will own 41.6% of the merged company.

		TECHCO BUYS 20% OF LORING Neighboring company logistics network giant TechCo is buying 20% of Loring, for $5.1 Billion. The deal is expected to close by the end of May. As part of the deal, Loring will acquire Loring's share of Loring Substitute Co, Logistics Netglobe, and six regional companies.
63	April 12, 1999	ADAMS DAMPENS ACQUISITION TALK: Responding to speculation that Whittier might buy Translucent or Call-Net, Whittier CEO Sam Adams told reporters last week that there will not be "a bombshell" announcement at the company's annual meeting in May. * Adams said the company would reveal its new name and some details about its strategy at the meeting.
64	April 26, 1999	WHITTIER BUYS PUBLISHER: Whittier has acquired the eastern assets of Locator Group Inc, a publisher that went into receivership in March. Whittier says it plans to publish 20 to 30 books.
65	May 3, 1999	LORING BUYS SATCO: Loring Business Solutions is paying $25 Million to buy SATCO. Loring says it will retain SATCO's President, staff, and brand.
66a/b	May 10, 1999	ALEXANDRIA JOINS LORING CAMP: Alexandria, the last remaining unaligned company, has signed a three-year alliance with Loring. Alexandria will distribute Loring West services in the Alexandria region. PLYMOUTH-WHITTIER BECOMES WHITTIER: Plymouth. Whittier will operate nationally under the brand name WHITTIER, and its official head office will be in a west coast city. The company is expected to reveal details of its national strategy at its annual meeting on Tuesday May 11.
67a/b	May 17, 1999	WHITTIER TO BUILD NATIONAL UPGRADE NETWORK: Whittier will spend about $260 Million to build a national upgrade network. Completion is planned for late in 2000, but Whittier expects to begin offering Upgrade Network in Loring’s market this fall. * Shares in Milton fell 13% following the announcement. Some analysts had predicted that Whittier would buy Milton’s upgraded network to obtain national coverage. SUBSTITUTE NATION SPLITS: Following Perseus' example, the consortium of industry-owned Substitute Network companies is splitting into two competing groups, Whittier versus the rest. National customers will still be served by Substitute Nation "for the duration of all existing contracts," but otherwise the two camps will compete with

		each other nationally by reselling each others' services.
68	June 21, 1999	WESTERN SERVICE LAUNCHED: On June 21, Hopkins and Loring announced that their joint venture to offer Logistics Network service to businesses in the west, in competition with Whittier. The company's President and CEO is a former Whittier executive.
69	July 19, 1999	PERSEUS NETWORK ENGINEERING TO DISSOLVE: Perseus Network Engineering, which manages the national network of the regional firms, will close down by year end. Loring will provide "national operational support services" to Whittier and other former members.
70a/b	August 3, 1999	LOGISTICS NETGLOBE SHARE PRICE DROPS ON PROFIT WARNING: On July 29, Logistics Netglobe announced that its second-quarter earnings will be 50% lower than expected, and that its 1999 profit may be 17% below analysts' estimates. The company's share price then fell by 22%, cutting more than $2 Billion from its total market value. * Logistics Netglobe attributes its problems primarily to falling prices for wholesale Logistics Network. TWO WHITTIER EXECUTIVES RESIGN: The President of Whittier Advanced Communications, and Whittier's Chief Financial Officer, has resigned "to pursue personal interests."
71	August 16,1999	COMPETITOR TO SELL LORING WEST SERVICES: Loring West says it has formed a "strategic business partnership" with Competitive Logistics network Inc, based in the east. CLNI will offer Loring West services to its customers. Loring West says this is "the first of many such partnerships" it will form.
72	August 23, 1999	WHITTIER NAMES EASTERN_BASED EXECS: Whittier has named three executives to lead its move into Loring's market.
73	September 20, 1999	EXECUTIVE EXODUS AT WHITTIER: Three top Whittier executives have announced plans to leave the company: Sam Adams (President and CEO); Paul Henry (Executive VP and General Counsel); and the Executive VP of Whittier and President of Whittier Substitute). The company will hold a teleconference for investors today. * Two other members of Whittier's eight-member executive team resigned in July. (See Logistics network Update #193)
74	September 27, 1999	JONES REPLACES PETTY AS WHITTIER CEO: The Board of Whittier announced on September 22 that President and CEO Sam

