

Managing Information Technology under Extreme Organizational Disequilibrium: the Case of Corporate Spinoffs

Completed Research Paper

Kui Du

University of Massachusetts Boston 100 Morrissey Blvd, Boston, MA 02125 Email:

Kui.Du@umb.edu

Hüseyin Tanriverdi

The University of Texas at Austin 2110 Speedway, Austin, TX 78712 Email:

Huseyin.Tanriverdi@mccombs.utexas.

Abstract

This paper studies the strategic management of information technology in periods of extreme organizational disequilibrium. In such periods, critical business parameters such as industry positioning, competitive strategies, organizational structures, leadership, and business processes change significantly and simultaneously, thus disrupting the very fundamental bases for strategic IT decisions. Corporate spinoffs represent such an extreme case for spun-off businesses that have to adjust most critical business parameters in a compressed timeframe and under severe resource constraints. Based on in-depth case studies on five spun-off businesses, we found that strategic IT management in the period of extreme disequilibrium largely reflected the priority of stabilizing business operations to ensure business survival. However, when organizations take shortcuts and make inadequate anticipatory IT investments, they compromise their long-term prosperity after new equilibrium emerges. A theoretical model of strategic IT management is proposed in the context of corporate spinoffs when concluding the study.

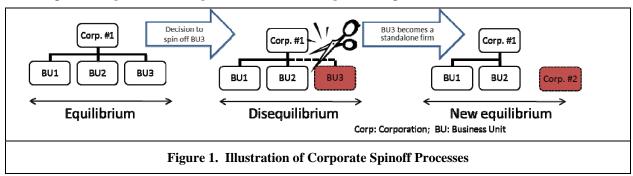
Keywords: Organizational Disequilibrium, Strategic IT Management, Corporate Spinoff

Introduction

The literature of strategic management of information systems (IS) at large is concerned with IS strategic decision making process (e.g., IS planning), strategic use of IS (e.g., IT integration), and strategies for IS issues (e.g., IT sourcing models) (Gable 2010). While a large and diverse body of knowledge has been accumulated for each component of IS strategic management, the knowledge commonly assumes organizational equilibrium. In the periods of organizational equilibrium, organizational forms are stable and organizational activities are patterned and predictable (Romanelli and Tushman 1994). While firms constantly morph in their quest to adapt to the changing competitive dynamics, the scope of changes is mostly within a manageable range. The current or desired operating strategy, structure, and processes of the firm are represented with conceptual models and schemas, which are subsequently encoded into supporting IT systems and reflected in strategic IT decisions. Given the often-expected long lifespan of information systems, it appears critical for IS strategic management that these conceptual models and schemas remain stable at least for a few years without the need for major redesign.

However, during its lifetime, a firm will go through periods of equilibrium and periods of disequilibrium. During the latter periods, many of the aforementioned business parameters changes significantly and simultaneously. Existing conceptual models and schemas in the firm are disrupted. To emerge out of the disequilibrium and achieve a new equilibrium, the firm has to renew its businesses and consequently supporting IT systems. A few IS studies have investigated strategic IT management issues when organizations are experiencing moderate levels of changes (e.g., Lyytinen and Newman 2008; Sabherwal et al. 2001; Vessey and Ward 2013) such as implementing a new strategy or restructuring an organization. However, our accumulated body of knowledge on strategic IT management has not yet been adequate to guide firms in the periods of extreme disequilibrium. Building on exploratory case studies, this paper aims to explore the following research questions: (1) what are the fundamental differences between organizational equilibrium and disequilibrium for strategic IT management; (2) how organizations can manage information technology to facilitate surviving extreme organizational disequilibrium periods; and (3) how they can manage information technology to facilitate culminating in a new period of equilibrium.

