Creating Control Configurations During Organizational Founding

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Abstract

This research examines the evolution of organizational control during organizational founding in a ten-year case study. Past research has examined aspects of organizational controls in mature, stable organizations. By bringing together work on control mechanisms with research on control targets and configurations, this study provides new insights about the combinations and uses of various types of control. This study provides a potentially significant step toward making organization control theory more operational, cumulative, and appropriately multifaceted. (75 words)
Control systems are a fundamental aspect of all organizations (Scott, 1992: 9) through which managers seek to align employee capabilities, activities, and performance with organizational goals and aspirations (Cyert & March, 1963; Merchant, 1985). Theories of organizational control describe how managers measure, influence, and monitor the work of organizational actors by channeling their efforts and comparing their performance against established standards and providing rewards or sanctions based on these evaluations (Cardinal, 2001; Kirsch, 1996, 1997; Makhija & Ganesh 1997; Merchant, 1985; Snell, 1992).

Despite the fundamental importance and significant work on organizational control, this area of study remains seriously underconceptualized and, as a result, has not been subjected to much cumulative empirical study in recent years. To respond to this general concern, in this paper we synthesize two discrete streams of organizational control research to understand and draw implications from the creation of control systems in a newly founded company. We recognize that organizations do not utilize single controls in isolation, but that organizational control is best depicted as configurational, a “multidimensional constellation of conceptually distinct characteristics that commonly occur together” (Meyer, Tsui, & Hinings, 1993: 1175). By studying a new organization, we are also able to discern how specific controls are adopted and configured before numerous layers of intertwined and overlaid control systems have been put in place. Our goal is to provide theoretical and operational groundwork that will facilitate renewed critical interest in this important feature of organizations.

Research on Organizational Control

Organizational control has been defined (Long, Burton, & Cardinal, 2002) as any mechanism that managers use to direct attention, motivate, and energize organizational members to act in desired ways to meet an organization’s objectives. Organizational control has been studied in one of two ways in the organizational control literature. An earlier, highly influential body of work
examined “ideal types” of control arrangements, whereas more recent work has examined individual elements of control and tried to understand when and with what effect particular control techniques are used. Each of these streams provides important foundational elements for the work on control described, so we will briefly summarize each before providing the synthesis that forms the basis of the study reported on here.

**Typological control research.** One stream of work follows from Ouchi (1977, 1979, 1981) and takes a configurational perspective by examining organizational controls as ideal types. This line of research differentiates organizations based on Ouchi’s definition of three distinct organizational forms in the use of control (i.e., markets, clans, and hierarchies) and the distinct controls he associated with each ideal type (i.e., prices in markets, norms in clans, and rules in hierarchies). Ouchi’s important and influential stream of research was most prevalent in the 1970s and 1980s (Ouchi 1977, 1979, 1981; Ouchi & Jaeger, 1978; Ouchi & Johnson, 1978). Although this line of control work remains the most cited of all organizational control research, theoretical and empirical advancement of this configurational work has stalled in the last 15 years. The limited impact on today’s control research can be largely explained by drawing upon Miller’s (1986) identification of the core limitations of many configurational approaches, including too high a level of generality, a relatively narrow range of specifics considered (i.e., control mechanisms in this case), and/or the rigidity associated with many ideal types that exclude normal empirical variation and thus discourage continued empirical investigation.

**Control elements research.** The second stream takes a more molecular approach to control and delineates the individual elements of control. Research on organizational control has identified and focused on specific categories of control mechanisms (i.e., individual units of organizational control, such as standards, rules, procedures, policies, routines, and norms) used to manage such issues as socialization, principal-agent relations, and performance evaluation
Researchers have conceptualized and empirically studied control by classifying control mechanisms according to their position along a “formality” continuum (e.g., Makhija & Ganesh, 1997) or by the objective (target) that they serve (e.g., Cardinal, 2001; Kirsch, 1996, 1997; Snell, 1992). This stream has also greatly influenced control thinking and is representative of more recent research on control among organizational scholars over the last two decades (e.g., Cardinal, 2001; Kirsch, 1996, 1997; Long et al., 2002; Makhija & Ganesh 1997; Snell, 1992). While this research stream has been influential, its practical applicability has been limited because it has not examined more than one or two elements (e.g., only a few input control mechanisms) or a subset of elements (e.g., only formal control mechanisms) at a time, thus missing whether control elements tend to appear in predictable clusters (Doty, Glick, & Huber, 1993).

Drawing together the two research traditions. In order to better understand the deployment and effect of organizational control configurations, we wish to examine the specific types of control mechanisms used by exploring the links between previously identified configurations and the specific elements of control that have been observed in earlier empirical studies. For example, researchers have drawn links between markets and output control, bureaucracies and behavior control, and clans and input control (e.g., Eisenhardt, 1989). Researchers have also linked clans to informal control and bureaucracies to formal control (e.g., Makhija & Ganesh, 1997). However, these studies remain in neat and tidy groupings and do not decompose the specifics that allow for replication and extension. The linkages have been seen as contingent, dyadic, and have been examined in a very useful but piecemeal manner, rather than taking a more holistic configurational approach.

While these studies provide important underpinnings for a holistic theory of control, we believe the real opportunity to advance control research lies in “synthesizing broad patterns from
the contingency theory’s fragmented concepts and grounding them in rich, multivariate descriptions, the configurational approach may help consolidate the past gains of contingency theory” (Meyer et al., 1993: 117). Our goal in adopting a configurational approach is to set the stage for a theory of control that is amenable to more specific, rigorous and predictive theoretical and empirical work (Doty et al., 1993).

Miller (1996: 508-509) provides criteria/guidelines for the effective study of configurations and these criteria guide our formulation of the next steps needed in revitalizing organizational control research: (1) “develop taxonomies that others can replicate,” (2) study “the emergence of configuration,” and (3) “connect configurations to theory.” In pursuing Miller’s guidelines, this paper draws upon a decade-long case study of a new organization to advance our understanding of the “emergence” of organizational control configurations. Because it is difficult to accumulate empirical research findings when “extremely crucial slices of organizational reality” (Miller, 1986: 234-235) remain isolated and unconnected, we pursued Miller’s suggestion about replicable taxonomies by making the linkages between specific elements of control and control configurations explicit and operational.

In order to connect control configuration work to organization theory, we chose to study the emergence of control in a context in which company co-founders were consciously and explicitly trying to design control systems. This context allowed us to examine the theoretical implications of a richer, more granular understanding of intentional control design and the initiation of control in new organizations – both untested theoretical territory for control research.

We also took seriously the admonition to study “emergence.” In fact, we recognized that, consistent with the critique offered by Kimberly more than 20 years ago (1977) and Aldrich (1999) quite recently, scholars who have studied organizational control have devoted almost exclusive attention to understanding the characteristics and effects of control in large, mature
organizations, with little or no attention to “how they came to be that way” (Aldrich, 1999: 1). As with many organizational phenomena, control efforts commence with the creation of the organization (Aldrich, 1999; Kimberly, 1979). Yet control research has focused on the attributes of control in mature organization settings, in which formal and informal control systems are already well established and intertwined with other organizational processes and systems (e.g., Birnberg & Snodgrass, 1988; Ouchi, 1977, 1980; Ouchi & Jaeger, 1978; Ouchi & Johnson, 1978). Applying Miller’s insights (1996) to control, the study of mature configurations is unlikely to provide insights into configurational options and how they came to be. Linkages between a range of control targets, levels of formality, and control configurations are more clearly evident before the control configurations have stabilized and settled.