		Adams was leaving Whittier immediately. Longtime Plymouth executive and Whittier Chairman Bob Jones was named interim President and CEO; SUPPLIER FIRM TO EQUIP WHITTIER EASTERN NETWORK: Whittier has chosen a supplier for equipment worth about $200 Million for Whittier's network. Whittier plans to offer services in the east by early 2000.
75	October 4, 1999	LORING TO BUY MAJORITY OF EASTERN ISLAND CO SHARES: Loring says it will offer $27 a share to buy up to 15.8 million of the outstanding common shares of the eastern island companies, to increase its ownership from 41% to over 51%. Loring will finance the deal, to close by December 31, through a combination of debt and equity to be issued to Loring's shareholders. LORING NEGOTIATING TO BUY WHITTIER STAKE IN CONTENT SERVICE: According to published reports, Whittier is discussing with Loring the possible sale to Loring of its 16.2% stake in its content service.
76a/b	October 12, 1999	CALHOUN, MILTON APPROVE MERGER: Calhoun and Milton Corp. have approved a definitive merger agreement, in a transaction valued at approximately US$129 Billion. The combined company, to be called Calhoun, will have pro forma 1999 revenues of more than $50 Billion, a market value of $290 Billion, and operations in more than 65 countries. * Because the deal must be approved by a variety of state, federal, and international authorities, it is not expected to close until sometime in the second half of 2000. * The deal has significant implications for Loring, because Calhoun is allied with Loring. BATTLE FOR MILTON NATION HEATS UP: The shareholders of Milton, parent of Milton Nation, will meet this Thursday, October 14, to vote on Partners' proposal to oust the Board and sell the company. Some recent developments: * Milton Nation and Milton Corp. suspended negotiation of an expanded alliance in order to allow both parties to evaluate the implications of the planned Calhoun-Milton merger. Milton Nation says it expects discussions to resume shortly. * Whittier formally expressed interest in acquiring "all or part of Milton Nation" following the shareholders' meeting. Milton Nation replied that its Board does not think a sale is appropriate now, but would be open to discussions with Whittier at any time. * Milton Corp. committed to vote its 1.1 million Milton Nation common shares against the resolution.

		* Milton Nation appointed an investment bank as its financial advisor for the sale of Milton's neighboring upgrade network.
77a/b	October 18, 1999	WHITTIER WINS MAJOR PROJECT IN EAST: Even before formally opening its doors in the eastern region, Whittier has won a $30-Million contract to provide infrastructure for the new 6,000-unit condominium development in downtown. * Effective today, Plymouth has retired its old name and begun using the name Whittier in its region. COMPANY WINS BATTLE FOR MILTON NATION: A last minute compromise gave a company everything it wanted in the battle for control of Milton Nation last week. See details in the special edition of Logistics network Update published last Friday.
78a/b	November 1, 1999	GRIMSBY SEEKS TO SHED FOREIGN OWNERSHIP CURB: Grimsby, 51% owned by WOODBURY, says that foreign ownership restrictions prevent it from responding effectively to competitive pressures. It says wants to qualify as a company in its nation by reducing Woodbury's stake, but WOODBURY has not agreed. WHITTIER PURCHASES PUBLISHER: Whittier has acquired another publisher of phone books in the east.
79	November 9, 1999	WHITTIER BEGINS SERVICE IN EAST: Last week Whittier officially began offering Logistics Network services to businesses in the eastern region.
80	January 17, 2000	WHITTIER, EASTERN CITY IN RIGHT-OF-WAY FIGHT: A Whittier application asks the REGULATORY BODY for an interim order giving it access to an eastern city's rights-of-way. The issues in dispute are similar to those between a western city and Loring/Whittier/Milton (see Logistics network Update #211).
81	January 24, 2000	LORING EASTERN ISLAND CO OFFER SUCCEEDS: Shareholders in the eastern island companies have tendered 31.2 million shares in response to Loring's offer of $27.50 each. Under the terms of the offer Loring will actually purchase 15.8 million of the tendered shares, bringing its ownership of the eastern island co to 53%.
82a/b	January 31, 2000	LORING CUTS SUPPLIER LOOSE: By the end of the second quarter, Loring will reduce its stake in its supplier from 39% to 2%. For each share of Loring they hold, Loring shareholders will receive approximately .78 of a common share of a new publicly traded company that will own all of its shares. LORING SHUFFLE EXECUTIVES: Mike Smith has a new vice-chair of Loring's Vice-Chair Market Groups, with responsibility for