We use corporate spinoffs as the representative context of extreme organizational disequilibrium. A corporate spinoff is a business transaction through which a parent firm divests one of its existing business units and sets it up as an independent firm (Bergh et al. 2008; Seward and Walsh 1996) --- referred to as the spun-off firm in this paper --- as illustrated in Figure 1 below. Spin-off is one type of voluntary divestiture, which is in turn one type of business portfolio restructuring activities conducted by a firm (Brauer 2006). Rationales of a parent firm's spinoff decision vary greatly, including the lack of strategic fit between the spun-off unit and its parent (Cusatis et al. 1993; Desai and Jain 1999), the lack of efficient, market-based compensation for divisional managers (Seward and Walsh 1996), legal or regulatory pressure (Cusatis et al. 1993), and the undervaluation of the spun-off unit due to information asymmetry between the parent and capital markets (Bergh et al. 2008; Krishnaswami and Subramaniam 1999). However, with only a few exceptions (e.g., Moschieri 2011; Semadeni and Cannella 2011), most spin-offs studies so far take the perspective of parent firms, while usually a spun-off unit experiences much higher disruption when its parent firm cuts the "apron strings."



The challenges of strategic IT management faced by newly spun-off businesses are particularly novel and complex. At the close of the transaction, a spun-off business loses access to its parent's shared corporate

services. It has to terminate its dependence on the parent, carve out any of its assets from the parent, and build out new resources and support services to operate as a standalone firm. Many critical factors of strategic IT management, which are taken-for-granted in relatively stable periods of business, are often uncertain during corporate spinoffs. For example, IS-business alignment has been an influential model in making strategic IT decisions (Henderson and Venkatraman 1993). In a spinoff context, the old business strategy is no longer valid, while the new business strategy may be under construction or even does not emerge yet. When the business strategy is uncertain or even unknown, there will be not much guidance on what IS strategies should be aligned to. Uncertainties in business positioning, competitive strategies, organizational structure, leadership, and business processes all create significant challenges for strategic IT management during spinoffs. Moreover, a more fundamental type of uncertainty can arise from the interconnections and interdependencies among these multiple factors, which are elements of a complex adaptive system of complements (Tanriverdi et al. 2010). As the spun-off business makes decisions on some of these factors, decisions on the complementary factors will also be affected. When complementary factors mutually interact with each other, unexpected macro-level patterns can emerge. This implies that emerging IT needs of the spun-off unit are likely to become fundamentally unknowable and unpredictable during at least the transition period.

Nevertheless, the spun-off business needs to survive, and it needs to be set up for long-term independent prosperity. We found from our study sites that spun-off firms invariantly take the stabilization of operational environments as the top priority. However, we also found that spun-off firms who overly succumb to survival pressure and make irreversible inferior IT investment in the disequilibrium period are later penalized after the new equilibrium emerges. Our findings are thus contributing to our accumulated body of knowledge on strategic IT management by extending them to the periods of extreme organizational disequilibrium.

Methods

Because there is a lack of a cumulative body of knowledge on IT management in newly spun-off businesses, we choose the case study method for studying the new phenomenon and generating the insights needed for theory development (Yin 1994). We conducted in-depth case studies with five newly voluntarily spun-off firms as our study sites. Table 1 below presents characteristics of these five spun-off businesses and our interviewees from them. Pseudonyms are used for anonymity.

Using a semi-structured interview protocol, we asked interviewees open-ended questions about the parent firms, the spun-off business, and the challenges faced and decisions made regarding strategic IT management during and after the spin-off transactions. For each spinoff, we wrote up chronological case narratives of the spun-off transaction and the startup periods of spun-off firms. We shared the case writeups with informants and requested their comments and suggestions. All informants reviewed the writeups and provided us with written feedback. After validating the accuracy of the chronological case narratives for each site, we conducted both within-case and cross-case analyses using iterative explanation-building processes (Eisenhardt 1989). Finally, we synthesized the emerging findings with the existing literature and developed the explanations presented below in this paper.

Findings

Question 1: How and why are strategic IT management challenges novel and complex during the disequilibrium periods for spun-off firms?

During relatively stable cycles of business, IT strategies and IT organizational structures are designed in alignment with the existing and desired business strategies and structures (Henderson and Venkatraman 1993). IT governance and control systems are then implemented as a mechanism to incentivize and discipline IT managers and also hold them accountable for deviations from the agreed IT service levels (Sambamurthy and Zmud 1999). However, the period in which a spun-off business transitions from being a unit of a large parent to becoming an independent firm is a period of disequilibrium in which existing conceptual schemas and models of the business become disrupted. Competitive environment, business strategies, organizational structures, business processes, and leadership of the business all can go through major changes and present unique challenges for strategic IT management.