We extend control theory by looking at a longitudinal study of a start-up company. Our study reveals distinct stages during an organization’s founding period in which specific configurations of control mechanisms are present. As a result, from our observations we are able to derive potentially significant theoretical insights concerning the creation of control configurations and their specific elements.

**METHODS**

To present our account of this organization and the theoretical framework derived from our analysis, we begin by describing our data collection efforts and our analytical approach. In the analysis that follows, we show how this start-up organization’s history enhanced our general understanding of control configurations and present our inductively synthesized framework. Finally, we examine the implications of this analysis for control formation and the development of a broader understanding of control in organizations.

**Case Context**

Blue Whale Moving Company specializes in short-haul, professional, and residential
relocations, in a mid-size, southwestern, metropolitan area. Blue Whale was founded in the fall of 1988 by Barry Atkins, an attorney and entrepreneur who provided the capital and played a small advisory role in the beginning, and Bill Meyer, a young mover who managed the organization full-time. During a ten-year period (1988 to 1998), the organization passed through four phases. The development of the organization’s control system is manifest in the statement by a Blue Whale employee:

In the beginning I wanted to be “buddy buddy” . . . then I turned totally 180 and wanted to be “Joe Hardass” . . . It took me a while to find a “happy medium.”

In the fall of 1988, Meyer and several part-time movers commenced moving operations and established the company as an operating organization. What we refer to as Phase 1 lasted for approximately six months, from the company’s founding in late 1988 until spring 1989. In Phase 2, which began in April 1989 and lasted until early 1992, the organization experienced rapid growth and the company’s co-founders received local and national acclaim for their entrepreneurial successes. Then, in Phase 3, which lasted from spring 1992 until early fall 1995, the organization experienced significant organizational and financial problems. The problems that erupted during Phase 3 led the organization to hire professional management in Phase 4 (1995 – 1998). We formally ended our investigation in 1998, once it became clear that Phase 4 control-related activities had stabilized and Blue Whale’s founding period had ended.

**Rationale for Site Selection**

We initially selected Blue Whale as a study site where we could explore issues relating to the effective implementation of a strong cultural control system. The elaborate, informal control system they used at the time we began our data collection (Phase 2) differed significantly from the industry norm, under which most local moving companies hired individual, day laborers (“movers”) from spot markets. Blue Whale’s co-founders, in an effort to differentiate themselves from competitors and to avoid the problems (e.g., high employee turnover) that commonly
plague companies in their industry, explicitly chose a strategy that included hiring movers as permanent employees and designing the company’s control systems to boost employee morale, improve mover performance, and promote exemplary customer service. At the time, we were interested in understanding how Blue Whale’s strategy of eschewing formal control might work and whether it could inform organization theory.

A team of four researchers collected archival data, interviewed organizational members, and observed company operations to understand Blue Whale’s control system and how it had evolved during the company’s founding period. As our analysis progressed, the company’s performance began to decline. This decline led co-founders Atkins and Meyer to radically and unexpectedly shift the controls used. At this point, our research agenda also changed, as we recognized that we had a unique opportunity to observe a naturally occurring, radical change in the use/application of organizational control mechanisms.

While the radical change that occurred at Blue Whale was serendipitous, three factors qualified the Blue Whale Moving Company as an ideal candidate for our longitudinal research agenda on the creation and early evolution of control system configurations: control transparency, the intentional and explicit creation and use of controls, and issues of organizational emergence. First, the establishment and changes in control systems were transparent and easily observed as a result of Blue Whale being a small company, performing a relatively routine set of tasks in a simple industry. Second, because control comprised a central component of Blue Whale’s strategy at founding, the company’s co-founders, managers, and employees presented clearly articulated and documented conceptualizations of the range of controls they applied and their motivations for implementing various mechanisms. Third, because the company’s leaders and members were quite open with research team, we were able to collect data on the company’s control usage throughout its first 10 years, from the time the co-
founders first began selecting the organization’s control mechanisms. Thus, we were able to accurately track the mechanisms used throughout their control system’s evolution.

**Data Collection**

Data collected on the evolution of Blue Whale’s control system consisted of structured interviews, semi-structured interviews, informal interviews, observations of the organization’s operations, and archival material.\(^3\) We chose to conclude the formal data collection in 1998 since, by that time, their control system had stabilized for two years.\(^4\)

In order to develop a picture of Blue Whale’s evolution and use of control, interviews with each subgroup of organizational members were conducted – co-founders, managers, support staff, and front-line workers (i.e., movers) for each phase.\(^5\) Our observations and interviews allowed us to develop a general understanding of the industry and company operations, and to construct a chronology of the company’s history. We later spent our time tracking changes in the control usage. We were able to verify accounts through archival checks or multiple references.

Our data collection efforts included three waves. First, we utilized a retrospective approach, following Miller, Cardinal, and Glick (1997), to develop an understanding of the founding of the organization’s controls between late-1988 and when we entered the organization at the start of 1991 (the first two years of Blue Whale’s existence).\(^6\) The retrospective reports were gathered during on-site structured interviews. While we acknowledge that individuals “tend to impose order retrospectively on phenomena which in real-time are rife with ambiguity and conflict” (Kimberly & Bouchikhi, 1995: 12), we believe that several aspects of our data collection effort at this stage enhanced the accuracy of the retrospective reports we collected. First, Blue Whale’s co-founders allowed us to investigate any aspects of Blue Whale’s control system that we deemed relevant or for which we surfaced conflicting accounts. The informants were not reticent about discussing issues and did not try to withhold information. Second, we also sought to obtain
information in the form of facts, and encouraged informants to refrain from providing opinions (Glick, Huber, Miller, Doty, & Sutcliffe, 1990). We used free reports, whereby informants can decline to answer any question when they do not have an answer. Free reports have been shown to have a high level of accuracy (Miller et al., 1997). Third, we supplemented interview data with archival data, such as organizational financial records, office memoranda, and artifacts (e.g., posted charts, customer letters). We also had the opportunity to observe organizational members in their jobs. Fourth, whenever possible, we attempted to verify accounts provided by individual informants by asking similar questions to multiple participants.

Our second and third waves of data collection from 1991 through 1998 were carried out on a real-time basis. For our second data collection wave, we collected data concerning on-going events from 1991 through the end of 1995. For this wave of data collection, we primarily relied upon on-site structured interviews, intensive observational visits, archival records, artifacts, and ongoing informal interviews (telephone updates) to stay abreast of the organization’s unfolding history and control evolution process.

Our final wave of data collection, from 1996 to 1998, involved conducting follow-up, semi-structured interviews by telephone and the continued collection of archival data. These interviews were more narrowly focused than in the first two waves, as we were now tracking specific changes in control system use that would indicate stability or lack of in control use.