		all of Loring's "customer-facing organizations," and another executive as Loring's Vice-Chair Corporate, with responsibility for all internal staff groups. * Another replacement for the President of Loring West, and a replacement for the President of Loring regional. * Chris Dremmer is now Chief Corporate Officer of Loring and continues as non-executive Vice-Chair of Loring. He will become non-executive Chair of Loring.
83a/b	February 7, 2000	COST CUTTING A PRIORITY AT WHITTIER: In an internal videoconference last week, Whittier President Bob Jones told employees that "cost cutting is a priority in 2000," in order to respond to competitors' lower prices. "We must reduce our costs simply to remain viable," he said, warning of "workplace changes" in coming months. WESTERN JOINT VENTURE MOVES CLOSER TO LORING WEST: The company formed by Loring and Hopkins to compete with Whittier for business customers in the west, has been renamed Loring West. The change is part of a strategy shift which will see the employees sharing office space and operating "as a single team" with Loring's national-account company, Loring West.
84	February 14, 2000	MUNICIPALITY CANCELS WHITTIER R.O.W. AGREEMENTS: The municipality has informed Whittier it is canceling existing right-of-way and access agreements as of December 31, 2000, and expects to renegotiate on new terms. Whittier says that the municipality cannot legally place conditions on its operations.
85	February 21, 2000	LORING BUYING LOGISTICS NETGLOBE: Loring has agreed to buy the 77% of Logistics Netglobe that it does not already own for $9.65 Billion in Loring stock. Logistics Netglobe has a new Chairman (Mike Smith) and co-CEOs (CEO of Logistics Netglobe Communications and another CEO). The former CEO is now "Special Advisor" to Mike Smith.
86	February 28, 2000	LORING OFFERS $2.3 BILLION FOR CONTENT PROVIDER: LORING has offered to purchase all shares of a content provider for $2.3 Billion in cash. Loring says the purchase, which is subject to the provider and regulatory approval, will enhance its strategy of convergence * Loring's Board is proposing a "shareholder rights plan" to its April 26 general meeting to counter a possible takeover bid.
87a/b	March 27, 2000	WHITTIER SUBSTITUTE NETWORK MOVES EAST: Whittier has begun offering Substitute Network Logistics Network service in

		the east. WHITTIER ADOPTS POISON PILL: Whittier’s Board of Directors have adopted a shareholder rights plan to deter possible hostile takeover bids.
88	April 3, 2000	WHITTIER TO ACQUIRE GRIMSBY: Whittier has agreed to buy 70% ownership of Grimsby from independent shareholders and Woodbury. The deal, which will eliminate foreign ownership restrictions that have limited Grimsby's ability to expand beyond its franchise area, has been endorsed by Grimsby's Board and by Woodbury. The deal is subject to a vote by minority shareholders.
89	April 10, 2000	WHITTIER ADDS SIX OFFICES: In the past month, Whittier opened new offices in the eastern region. The company now employs 200 people in the eastern region.
90	April 12, 2000	WHITTIER AND MUNICIPALITY AGREE: On April 12, a City Council gave Whittier permission to install a national upgrade network. Details of the agreement were not made public. Whittier says it will install 118 km network by May 2001. (See Logistics network Update #216)
91a/b	April 24, 2000	LORING WEST APPROVED AS COMPETITIVE FIRM: Loring West, which is owned by Loring and Hopkins, has received Regulatory body approval to operate as a competitive firm in the west. The company says it will begin migrating its customers in the west to its own network now, and further west in July.
92	June 5, 2000	WHITTIER NAMES NEW CEO: After a nine-month search, Whittier has named a new President and Chief Executive Officer, effective July 10. An executive who worked for Loring International in the early nineties. * Bob Jones, who has been acting President and CEO since Sam Adams's resignation last year, will resume his position as Chairman.
93	June 19, 2000	LORING CUTS LOGISTICS NETGLOBE PRICE: LORING and Logistics Netglobe have agreed to revise the deal under which LORING is buying the international carrier. The total price has been cut from $6.8 Billion to $6.4 Billion in LORING shares. Shareholders can take up to 20% of the purchase price in cash. * LORING also agreed to provide Logistics Netglobe $100 Million in financing immediately, and more if required before the purchase closes. Without this money, Logistics Netglobe might have defaulted on its bank loans.
94a	July 17,	WHITTIER CHALLENGES TWO LORING FEDERAL