Table 1. Characteristics of Spinoff Sample Sites

Spun-off units	GroceryCo	ShallowDrill	RegionAir	UtilityCo	EnergyCo
Spinoff year	2007	2009	2006	2008	2006
# of employees		900	5,100	90	56,000
Market value	\$46 million	\$306 million	\$1 billion	\$1.5 billion	\$3.5 billion
Spun-off unit's business	Operate 67 supermarkets in two states of U.S.	drilling services in shallow ocean waters	Provide regional airline flights under its parent's brand name	Operate 29 power generation plants in northeast of U.S.	Large contractor focusing on energy and infrastructure development projects
Parent's business	Operates over 300 grocery chain supermarkets in Southern U.S.	Provides contract drilling and related services to oil and gas companies worldwide, especially in deep ocean waters	A major airline carrier	A large conglomerate operating in infrastructure development, power generation, energy supply, and regulated electric, gas and steam utility services	One of the largest energy services companies in the World, with a focus on oilfield services
Reason for spinoff	The parent and spinoff want to become customer focused regional grocery chains in their respective geographic markets	The parent wants to exit shallow water drilling business and focus on global deepwater drilling business	The parent reduced regional flights sourced from the spinoff. The spinoff wants to provide regional flights for other airlines too and diversify into owned braded flight operations and corporate jet services	The parent wants to use proceeds to repay debt and pursue growth opportunities in its core business, regulated utility services	Lack of synergy between the parent and the spinoff. The spinoff is believed to unlocked the value potential of the spun-off business
IT assets owned by the spun-off unit prior to the spinoff	Each grocery store has an autonomous IT system enabling store operations; but no IT for corporate functions	No IT assets at all	No IT assets at all. Parent dedicated a few IT staff to serve as relationship managers between parent and spun-off businesses	A few IT staff and rudimentary computer and local area networking services in the power generation plants	Except for a few shared IT services received from the parent, the spun-off unit has a near autonomous IT operation
IT dependencies of the spun-off unit on the parent	The spinoff is fully dependent on the parent's shared IT services infrastructure for corporate support services (e.g., finance, accounting, HR, etc.)	The spinoff is dependent on the parent for all of its IT needs	The spinoff is dependent on the parent for all of its IT needs. The parent has a shared IT services environment, half of which is outsourced to an outsourcing vendor	The spinoff is fully dependent on the parent's shared IT services infrastructure for corporate support services (e.g., finance, accounting, HR, etc.) and energy management and trading applications	The spinoff received a few shared IT services from the parent: e.g., payroll and HR systems and corporate email services
Who manages IT carve-out and transition	An IT consultant serving as the interim CIO developed the plans; the full-time CIO joined 3 months later		spinoff transition	IT consultants and the CIO jointly developed the plans	The VP of application services at the parent led the project; the spinoff initially used IT consultants and appointed its full-time CIO one year later
Aftermath	bankrupted in 2009	buy all the assets	The intended strategic moves were carried out on time but failed one year later. The company was acquired in 2010	Still in operation. The size remains approximately the same in two years	Still in operation. Revenue dropped 14% in two years but then recovered and totally increased 19% in four years
Interviewees	The IT consultant who serves as an interim CIO and full-term CIO	The VP of IT and the lead IT consultant	The CIO and the lead IT consultant who led the project management office	The CIO and the lead IT consultant	The CIO of the spun-off unit and the VP of application services at the parent firm

Among our case sites, some had visionary business strategies to be constructed, and others were still exploring. For example, ShallowDrill considered diversifying from its domestic markets into international markets, and RegionAir wanted to diversify from its contracted flying business into its own branded flight operations and corporate jet services. These competitive repositioning moves implied that the firms will serve new customers, face new rivals, collaborate with new business partners, operate in new geographies, and become subject to new regulations and accounting systems. In addition, four out of five case sites relied heavily on the shared services provided by their parent firms prior to the spinoffs, and they needed to set up their own functional and supportive departments, appoint their own CIOs, CFOs, general counsels, HR managers, marketing officers, and formulate business processes all in a short period of time.