Data Analysis

We employed a traditional grounded theory approach by continuously comparing data with emerging theoretical constructs (Glaser & Strauss, 1967; Miles & Huberman, 1984). Following the grounded theory method, we were able to classify distinct control mechanisms and distinct time periods in the story of the company’s history (Dyer & Wilkins, 1991; Kimberly & Bouchikhi, 1995).
We utilized six steps in the data analysis process. In step 1, we constructed a chronology of the company’s key historical events. In step 2, as we reviewed the data, it became clear that the organization went through four control phases, involving three discernible transitions in its use of control. We noted that the control systems in use during the first three phases matched Ouchi’s (1980) control typologies (market, clan, bureaucracy). We drew upon Roth, Sitkin, and House’s (1994) concept of “integrative control” (an extension of Ouchi’s control typology in which the use of both normative and bureaucratic control is high) to characterize controls used during the fourth phase of the study. In step 3, we identified inductively the control mechanisms (i.e., individual units of control such as singular processes, policies, norms, etc.) the organization employed during each phase. We then systematically searched our data for evidence of each mechanism during each phase to insure that we did not erroneously infer the absence of a mechanism due to incomplete data collection. In step 4, we coded whether each control mechanism was formal or informal. In step 5, we classified each control mechanism as to its role in “what” is controlled – the target of control (input, behavior, output). Our last step of the analysis focused on classifying configurations of control mechanisms and control targets and capturing how those configurational patterns evolved over time. Our data permitted us to track the initiation, usage, and termination of the various configurations of control mechanisms used in Blue Whale across the four phases. Building on the approach used by Glick et al. (1990) we classified each mechanism as to: (1) when a new control mechanism was initiated, (2) whether it was retained across a time period from the prior phase, (3) whether its use lessened in intensity or it was completely removed, (4) whether it was augmented and reinforced, and (5) whether it was a previously used control mechanism that had been discarded and re-invoked.

Two coders identified all of the control mechanisms and noted all changes in each mechanism during throughout the four phases. The Perreault and Leigh (1989) index was used to
estimate inter-rater reliability, and the estimate was sound for all three control attributes coded: control formality (0.98), control target (0.90), and control changes (0.96).

RESULTS

As Blue Whale passed through four distinct phases they adopted four types of control systems: market, clan, bureaucratic, and integrative. For each phase, control mechanisms were distinguished based on whether they were formal or informal and whether they targeted inputs, behaviors, or outputs.

Phase 1. In September, 1988, Barry Atkins and Bill Meyer founded their company by purchasing a used trailer, a cellular phone, and miscellaneous supplies. For the first six months the company began to develop a few specifically tailored control mechanisms, but essentially adopted the controls used by others in the industry.

Meyer relied primarily on his understanding of industry norms and practices to develop Blue Whale’s initial control system. In the moving industry, employees were generally hired as daily contract workers and would choose to work for the company that paid them the highest daily rate. Meyer followed these universal industry norms and implemented an intra-organizational market control system. Meyer’s leadership approach during Phase 1 fundamentally depended upon his use of output controls: the pre-set, commission-based-pay that movers received for completing jobs served as the primary control mechanism. How efficiently and effectively movers performed their tasks was directly related to how much pay they received. With this clearly in mind, Meyer recruited and motivated employees with market-based incentives.

I knew that [it] was going to be tough because, for the good workers that I knew that were out there in the city, I wasn’t going to be able to attract too many of them at the beginning because I didn’t have enough work to keep them busy full time.

Meyer was able to pay high salaries by minimizing organizational costs, working long hours, and completing as many jobs as possible during seven-day work-weeks. His first two employees
were paid on a pure commission basis. As Meyer figured, the more jobs this first crew completed, the higher their wages and tips and the more attractive Blue Whale would look to future potential employees. In recruiting and in motivating current employees, he directed attention to the salaries they could earn if they provided customers with fast, reliable service.

I keyed on trying to help these guys break down in their head, and this is early on, how much they were going to be able to make per hour if they hustled . . . I wouldn’t necessarily say this to them, but I was thinking that Blue Whale wouldn’t be making squat if it was going to take them all day to do this work. I wanted to motivate them to get this work done at the [billable] rate of $100 per hour. That was my goal. Get out there and you have [billed] a $600 day and it ought to take you 6 hours to get it done. If you do that, you have made your $125 and at 3 o’clock you are at the pool.

Due to their interest in developing a strong culture, during Blue Whale’s first six months the two owners frequently talked about the primary thrust they wanted for Blue Whale’s control system emphasizing informal, cultural controls. They planned to empower employees by creating a team atmosphere that placed a premium on maintaining spotless trucks, tidy equipment, clean-cut personnel, and outstanding customer service.

Startup details required so much attention that Atkins and Meyer were not able to explicitly focus on developing and implementing many formal or informal control mechanisms during Phase 1. The owners did, however, take a few actions that created a foundation for the subsequent development of informal control. They selected and trademarked “Blue Whale” as the company’s name and logo because they felt the image of this “gentle giant” instilled a feeling of strength and confidence for potential customers and employees. They spent much time choosing this image and designing a logo, because they saw the cultural symbolism it conveyed as the “heart and soul of their firm,” and hoped that cultural control would develop into the key mechanism by which they would ultimately manage the company’s operations.

Meyer informally supervised employees’ behavior through his personal presence and his relationships with them. The overwhelming focus of this phase on output control was softened somewhat by the selective-but-charismatic use of informal behavior control by Meyer. This
pattern was to change strikingly as the company entered Phase 2 and Meyer’s initial informal forays formed the foundation for the company’s construction of a strong, culturally-focused control system.

Phase 2. After approximately six months of operation, Blue Whale’s clan control system began to emerge. Six months into Phase 2, Blue Whale earned enough revenue to purchase another trailer and hire a second moving crew. Over the next four years, the company grew to generate over a million dollars in annual revenue. Recognizing the potential of the business, Atkins quit his law practice in late fall, 1991 and began working full-time at Blue Whale. In order to codify the goals and management philosophy Meyer had successfully applied informally, the two owners wrote the Blue Whale Vision Statement in 1992.

By 31 December, 2000, Blue Whale will have become preeminent in the moving and storage industry, with locations in 100 cities worldwide. Marked by complete commitment and dedication to the highest standards of moral and ethical excellence, Blue Whale will be delivering an exceptional service experience created uniquely for each customer, by radiating positive energy throughout our team, and reflecting this love and respect upon our customers and all those we serve. Only then will our successful evolution into other markets, products, and services be guaranteed.

In Phase 2, the co-founders relied upon norms and unwritten rules. Meyer communicated these norms personally as part of the day-to-day business of moving.

Meyer’s only main rules were that you showed up on time, you were on your job on time all day long, and if there was any kinds of problems that you had to call through . . . go through the office and he would arrange to get things fixed.

Meyer believed that the most effective way to empower employees was to build cohesive moving teams committed to providing superior service to customers. He saw his primary ability and function as serving as a role model. Meyer was able to create a positive, clan-like “brotherhood” through his team building approach: “. . . everybody knew the rules and that is how it was. There was no fighting or arguing over it.”

Conceptually, here is how I looked at it. I wanted these guys to go into a burning building for me. I wanted that kind of unity. That kind of brotherhood, teamwork . . . and through that [Meyer’s commitment to the organization] they had to know and realize that I would go through a burning building for them.
Employees were committed to Meyer, and through him to Blue Whale. As a result, he enforced norms by personal involvement and the explicit encouragement of employees. For example, if movers arrived at headquarters with dirty clothes or non-trimmed facial hair, he would ask them to clean up or shave in a bathroom adjacent to their warehouse. Because a dress code was not an industry norm, movers could easily have objected. Meyer, however, was able to effectively incorporate this norm into his approach through informal, but firm enforcement.

I tried to put in a dress code because I wanted the guys to feel good about themselves . . . I monitored that with those guys during the early years and I never really had a problem with it. They knew they were to be tucked in and clean and if they weren’t shaven, I handed them a razor . . . [Much of the time, however] they would come and ask for it.

While Meyer managed daily operations and revenue growth, he neglected to implement formal financial control mechanisms. For example, he did not establish formal salary administration system or performance appraisals. This began to cause problems for the company.