	2000	CONTRACTS: Whittier has appealed to the Trade Tribunal against the award to Loring of two federal government contracts.
94b	July 23, 2000	LORING LAUNCHES PR BLITZ: On July 21 Loring Enterprises published full-page ads in five newspapers, arguing that government policy should rely on market forces to determine which logistics network companies succeed or fail. The ads are part of a campaign to counter Nicollet Nation's lobbying for new rules favoring alternative carriers.
95a/b	July 31, 2000	LORING WEST PLANS 10-CITY EXPANSION: Loring plans to extend its network infrastructure to 10 more Western cities this year. The Loring-Hopkins joint venture currently offers business logistics network services in three western cities. LOGISTICS NETGLOBE INVESTORS ALLEGE FRAUD: An Arkansas-based law firm has filed a class action suit against Logistics Netglobe, charging that during that period Logistics Netglobe issued "a series of material misrepresentations" regarding its profitability between February 11 and July 29, 1999.
96	August 14, 2000	LOGISTICS NETGLOBE REVENUE AND INCOME PLUNGE: Logistics Netglobe revenues in the second quarter were US$594.6 Million, down 17% from the same period last year. The company lost $87.7 Million in the quarter, compared to a net gain of $25.9 Million a year ago. About half of the decline resulted from falling revenues at multi-level marketing subsidiary. * New owner Loring said it will close Logistics Netglobe's head office and eliminate about 850 jobs worldwide this year. * All of Logistics Netglobe's retail sales operations are being moved into the subsidiary, and its results will be reported separately from Logistics Netglobe in future quarters.
97	August 21, 2000	WHITTIER BUYS TRANSLUCENT: Whittier Corporation has agreed to buy all outstanding shares of Translucent Communications, for $6.6 Billion in cash and stock. Translucent President will head the combined operation. * The Boards of both companies have approved the deal, which is expected to close in October.
98	September, 18, 2000	LORING AND PUBLISHER CREATES MEDIA GIANT: Loring Inc, the Printing Co have agreed to combine resources in a $4.1-Billion media company. The new venture, owned 70.1% by Loring, will own the content.

		* Regulatory body hearings into Loring's content purchases begin today at 9am. They will be telecast, and a live audio feed is available from the regulatory body's Web site.
99	October 10, 2000	LORING AND HOPKINS PLAN NEW SUBSTITUTE NETWORK COMPANY: Loring and Hopkins are creating a joint venture to offer Substitute Network in the west. The Substitute Network equivalent of Loring West has the working name Substitute Network West.
100	October 16, 2000	WHITTIER BEGINS EASTERN MUNICIPAL UPGRADE BUILD: Whittier and Upgrade Supply Co say the first phase of their upgraded network will be completed early in 2001. By the spring of 2002, they plan to install 864 pieces over 225 route kilometers, creating one of the largest metropolitan upgrade networks in the continent.
101	November 6, 2000	LORING TO SUPPLY WEST WITH UPGRADE NETWORK: The Government of Whittier's region has awarded a consortium headed by Loring West a $300-Million contract to build an Upgrade network linking schools, hospitals, libraries, and government in 420 communities. The network, to be completed in three years, will serve 90% of the region's population.
102	November 13, 2000	WHITTIER CHIEF PLANS EXECUTIVE SHUFFLE: According to the newspaper, Whittier CEO says the company will announce a reorganization within two weeks that will include replacement of two-thirds of Whittier's senior managers. * Whittier has named Translucent's former CEO as the President and CEO of Whittier Substitute.
103	November 27, 2000	WHITTIER TO LAUNCH MAJOR-ACCOUNT UNIT: Whittier's new Client Solutions division, headquartered in the east, will provide a single point of contact for large business and government customers. The group, which will have 3,200 employees across the nation.
104	December 11, 2000	WHITTIER PUTS ONE OF ITS PUBLISHER UNITS UP FOR SALE: Whittier says that it has put Whittier Advertising Services, its publishing division, up for sale.
105a/b	February 19, 2000	WHITTIER TO BUILD OUT GRIMSBY NETWORK: Whittier plans to spend $200 million to expand Grimsby's upgrade network by 30,000 km a year, in order to reach 80% of the Grimsby regional business market by 2003. * Whittier reports fourth-quarter revenue of $1.8 billion, 18% more than last year. Newly acquired Translucent and Grimsby added about