As one example, a senior consultant who served as an interim CIO for GroceryCo describes the state of the IT management when the spinoff began:

....when we got involved and asked questions about 'what is the strategy, are we setting" [GroceryCo] up for independent operation or do you want to make it attractive to a strategic buver?' The answer was, 'well, it might be either of these two things.' That makes it very difficult to know what to invest in and what to focus on... It tends to obscure the decisions about how best to set the company up... It is very difficult to set up the company for success if it is unclear what the definition of success is."

Question 2: How do spun-off businesses address strategic IT management challenges to survive the periods of extreme disequilibrium?

For most of spinoff sites in our sample, the short-run task was to cut IT links to the parent's shared IT services and support the businesses' independent operation. However, the time between the announcement of the spinoff and the effective date was usually only a few months, often insufficient to disentangle and cut a complex set of IT links that have developed between the two firms over a long period of time and fused deeply into the fabric of their respective businesses. In our study sites, newly spun-off firms adopted various internal and external mechanisms to first stabilize their operational environments.

Using IT transition services to gain time for making sense of the complex planning environment. The first step taken by all five spun-off businesses in our sample to stabilize their operational environments was to enter into transition services agreements (TSAs) with their parents. A transition service agreement is a contract between parents and spun-off businesses in which parents continuously provide corporate supportive services such as IT, accounting, HR, legal, and facility management to the spun-off business (Du and Tanriverdi 2010). TSA helped stabilize the short-run operational environment by enabling the spinoff to keep using the parent's IT services for an extended period and ensure the continuity of business operations. It also helped stabilize the operational environment by providing the spinoff with the much needed additional time for making sense of the firm's emerging business strategy, structure, and processes.

Selecting IT leaders who can lead in the novel and complex environment after the spinoff. The second step taken by all of our five spun-off businesses to stabilize their operational environments was to select IT leaders who could do IT planning and execution in the novel and complex environments. All of our five case sites hired consultants who specialize in IT planning and execution phases of major corporate restructuring projects as interim leaders, either directly as interim CIOs or managers of the project management office. Consulting firms specializing in corporate restructuring and IT carve-out projects are able to pool together IT carve-out projects of many client firms from a diverse set of industries and provide their consultants with a continuous stream of learning-by-doing opportunities with IT carve-out projects. Although each spinoff transaction is unique, experienced consultants can think back to past projects, engage in pattern recognition, and identify a past project whose success drivers could match the circumstances of the current project. The ability to engage in analogical reasoning and do such mappings is known as the "power of analogy," and it is suggested as a viable mechanism for strategy making in novel and complex environments (Gavetti et al. 2005).

Establishing guiding principles and acquiring mundane capabilities first. The third approach taken by our sites to stabilize their operational environments was to establish guiding principles for business and IT decision making during the transition phase. Because of the complementarities between business and IT functions, decisions made by business and IT leaders form a system of complements in which one decision affects the others as well. Task prioritization and resource allocation become a complex problem. Guiding principles, known as "simple rules" (Davis et al. 2009) , were designed to reduce this complexity and fasten decision making speed.

For example, most of our case sites reported that they gave priority to build those mundane IT resources and capabilities at their minimum possible scale and scope, as one of their most important guiding principles. The purpose was to "stabilize" the business and IT operations after the spinoffs and ensure operational continuity. "Optimization" of IT capabilities was not considered until after the spun-off businesses were stabilized. Focusing on the minimum required IT infrastructure and functionality needs first significantly reduces the complexity of task environments for IT and business decision-makers. The IT consultant advising UtilityCo stated:

"The concept of trying to just stabilize the new business and get the [IT] infrastructure in place, have the company stand alone, and then focus on optimization of the infrastructure after you stabilize the business, I think that is an important concept."

Similarly, the CIO of RegionAir stated:

"Had we not set down with business very early on and said 'we are not covering the ideal [IT functionality], we are only covering the absolute minimum required process automation [that] you need to support your core business and structure... there was no way we could be successful... We had to limit first delivery at phase-I to what was absolutely critical to success."

Collectively, the TSAs, hiring of outsider IT leadership, the institution of simple guiding principles and focusing on mundane capabilities all stabilize operational environments of the spun-off businesses sufficiently to allow them to survive and keep the business up and running. Eventually, all of our five study sites successfully survive spinoff transition.