You know our accounting process was good, but it was raw. The amount that we were cranking out per mover, per hour, per day . . . I tried to break all that stuff down. I knew production and how we were cranking things out. I knew the number of phone calls that we were getting and how were turning into dollars. That’s what was motivating me, sales-wise, to make sure that our phone calls are increasing . . . because word of mouth was spreading so I want[ed] to make sure that I [was] booking more moves. Therefore, we are buying more trailers, we are hiring more movers and we were motivated by the top line. We were motivated by “let’s get more dollars in the door.” . . . there was a fine line there, we had the dollars that were rolling through and we stopped looking at the bottom line . . . They [costs] started to become disproportionate . . . We were bringing in more dollars, but we were losing money.

Throughout Phase 2, Meyer began to rely increasingly on informal control mechanisms directed towards input and behavior control targets and began to hire for strength, but also to systematically look for additional mover attributes. For example, Meyer more strongly focused on input control targets by hiring only personable individuals who could move thousands of pounds of items while courteously dealing with customers. Meyer put new employees through the “paces” using training and orientation as screening and socialization tools.

They went with me and I walked them through every step they took . . . I would work them pretty hard . . . on the first couple of moves they would come on as the third man…the guy that wasn’t required to do a lot of big time major lifting but carried some of the small stuff . . . Once we felt comfortable with him, he would go on a two-man crew either with me or with somebody else when he was expected to pull his weight, literally. He would have to do that and we wouldn’t let him go until we knew he could do it and if he couldn’t do it we knew that pretty quick. We worked them pretty hard and if they
couldn’t hang, then we would just say we are going to do something else with you or you need to move on.

Socialization also continued after work hours. At the end of the day, Meyer would join movers for what he referred to as “cock and bull sessions” at the office.

We’d hang out after the day, we’d sit at the end of the dock in the warehouse. Somebody would go buy a case of beer and fifteen of us would sit there and drink a couple of beers for a couple of hours and we’d talk about our war stories . . . We would talk about the battles that we had gone through that day and “man, that piano was a bi . . .,” and “going up those three flights of stairs” and “here’s what I was thinking when this was going on,” and all these guys are telling their thought processes . . . we would be coaching each other through the steps and the stages. And as far as coding any ideals, I think we were doing it without knowing it. We were getting each other riled up and excited and motivated and we were building a camaraderie and a sense of trust in each other.

There was absolutely no better classroom, except for maybe hands on, at this stage than to have these young guys listen to these stories and to the process that these guys went through so they would learn.

Through his constant involvement with the movers, Meyer emphasized behavior control and promoted a team atmosphere using informal control mechanisms. He maintained constant contact with employees by working as many as 110 hours a week. He arrived at the company’s warehouse every morning at 7:30 to greet movers, distribute assignments, check equipment, and informally discuss job-related issues. Throughout the day, Meyer maintained an open-door policy and encouraged movers to come to him if they had personal or professional problems. During the day, Meyer would often visit work sites to help movers with problems and interact with customers. If movers experienced difficulties at a job site, Meyer would leave Blue Whale’s headquarters and personally lend a hand. Meyer also created an effective second-order informal behavior control in that movers exerted social and professional pressure on co-workers when they exhibited behaviors that were contrary to organizational goals. As one mover described:

I am not going to tolerate someone who don’t want to be here or someone who comes in here and don’t want to be part of what this stands for. This is not just where you come and make money . . . for someone to come in here and mess around, you got people here that’s above that and don’t want to accept anything less than wanting to be a part of it [Blue Whale’s high standards].

Meyer used both formal and informal control mechanisms aimed at output control targets. We observed that output controls were more varied in Phase 2. Meyer used commission-based pay to quantify the amount movers could earn for achieving specific production standards.
Because this formal output control mechanism was so successful, the compensation for a hard-working Blue Whale mover was often higher than other companies in the industry. Although Meyer required movers to pay half of the cost of damaged customer items, it is important to note that Meyer’s behavior control helped protect movers from the potential negative effects of this output control. While movers occasionally forfeited some of their pay, Meyer stayed involved to effectively limit the mistakes that movers made at job sites.

Meyer also used informal output control mechanisms to reinforce his use of formal output control. He personally inspected the company’s equipment to ensure that movers maintained company property and did not steal from the company by performing moves off company time. In addition, Meyer kept an eye on customer service ratings, discussed results with each mover, and personally involved himself in remedying any disputes between clients and employees.

As the company progressed through Phase 2, the degree to which Blue Whale’s rapid growth created operational and financial problems began to become increasingly clear. Meyer’s personalized management and lack of formal systems were not scaling well. Finally, the long hours required to manage this organization began to take its toll on Meyer and he left Blue Whale to take a year-long personal leave beginning in April, 1992.

Phase 3. Throughout Meyer’s sabbatical and continuing until shortly after his return in April, 1993, the company’s neglect of proper fiscal constraints started to affect Blue Whale’s operations. For example, labor and operating costs increased more rapidly than revenues, creating financial shortfalls.\(^\text{13}\)

Atkins attributed the emergent problems to Blue Whale’s dependence on informal control mechanisms. He concluded that the problems resulted from the organization having become unstructured and unprofessional, and he began moving Blue Whale’s control systems away
from an informal, cultural style to a more formal style. Meyer initially agreed with this new management approach and, after his return, worked with Atkins to formalize the company’s operations. In order to foster a more formal and authoritative control approach, the two owners moved Blue Whale’s management office a mile-and-a-half-away from the company’s main warehouse and staging area. Now physically separated from their front-line employees, Atkins and Meyer managed daily operations by formulating explicit, written directives.

When he first began to make this shift, Atkins began making business decisions that sharply contradicted the practices Meyer had established, increasingly stressing formal control mechanisms directed towards all three types of control targets (input, behavior, and output). The shift towards a more formal control style during Phase 3 led Blue Whale to begin to resemble a more traditional bureaucratic control system. As succinctly stated by a manager:

> It was two different theories . . . two different companies . . . two completely different cultures, two completely different sets of ideals I think, and two completely different ways of managing. The crux and the swing point is that fall when Atkins came in and he said now we are going to start doing things differently . . .

Atkins began using the Blue Whale Vision Statement systematically. He believed that formalizing the use of a written statement could help the movers adopt Blue Whale’s principles, feel more pride in the organization, and be more willingly perform their respective duties.

In Phase 2, the vision statement was manifest only in Meyer’s actions and talk. In Phase 3, Atkins began using this written statement as an integral element of formal control and standardized its use in several ways. He required all employees to memorize the vision statement and often asked movers recite it on demand when he visited them at job sites. He also used it in order to formalize the employee hiring process, hiring only those employees who exhibited a positive reaction when the statement was read to them.

> I would bring somebody in. I would recite the vision statement and I would ask them how they felt about it and if they said, “well that’s kind of dumb, isn’t it?” they probably wouldn’t get a job. But if they had an affect change and they said something like “Wow!, that’s really great. I would like to work in a company that is that committed to their customers.” Then maybe we would have something.
Atkins deeply believed that the company needed to understand what employees wanted outside of work and had an obligation to help each employee achieve “their dreams.” He spoke of this with a passion at every opportunity, and saw it as a company goal equal to profitability and customer service. One striking aspect of this highly personal and potentially intrusive definition of the company’s mission is that Atkins chose to implement this values-oriented form of control through the use of highly formal mechanisms.

We would make them fill out forms that had them describe the benefits that they wanted to get from working with our company, other than salary. We would have them make a list of five things that they want to have in their life. Five things they want to do. Five things they want to share and five things they want to become in their life. Those questions were important for us to know because we try to incentivize people outside of just direct financial compensation.