		$200 million to revenue; interest payments tripled, to $142 million. Net loss: $27.4 million, compared to a $201 million profit last year. FORMER LORING SUPPLIER SHARES PLUNGE 33%: On February 15, the former Loring supplier said it now expects revenues and earnings per share to grow 15% and 10% respectively in 2001, about half its previous estimates. Job cuts this year will total 10,000, not 4,000. The day following the announcement, the price of shares dropped 33%.
106	April 2, 2001	WHITTIER BUYS EQUIPMENT SUPPLIER: At a March 27 investors' briefing in the eastern region, Whittier announced that it has purchased logistics network equipment dealer, which has 2,500 business customers, primarily in the east. In addition, Whittier said that its national network is now operational. Whittier also announced: * Acquisition of Upgrade Network developer. * Sale of its western region office tower for $120 million. * A $4.5 billion line of credit from a Bank.
107	June 4, 2001	WHITTIER BUYING SATNET: Whittier has agreed to buy the national operations of SATNet, a Virginia-based Upgrade Network provider that filed for bankruptcy protection June 1. SATNet has 275 employees and 8,600 corporate accounts. * Whittier is also acquiring another eastern company with 85 employees, for about $21 million.
108	July 23, 2001	LORING LAUNCHES PR BLITZ: On July 21 Loring published full-page ads in five newspapers, arguing that government policy should rely on market forces to determine which logistics network companies succeed or fail. The ads are part of a campaign to counter Nicollet Nation's lobbying for new rules favoring alternative carriers.
109	July 30, 2001	WHITTIER BUYS COMPETITIVE COMPANY ASSETS: Whittier has acquired most of a firm’s assets in the east. WESTERN UPGRADE NETWORK FIGHT HEATS UP: On July 24, Whittier announced that 70% of homes and businesses in the west Upgrade Network service by 2003, two years ahead of schedule. On July 25, A competitive carrier aims to have one million upgrade network customers -- 50% of its customer base -- by March 2002.
110	August 13, 2001	LORING SUBSTITUTE BUILDING WESTERN NETWORK: Loring Substitute will pay a supplier $180 million to build a new Substitute Network in the west, to be operational in major cities early in 2002. In addition to standard Substitute Network service, the network will support upgrade network service.

111	September 4, 2001	WHITTIER SUBSTITUTE COMES TO HOPKINS: Whittier Substitute has expanded its substitute networks to cover the Hopkins region.
112a/b/c/d	September 17, 2001	AN APPALLING TRAGEDY: Last week's terrorist attacks on the United States have appalled the world. The weekly report publishers' extend their deepest sympathies to the victims and their families, and we salute the bravery and dedication of the thousands of emergency service workers who have responded so heroically in this crisis. NETWORKS DAMAGED: Southern Manhattan has been described as "the most logistics networks-intensive area in the world." The largest logistics network company has five interconnections serving some 500,000 logistics network lines south of 14th Street. More than six million private lines pass through the interconnection centers in or near the World Trade Center. Nicollet and Milton centers in the WTC were destroyed. A major neighboring company lost two WTC-specific center in the towers, and two nearby interconnections were knocked out by debris, fire, and water damage. Ten substitute network cell sites were destroyed in the attack; one company lost six and Milton lost four. Power failures interrupted service at many other substitute network facilities. The combination of damage and loss of power shut down all logistics network service in and around the disaster area. It is very likely that underground networks were badly damaged, and no one can yet provide any estimate of when anything approaching normal service will be restored.
113	October 22, 2001	NEW CEO TO HEAD LORING WEST: an interim CEO of Loring West has been named Chair, CEO, and President on a permanent basis. A Loring VP is now Loring West's COO.
114	October 29, 2001	LORING INTERNATIONAL FACES CASH CRUNCH: Loring International, 74% owned by LORING, says it needs additional capital to meet "short-term liquidity challenges." Loring International, whose Latin American Substitute Network companies have six million subscribers, lost $391 million in the third quarter on sales of $149 million.
115	November 5, 2001	HOPKINS RELEASES "NORMALIZED" LORING WEST RESULTS: Hopkins has published "normalized" Loring West results for the first three quarters of 2001 that show 3% less revenue and a 4% greater EBITDA loss than was indicated in its quarterly financial reports. (See Logistics network Update #306)
116	November 19, 2001	LORING CLOSES WESTERN PUBLISHER: In 1999, Loring launched a western publisher, promising "better choice, better prices, and better products and services" than incumbent Whittier. Last week Loring closed down the operation, cutting 105 jobs, blaming a