The company formalized a number of other processes as well. Instead of following Meyer’s practice of informal on-the-job socialization, the company shifted to formal training and standardization of work procedures. Now trainers were formally appointed by management to demonstrate the steps required to pack and load pieces of furniture. Recruits were then required to master these procedures before entering the field. Only after the trainer inspected and approved their work were movers allowed to serve as a third member of a moving crew.

Atkins and Meyer also applied formal control mechanisms to behavior control targets. For example, to help standardize the way work was performed and to facilitate the transfer of task knowledge between employees, management developed a detailed procedural manual that codified the minutiae of organizational operations. In addition, Atkins and Meyer established written “interpersonal agreements” which codified elements of each manager’s employment contract, the goals and procedures that managers were required to pursue in performing activities, the attitudes which supervisors were obliged to publicly exhibit, and the skills employees were required to develop. These agreements also described both the positive and negative consequences for succeeding or failing to adhere to these specifications. Management explicitly controlled behaviors by requiring employees to sign these interpersonal agreements.
They also added two layers of management. To create a more formal control hierarchy, Atkins and Meyer promoted former movers into field management positions and began requiring field managers to implement formal policies.

We would say “OK, now these are the things that we want you to start passing down . . . We want trailers cleaned up. We want to get sales motivated” . . . and then they [the managers] would go back to their office and then say these are the new rules that these guys [Atkins and Meyer] are going to lay down.

Scott Carrington was hired as Operations Manager to be the direct supervisor of the field managers, thus removing the co-founders from the direct chain of command. Carrington implemented corporate directives using a top-down, heavy-handed, formal style. Employees described him as “a bulldog.” For example, Carrington routinely dismissed the reservations of movers who disagreed with the directives he implemented.

. . . [Carrington’s response to any resistance was] hey, I am not going to put up with any of your b_s_ . . . This is what they [company management] told me needs to happen and you are going to do it.

Atkins was adamant about reinforcing the company’s hierarchy. In an effort to create formal control standards and a formal separation of corporate control from day-to-day operational supervision, he refused to circumvent the authority of supervisors, even when the field manager’s decisions could hurt organizational performance.

Particularly compelling examples of Blue Whale’s bureaucratic control system were presented in management’s approach to the employee dress code and customer damages. Whereas in the previous time phase, Meyer would informally influence the dress code by simply asking movers to shave and wear clean clothes to work, management now coupled rigid dress code policies with strict enforcement. Movers that did not follow the rules were asked to go home. The company also developed formal policies regarding damages and equipment losses. For example, movers were required to document the customer articles they damaged while performing moves and to reimburse customers 100% for these damages.
A crucial element of Blue Whale’s development during this phase involved the company’s approach to output control. As the company became more formalized, managers increasingly directed formal control mechanisms at input and behavior control targets, and the company began neglecting to monitor the outputs they had previously evaluated. For example, managers stopped inspecting trucks to ensure that equipment was present and properly maintained. In addition, management stopped monitoring whether customers were being reimbursed for damages incurred during moves. Management tinkered with mover’s commissions, but no longer emphasized informal output control (e.g., encouragement to meet goals) and did not add additional fiscal controls as the company grew.

What started to happen is the movers noticed that when a damage took place, they didn’t hear about it the next morning. Wow. They didn’t hear about it for two months. Wow! They didn’t hear about it at all. Because he [Scott] got behind, equipment was missing from trailers . . . Nobody said anything.

Because management had stopped personal inspections and being involved with customers, they were surprised whenever they confronted data regarding the level of damages and equipment losses. Managers did not see their lack of involvement as the problem. However, they did see a lack of formal output controls as problematic and they addressed these problems by applying additional formal output control mechanisms. For example, they began fining employees when they failed to maintain company equipment. In contrast with earlier phases, when management viewed output controls in cultural and motivational terms and split the cost of damages with movers, managers now viewed output control as a deterrent and now required movers to pay 100% of everything they broke.

Movers, accustomed to operating under Meyer’s informal control approach, reacted negatively to the institution of these new formal control mechanisms. Throughout 1993 and 1994, a number of experienced movers quit.

These guys were in an environment and an industry that said “we don’t go by the rules, we go by energy.” If you guys want the rules then I will just go work somewhere else where there are not any rules . . .
opinion of management was] yeah, you guys are too hard to work with. You want to manage too much. I am going to go down the street and work for these other guys.

Employees who elected to stay became even more frustrated by Blue Whale’s financial situation. Mounting operating losses led the co-founders to begin cutting mover’s commission rates and bonuses. In addition, they halted development of a promised, health insurance system plan for employees, which further disappointed movers.

Company morale spiraled downward. As a result of the broken promise of health insurance and management’s insistence on formalizing many prior informal control mechanisms, movers became increasingly disgruntled. Movers began coalescing around the opinion that the co-founders and other managers wanted to further restrict them and were willing to “cheat” the movers out of money. During this time, movers began ignoring rules, neglected to properly care for their equipment, and in some cases, even stole from the company. Believing that their application of formal control mechanisms was still insufficient, the co-founders began instituting additional formal control mechanisms. Movers, in turn, became increasingly frustrated with what they perceived to be management’s singular reliance on formal control mechanisms. Like the double helix of escalating distrust and control observed by Fox (1974) and Sitkin and Stickel (1996), Blue Whale was spinning out of control.

The company’s financial problems and subsequent decisions to decrease movers’ pay exacerbated these problems. In the past, Blue Whale had used financial incentives to motivate employees to produce appropriate outputs by focusing their attention on output control targets. However, as Blue Whale’s ability to provide effective financial incentives diminished, so did the company’s ability to motivate employees. Blue Whale’s movers increasingly felt that management failed to recognize that much of the company’s success was attributable to their efforts. Specifically, as the company’s controls became more punitive and commission rates decreased, movers began to believe that Atkins and Meyer not only failed to appreciate their
contribution, but were punishing them without cause by lowering their pay on a regular basis. These feelings generated negative responses from the movers towards management and toward the company as a whole.

Instead of communicating and reaching an understanding with the movers through interpersonal contact, Atkins and Meyer continued to rely on written communication transmitted through hierarchical channels. As a result, the rift between movers and management continued to grow. Over the next year the situation deteriorated, until one morning in early 1995 the movers staged a walk-out. While most employees returned after only a few days, Blue Whale suffered from serious financial and personnel problems. The residual feeling among Blue Whale movers was that they were not being amply rewarded, that Atkins and Meyer no longer appreciated the movers, and that the co-founders had increasingly restricted and punished them as the company grew by focusing so exclusively on formal controls.

*Phase 4.* In the spring of 1995, Atkins and Meyer acknowledged the serious problems facing the company and began implementing organizational changes. On the advice of management consultants, they hired professional managers to run the company. They “fired each other” and became absentee owners. Paul Patton, the new Chief Executive Officer, and Joan Clay, the new Chief Financial Officer, faced a bleak situation:

... [several] areas were out of control when I came in: (1) care of the equipment, trucks and all that ... we weren’t maintaining them, so clutch transmissions were going out, we were having blowouts which would then ruin the actual wheel of the tire; (2) damage claims that weren’t being handled; (3) accounts receivable; (4) mover morale. There were over a $185,000 in payables that hadn’t been paid. Vendors were shutting us down ... Damage claims? The ones we knew about were six months behind, with a couple of lawsuits pending.

While they observed that mover morale was low, Patton and Clay noticed that movers often reminisced about Blue Whale’s past, particularly the phase when Meyer managed the company. They deduced that Meyer’s early efforts had helped ensure that movers provided excellent customer service, even when there were problems between movers and managers.
 Somehow either their professionalism or their humanity or something allowed the movers to, when they hit the door, generally give the customers exceptional service. So even when we were having trouble in the office and trouble with management versus movers, our reputation was still really good with our customers.

Patton and Clay realized that the company’s employees, while upset by management’s emphasis on formal control mechanisms, still felt the impact of the informal control mechanisms that Meyer had previously applied and that his knowledge still existed in the fabric of the organization. Certain values and norms about perform your work, what standards you apply, and how you treat customers were still felt and enacted collectively by the movers. Consequently, management began to rebuild Blue Whale’s control system. They adjusted many and eliminated some of the existing formal control mechanisms. They added new formal and informal control mechanisms and they reintroduced previously used informal control mechanisms and strengthened previously used formal control mechanisms to correct the company’s problems.

Patton and Clay quickly noted that movers were particularly dissatisfied by their recently decreased salaries. The use of output control mechanisms had been the cornerstone in the founding of the company in Phase 1. In the past, Meyer had been able to attract and retain movers partially because of his effective application of output control mechanisms (e.g., employees had been more highly paid than in competing companies). By the time Phase 3 had arrived, these output controls had been diluted or completely dropped. Patton and Clay concentrated first on improving the movers’ compensation package by reinstituting and strengthening aspects from the early market system and adding additional elements. They increased commissions, reinstated the movers’ year-end bonus, and established a health insurance plan and paid vacations.

Patton and Clay maintained the company’s hierarchical structure, but hired a professional operations manager, Ted Shepherd, to ensure that movers showed up on time, maintained equipment, and addressed damage claims. During this phase, management continued to apply
formal control mechanisms to behavior control targets. Their emphasis was to modify the punitive/controlling tone and replace it with an emphasis on formalizing coordination, communication, and commitment. For example, Clay rewrote the operations manual so that it would be more user-friendly and useful for Blue Whale’s day-to-day activities. Patton maintained and distributed a written schedule describing employees’ specific assignments. In addition, management revised Blue Whale’s invoicing and damage claim procedures to help quickly identify and reduce employee theft and to ensure the company reimbursed customers promptly and accurately for items broken in transit. The policy of splitting damage costs 50-50 between movers and management was also reinstated.

Management’s renewed focus on formal control also included behavior and output controls directed toward the company’s customer service policies. Patton and Clay formulated standard procedures for salespeople to follow. They also contacted customers and asked them to complete a questionnaire to evaluate the customer service they were provided. Feedback from these evaluations was discussed with movers in informal, face-to-face meetings:

We track customer satisfaction every day . . . We ask every customer to evaluate us…and then we call every customer that we moved today and try to talk to them . . . Every mover gets an annual rating and they usually get a semi-annual sit-down, a “here’s how it is going” type thing. I can guarantee you that they get feedback every day because every morning everybody is here to go out on the next day’s move . . . and gets feedback from the day before.

Patton and Clay retained the hiring and training process established in Phase 3, which selected employees based on their potential commitment to the Blue Whale vision. They systematically trained individual movers on packing and loading furniture before they were assigned to moving crews. An increased availability of alternative employment due to a growing local economy made it more difficult to retain movers than in previous phases. However, employees suggested that, because top management was personally involved in hiring and socializing movers, those employees who were hired and trained were of high quality and more committed to the company than those hired earlier in Phase 3.
Patton and Clay re-adopted several previously used informal control mechanisms in the hopes of re-establishing a good rapport between movers and management. Not only did they hope to boost mover morale, but also they wanted to rebuild the company’s team atmosphere.

We try everything with anticipation of how can this better the movers and how can we make this a team thing . . . We don’t question when they price something or they say they have a problem out on a move. We don’t question it. We’ll send them help and we’ll go.

With Shepherd, Blue Whale was able to reinstitute the informal, day-to-day involvement and feedback that the movers missed from Phase 2. To facilitate this dialogue on a day-to-day basis, Shepherd held daily meetings with movers before they traveled to job sites. At these meetings, employees and management made joint decisions regarding moving operations and attempted to promote a team atmosphere by including mover’s opinions on long-range planning issues. He also could address job-related questions or problems as they arose. Shepherd became the informal connection between the movers and the company, a role that Meyer once served in Phase 2. Shepherd was also able to informally watch for employee theft and more closely monitor damage claims and equipment maintenance. To celebrate the company’s improvement, Patton and Clay also hosted occasional beer parties.

In many other cases, management lessened or even abandoned their use of formal control mechanisms, which they deemed as useless or even harmful to moving operations. For example, management ended the practice of using formal, interpersonal agreements to direct employees. While they still stressed the importance of standardizing company operations, they attempted to accomplish this and motivate performance by increasing their reliance on informal control mechanisms, by directing employees’ efforts using more personal interaction, by encouraging joint-decision making between movers and management, and by improving the ways in which they compensated employees. Now, instead of relying primarily on informal control (as Blue
Whale did in Phase 2) or on formal control (as was emphasized in Phase 3), management utilized a broad array of both informal and formal control mechanisms in a more balanced approach.

After nearly a year of change, Patton and Clay’s efforts began to pay off: 1996 was the company’s most profitable year. Moreover, Blue Whale’s employees acknowledged that, although the company had experienced many trials, management had been able to revive commitment to the company by effectively combining both formal and informal control mechanisms.

I have come full circle . . . We have gotten back into doing things the right way I guess . . . we are pretty much sticklers again. We will get together instead of being movers against bidders against the management, etc. It is just back to more of a team effort . . . that’s why I said morale has gone back up a little bit back to where it was in the beginning.

Throughout the development of Blue Whale’s control systems, various controls were adopted, adapted, abandoned, and rediscovered. In Phase 4, through the selective and integrative use of a wide variety of control mechanisms – including the reinstitutionalization of some that had been discarded during earlier anti-informality or anti-formality phases – Blue Whale was able to adapt its varied control legacy to its current requirements in a way that allowed for standardization, while also facilitating a more human and personal touch. By Phase 4, managers at Blue Whale had learned the core lesson of integrative control: that all three control targets were critical and needed to be used in a coordinated way to foster stable and long-term performance. Thus, in many ways the final phase studied represented a true integration of the previous three phases.

**Summary of Control System Use at Blue Whale**

As Atkins, Meyer, and their managers responded to internal and external contingencies between 1988 and 1998, they adopted four types of control systems: market, clan, bureaucratic, and integrative. During this time phase, Blue Whale managers also applied both formal and informal control mechanisms to different combinations of input, behavior, and output control
targets. Blue Whale primarily used output controls in Phase 1, but quickly evolved from a market control system into a clan system and added a full spectrum of informal mechanisms in Phase 2. By Phase 3, Blue Whale’s management completely renounced its use of informal control mechanisms and adopted a rigid bureaucratic system. Lastly, in Phase 4, Blue Whale developed an integrative control system by reviving and merging elements from the clan and market control systems it previously applied with its more recently established bureaucratic control system—they combined both formal and informal control mechanisms with a full array of input, behavior, and output targets.

Our analysis of Blue Whale highlights that, as the organization passed through four distinct phases, the company adopted an evolving set of control mechanisms. Figure 1 provides a summary of the control mechanisms that Blue Whale used across the four phases studied. As shown in the figure, certain types of control mechanisms were not used in some phases, whereas others were heavily relied upon. Evidence of these patterns and their relationship to extant theory is one of the key points of interest in our analysis.