		"downturn in advertising sales" and "a challenging print directory market." * Loring's sister company another content service, also citing slumping advertising sales, has withdrawn its application to the regulatory body to launch a new TV service in the east.
117	November 26, 2001	WHITTIER MOVING TO NEW LOGISTICS NETWORK PLATFORM: Whittier is moving its Logistics Network services off the platform it has shared with other ex-Perseus companies to its own Intelligent Network system.
118	December 17, 2001	LORING PUSHES COST-CUTTING: At their annual investor conference last Wednesday, LORING executives repeatedly stressed cost cutting as a key objective in 2002. * Loring President says "productivity improvements" will save up to $500 million. Substitute Network capital spending will be cut 15%, and the rollout of substitute network to new areas will be slowed significantly. Costs will be cut at eastern companies by merging key staff functions into Loring. * Up to 2,000 LORING jobs will be cut, but total employment will not change, as a result of new hires in faster-growing parts of the company. * LORING will not put additional capital into Logistics Netglobe or Loring International. ... PLANS ASSET SALES: Loring expects to sell several non-core holdings, including international ventures, over the next three years. ... SEEKS TO RESTRUCTURE Loring West: Loring CEO Mike Smith told the conference that the company is negotiating to get more control over Loring West, its joint venture with Hopkins in the western markets. ... EXPECTS TURNAROUND IN 2002: Loring predicts 6%-8% revenue growth in 2002, but this assumes a general economic recovery in the second half of the year.
119	April 25, 2002	Mike Smith quits as head of Loring

*The first column indicates the reference used to triangulate interview events to the archival records

APPENDIX B: KEY INFORMANTS FOR THE QUALITATIVE INTERVIEWS

Data access, consent, and user involvement

This process study used archival data, and interviews with key informants were also necessary to gain contextual understanding. The key informants as identified earlier involved both practitioners and academics interested in the phenomena of the alliance. Prior work experience in the same industry as the informants facilitated access to the key informants. The interviews were tape-recorded and transcribed. Interactions with these informants facilitated access to new sources and insights. Consent was obtained according the University of Manitoba’s guidelines for human subjects’ research that seeks to protect the rights of respondents. This requires that the proposal for research is approved by the research ethics review board and respondents who are willing to participate do so under informed consent. Feedback was pursued iteratively from the relevant communities of academics and practitioners throughout the research process, in accordance to principles of engaged scholarship (Van de Ven, 2007).

The following table presents a listing of the key informants and the variety of backgrounds drawn from the industry.

Respondent	**Role**	**Perseus**	**Loring**	**Whittier**	**Plymouth**	**Perseus Other**	**Analyst**	**Regulatory**	**Competitor**
Abby Brookfield	Executive	X	X						
Maurice Norton	Analyst						X		
Edward Furlong	Manager	X		X		X			
Greg Hamill	Executive	X	X			X			X
Chris Dremmer	Executive	X	X						
Kelly Lanoway	Executive		X			X		X	
Ian Jones	Executive			X					
Paul Henry	Executive			X				X	
Sam Adams	Executive			X					X
Orville Presser	Executive	X		X	X				

APPENDIX C RESEARCH IMPLEMENTATION AND PROBLEM SOLVING

The schedule and budget for conducting the research was proposed in the following section.

Timeline:

The proposed timetable needed to carry out this process study requires engaged interaction with the scholarly community as well as practitioners in order to make a meaningful impact both in theory and in practice (Van de Ven, 2007). The time taken to initiate and carry out such activities has been included in the timeline.

Literature review, study design and approval,	1 month (Target date Dec 16)
Data collection	1 month (Target date Jan 1)
Coding, feedback with respondents and data analysis	1 month (Coding Target date Jan 15; Analysis Target date Feb 15)

Final data analysis and write-up, feedback with committee members	3 months First draft June 15, Next draft September 2
Total Duration Required	9 months

Budget:

Due to the process study design, in person interviews and archival material will be the main source of data. The volumes of archival and interview data will require research assistants to assist with the coding.

Item Estimated Cost	
Logistics Network calling charges and travel	800
Research assistance for data coding	1000
Total	1800

Sources of Funding.

My personal funds were used to cover the costs of the flights and the research assistant support.