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Insert Figure 1 about here

DISCUSSION

Our observations and theoretical investigations suggest that organizations, even small start-up firms, face complex challenges in simultaneously evolving the elements of control they apply. We systematically analyzed the creation and use of control mechanisms and targets and, specifically, the relationships among control targets, mechanisms, and control configurations to begin to link these complementary elements of organizational control.

Aspects of our research have been raised by prior research: Ouchi (1979) studied control systems empirically; entrepreneurship researchers (e.g., Covin & Slevin, 1990; Hanks, Watson,
Jansen, & Chandler, 1993; Kazanjian & Drazin, 1990) studied selective aspects of control systems longitudinally; and Snell (1992), Kirsch (1996), and Cardinal (2001) studied formal individual control targets and mechanisms empirically. But despite repeated calls for synthesis and testing of control theory ideas, no prior work has made the various linkages that allows for a synthesized view. As we discuss below, there are numerous theoretical benefits to such a synthesized view that we hope will lead to better theories and more extensive and cumulative empirical research on organizational control.

From Ideal-Type Control Typologies to Explanatory Control Configurations

We have been fortunate to have a rich legacy of work on the elements of control and ideas about control types to build upon. By drawing together previously unconnected streams of research on organizational control, we have been able to substantiate some ideas proposed in the past, extend some of the theories put forth previously, and provide a new foundation for future cumulative research on organizational control.

Less stylized, richer conceptualization of control configuration elements. We were able to distinguish the configurations of control without depending upon the stylized, ideal-type approach used in past research, but instead by utilizing one that reflects much richer and explanatory detail in depicting control configurations, while nonetheless remaining quite simple to interpret.

Specifically, we found several results that have significant implications for control theory and research. First, we found that market control was characterized primarily by a few output-targeted controls and a few other types of controls. This observation differs from Roth et al.’s (1994) depiction of market control as being generally low on both formal and informal control. Instead, a benefit of considering control formality and control targets is that interactions become observable which would otherwise be hidden. Whereas, previously it appeared that all targets of
control were low, we were able to discern that output control was high while all other forms were generally low. This does not contradict Ouchi’s focus on price control for market control types, but it does extend his idea by showing market control is more than just price. Thus, we challenge the logic and detail of Ouchi’s (1979, 1980) characterization in a way that strikes us as being more appropriate for intra-organizational, market-like control configurations. This intra-organizational approach contrasts with Ouchi’s depiction of market control, which was based on Williamson’s ideas (1975) of price-based extra-organizational market control mechanisms.

Second, we found that formal output control was present in all four configurations. This finding raises questions about a central assumption that seems to be held in the literature. Much of the work on clans (e.g., Jaeger & Baliga, 1985; Ouchi & Price, 1978) has depicted clans as near-pure informal control settings. In fact, much of the work on informal, clan-like control has stressed that low levels of formality are an essential feature of the clan configuration (e.g., Jaeger & Baliga, 1985; Makhija & Ganesh, 1997; Ouchi & Price, 1978). In contrast, our data provide partial support for Roth et al.’s (1994) contention that all formal organizations (including those exhibiting clan control) will use a fairly high level of formal control. Our findings extend their insights by highlighting the possibility that formal controls (which they saw as universal in formal organizations) may only be focused on outputs rather than other targets. However, further study is needed to see whether the pure-form of clan control, the Roth et al. (1994) conception of universal formal control, or our more targeted formal control use applies in a wide variety of organizations. For example, the pure clan approach may be applicable to non-organizational collectivities, Roth et al.’s (1994) broader inclusion of formal control may be applicable to more mature organizations, and our observation may be more applicable to newer organizations. More research is needed to more confidently distinguish the boundary conditions involved.
Third, we found that both bureaucratic and integrative control configurations fit quite neatly the descriptions of Ouchi (1977, 1979, 1980, 1981) and Roth et al. (1994) (bureaucratic as high on all types of formal control and lower on all types of informal control and integrative as high on both formal and informal).

**Combinatorial control: Assembling control mechanisms and control targets into control configurations.** While supporting the ideas presented in the control literature, our findings also highlight several ways for improving how theorists have traditionally viewed control in organizations. First, our findings help scholars better reflect how managers use combinations of formal and informal control mechanisms and direct them selectively at input, process, or output control targets. Second, our configurational approach provides support for our contention that there is significant value in synthesizing control configuration and control elements into a richer and more fine-grained conception of how controls are used in organizations. Third, we have tightened the concepts and definitions used in the control literature so that we could consistently analyze the data and develop our typology, thus helping move the control literature towards conceptual consensus while also facilitating the empirical operationalization of key constructs. Fourth, instead of only viewing when and why managers choose to focus on single control targets as the most critical factor in control research (Eisenhardt, 1989; Ouchi, 1977, 1979), our typology suggests that scholars might benefit from investigating how combinations of control mechanisms affect organizational processes and effectiveness.

Researchers (e.g., Makhija & Ganesh, 1997; Merchant, 1988, 1993) have typically treated control as being formal or informal (i.e., as categorical or as end points along a single continuum),\(^\text{14}\) rather than acknowledging and theorizing about the co-existence formal and informal controls in delicately balanced and dynamic organizational configurations (Roth et al., 1994; Sutcliffe, Sitkin, & Browning, 2000). We would disagree, and suggest that our data
directly challenges research that has explicitly rejected the notion that informal control mechanisms cannot be explicitly designed (Jaworski, Stathakopoulos, & Krishnan, 1993; Merchant, 1988). Specifically, our data shows how Blue Whale’s co-founders designed informal controls in Phase 2 and, at least for some time, found those “designed” controls to be rather effective.

Not only have we shown how control systems emerge in ways that previous theories could not fully explain, we also show how control mechanisms and control targets are systematically linked to different control configurations in a way that is both theoretically and practically useful – giving managers tools and researchers better descriptive and explanatory power. Distinguishing mechanisms of control through their targets also gives us the ability to ground our more general understanding of control systems in the specific patterns of control mechanism use and non-use.

Validating control configurations. We empirically validated the presence of all four configurations of control posited by Jaworski et al. (1993) and Roth et al. (1994) – and found that all four types could be observed in newly formed organizations and not just in mature ones. Thus, following Meyer et al.’s (1993: 1175) definitions, our configurational approach is both typological (i.e., conceptually-based) and taxonomic (i.e., empirically-based). For example, we found cleanly identifiable shifts between the types of control configurations identified in previous organizational control research.

Radical shifts between control configurations within the founding period. We also observed rapid shifts between control configurations, including some configurational periods that were quite short-lived. These observations speak directly to Miller’s (1986: 235-236) predictions about organizational configurational change:

Organizations tend to . . . [adopt] a configuration that is preserved for a very long time. Piecemeal changes will often destroy the complementarities among the many elements of configuration and thus will be avoided. Only when change is absolutely necessary or extremely advantageous will
organizations be tempted to move concertedly and rapidly . . . from one configuration to another that is broadly different. Such changes, because they are so expensive, will not be undertaken very frequently.

While our observations support Miller’s ideas about piecemeal change, they are not supportive of his ideas concerning the periodicity of change. This requires further study: our research intentionally focused on a new organization so we could observe the creation of control before it fully stabilized, whereas the configurational observation Miller made may well apply to the more mature organizations that are typically studied. It is worth noting, however, that our choice to study a new organization over time provided significant benefits that should not be overlooked. If we had just looked at Blue Whale once the organization had stabilized, we would have observed integrative control with multifaceted and intertwined control mechanisms in place. We would have had little or no opportunity to understand their “emergence” or linkages – and thus would have missed significant opportunities for theory development.

**Strengthening coherence and singularity within a configurational focus.** Our data seem consistent with an analysis of the link between configurational purity and effectiveness, although this observation must be considered quite tentative and in need of further exploration. Specifically, we observed that several different configurations appeared to function effectively for a time, but then became almost myopically singular in their utilization of a single set of configurational attributes and as they became more singular, they became less effective. These observations are consistent with several of Miller’s (1987: 697-8) ideas concerning organizational configurations more generally:

. . . organizations do not change while they are within an imperative, but only according to the original theme. Bureaucracies strive to become even more bureaucratic, increasing their standardization and formality. . . But these changes merely extend an old emphasis – the same imperative continues to be in effect.

Our evidence, however, should not yet be generalized without additional study, but it does fuel the distinction that Miller has highlighted between disjunctive configurational shifts that are “disruptive” (1987) and those that are more adaptive and incrementally reassessed and
reconfigured (1996). In fact, Miller (1987: 698) also highlighted what we observed to be the causal driver of these changes, namely “changes in top management” (which occurred between our Phases 3 and 4) and “very serious declines in performance” (which occurred at the end of Phases 2 and 3). We also observed in our study two additional causal factors – the values or vision of the company co-founders and the pressure for industry-specific isomorphism. All of these potentially useful ideas need further theoretical development and empirical study.

CONCLUSION

Organizational control, as a fundamental and consequential feature of organizations merits a revitalization of attention to both theory and empirical research. In order to link control configuration work to organization theory, we explicitly chose to study the emergence of control in the context of a newly founded firm that allowed us to examine the theoretical implications of a richer and more nuanced understanding of control for the intentional design and initiation of control in new organizations – both untested theoretical territory for control research. In reporting on a decade-long case study of a new organization, we were not only able to propose and observe a much richer, textured conceptualization of configurations of control, but we were also able to challenge some previous assumptions about types of control configuration and how the specific elements of control might be interrelated during the period of what Miller (1996) refers to as “emergence” of organizational control. As such, this research will facilitate what we hope will be a re-emergence of organizational control research.
References


In Ouchi’s well-known typology, in market control systems managers primarily focus on evaluating transaction outcomes (i.e., prices), rather than how well subordinates adhere to organizational rules or norms. In contrast, hierarchical control systems differ from internal market control systems that emphasize the specification, monitoring, and enforcement of rules and primarily apply formal control mechanisms, such as rules and regulations, specialized jobs, and hierarchies. Managers within clan control systems place relatively greater emphasis on informal control mechanisms. Within these clan control systems managers use traditions and beliefs to motivate members to supplant their individual goals with commitments to organization values.

Formal control mechanisms include a range of officially sanctioned (and usually codified) institutional mechanisms such as written rules and procedural directives. Informal control mechanisms include values, norms, and beliefs that guide employee actions and behaviors. Control targets are those individual and groups of control mechanisms that are applied to specific elements of organizational transformation processes: inputs, behaviors, or outputs (Cardinal, 2001; Kirsch, 1996, 1997; Long et al., 2002; Snell, 1992). Managers select input targets (“input control”) to direct the flow of human, material, and financial resources into the firm. Managers choose behavior targets (referred to as “behavior control” or “process control”) – such as process rules and behavioral norms – to determine how work gets done. Finally, managers employ output targets such as profits, customer satisfaction levels, and production volumes and schedules – to regulate the results or outcomes of various product and service activities.

Formal interviews lasted between 1 and 3 hours and were taped and transcribed. In addition, regular, ongoing semi-structured telephone interviews and telephone conversations helped the research team to stay abreast Blue Whale’s status. Over two dozen semi-structured interviews and informal conversations were conducted throughout the real-time portion of the study (from 1991 to 1998). Detailed field notes were taken for these discussions.

Although the study period ended in 1998, selected data collection continued after that date. Follow-up efforts to update Blue Whale’s status occurred in 1999, 2000, 2001, and 2002 with Blue Whale’s Chief Executive Officer. Through these informal or semi-structured interviews, we were able to verify that the control system remained stable.

Data was collected during each of the four phases from each of these four groups. In the first phase and the early second phase (when we entered the organization), all members of each group provided data. In the later phases, as findings stabilized, data was needed primarily for confirmation. In no single phase did participation fall below levels that were quite substantial and robust: a minimum of 100% for the co-founders; a minimum of 80% for the managers, a minimum of 40% for office staff, and a minimum of 27% for the movers.

We entered the company in early 1991, when the company had only 11 employees. The rapid growth of the company began later in 1991, when Blue Whale added 20 employees, including four in an office opened in a different city.

For example, we collected and/or reviewed the standard operating procedure manual, samples of the customer ratings, customer thank you letters, the mission statement, press releases,
business articles, financial records, a franchise manual, interpersonal agreements, company memos sent to employees, the lease agreement for the new building, the phone sales representatives’ check list form to create a bid/quote, the billing invoice sheet, the call back sheet to call customers after the move, job descriptions and positions posted, the yellow pages ads, company brochures, and thank you letters from the community for community service.

8 We observed the trucks and equipment, the awards, the logos on the truck, the numerous blue whales that were displayed throughout the office, the office space, the customer ratings and evaluation forms posted on an entire wall, the weekly movers’ work schedule on the writing board, the movers’ docking station, and all of the offices and physical space.

9 Full days and half-days were spent with movers observing the moving process and observing on-site job quotes by sales personnel, phone quotes by sales personnel, customer call backs, front office activities by the receptionist dealing with customers and stakeholders, sales calls by Atkins, and Atkins speaking in the community about Blue Whale’s service.

10 Our approach to combining some retrospective data collection (two years) with real-time data collection (eight years) is similar to the approach taken by Garud and Van de Ven (1992) in their study of internal corporate venturing where they entered the organization after five years of existence and then tracked events for seven years. Their data analysis included both retrospective and nonretrospective data for a total of 12 years.

11 During our first and second waves of data collection for interviews (structured and semi-structured) and observations two or three researchers were on-site. For all telephone interviews one researcher conducted the interviews (semi-structured and informal).

12 Since we were no longer observing the company or its operations, it was not necessary to be physically present.

13 In 1989 revenues were $182,000 and peaked at about $1.7 million in 1993 (with 47 employees). By 1998, revenues were about $1.6 million (with 26 full-time employees and 10 part-time employees).

14 For example, Jaworski et al. (1993) asserts that control targets can only be formal and Merchant suggests that formality should be used as a core theoretical element in all control theories reasoning that “managers do not design informal systems” (Merchant, 1988: 42).

15 Researchers that have rejected informal control as a legitimate form of control are also rejecting Ouchi’s (1979: 837) perspective that informal control is consistent with his clan system of control, “a clan may serve as the basis of control in some organizations.”
FIGURE 1
Dominant Form of Control Mechanisms by Formality, Target, and System

<table>
<thead>
<tr>
<th>Reliance on Formal Controls</th>
<th>LOW</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clan System (Phase 2)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Behavior</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Output</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td><strong>Integrative System (Phase 4)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Behavior</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Output</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td><strong>Market System (Phase 1)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td>Low</td>
<td>Low/Medium</td>
</tr>
<tr>
<td>Behavior</td>
<td>Low</td>
<td>Low/Medium</td>
</tr>
<tr>
<td>Output</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td><strong>Bureaucratic System (Phase 3)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Behavior</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Output</td>
<td>High</td>
<td>Low</td>
</tr>
</tbody>
</table>

* Shaded sections are used to highlight the configuration of control mechanisms that were predominately used in each phase/system.