Question 3: How do spun-off businesses address strategic IT management challenges to prepare for the emerging new equilibrium?

Other than EnergyCo, our other four spinoffs sites have almost no reusable IT resources or practice that could be used as a baseline for incremental changes. During their start-up stages, strategic IT management is a discovery and sense-making process, which seeks to better understand the firm's novel and complex environment and how the firm's business and IT needs will emerge and co-evolve with this environment. IT leaders at our sites often actively engaged in sense making processes to understand how various factors influencing IT strategic management are emerging and evolving. They collaborated with internal business leaders and refer to external benchmarks to determine reasonable objectives of IT investment for their firms. Small experimental steps were taken to explore the task environments. In the meanwhile, new business strategies and processes were emerging, and the spun-off firms had to make a few critical IT decisions with long-lasting effects. In those decisions our case sites start to differ.

Choose the right IT sourcing models. Our sites all face the decision between making significant capital investments in in-house IT infrastructures in place or source IT from service providers in the market. Outsourcing will be an easy way out of the capital investment and in-house IT capability development hurdles, but it could also be a much more expensive option by increasing recurring operational IT costs in long-run. Our sites first start to differ in how they handle this trade-off.

Decision makers in some of our sites, such as GroceryCo, preferred to postpone the capital IT investments. However, soon later they encountered constraints when implementing new strategies. For example, the full-term CIO of GroceryCo explained that the lack of investments into IT capabilities such as customer analytics inhibited the firm's ability to become a competitively fit regional grocery chain:

"...from IT perspectives, a lot of the time and monetary limitations, for one example, limited our ability to invest in business intelligence. As the result, we were not as able as we probably would like to, when over the summer of 2008, when there was a demonstrable change in consumer purchasing behavior, understand what was happening there and react as quickly and efficiently, and consequently, make the right brand messaging statements to our customers than we probably would like to otherwise."

Select the right-sized IT platform for the spun-off business. IT leaders at our sites gave priority to implementing the minimum required IT functionality first. Even so, deciding on the right-size IT infrastructure and application solutions for their firms was a major challenge. For example, some of our sites decided that they would need an ERP system, but they could not easily decide if the firm would need a first-tier ERP solution such as SAP or Oracle or a second-tier or third-tier ERP. The first-tier ERP solutions are robust, reliable, and provide more functionality and add-on IT investment options in the future, but they may be oversized for small and medium size firms because they are complex and expensive. In our sample, two firms (ShallowDrill and EnergyCo) invested in first-tier solutions. For example, ShallowDrill had a strategy of growth through acquisitions in the shallow water drilling business. It knew that most of its acquisition targets or potential acquirers were using an industry standard ERP solution. ShallowDrill decided to use the same system, despite higher capital investment, because its growth strategy will involve future acquisitions and using the same system will ease postacquisition integration.

The other three firms in our sample selected second-tier or third-tier solutions for cost considerations, although some of them knew that their business operations would be better off with a first-tier solution. For example, Region Air considered a first-tier solution, but the solution was considered too expensive and thus not adopted. Later in operations, the cost-driven decisions start to create troubles. An important component of RegionAir's strategic renewal effort was to diversify into branded flight operations, but the firm's choice of a second tier solution for customer reservation and revenue management systems created problems in branded flight operations and contributed to the firm's exit from this business in less than two years after their entry.

Collectively, critical decisions such as IT sourcing models and IT vendors made during the periods of disequilibrium have long lasting influence on the emerging equilibrium. Our study sites differ in their decisions, and those who overly succumb to short-term survival pressures appear to suffer more in the long run.

Theory Development

Building upon our qualitative data and analyses, we propose our theoretical model as in Figure 2 below.

We first generated insights from our study sites on the dimensionality of strategic renewal that contributes to organizational disequilibrium after a spinoff. We found that, after a spinoff, dramatic changes happen to the spun-off business' competitive environment, business strategy, organizational structure, leadership, and business processes. Changes in each dimension create unique challenges to strategic IT management and in the meantime threaten the spun-off business' both short-term survival and long-term prosperity. We further argue that new challenges emerge due to the simultaneity of changes in each dimension and the complementarity between these dimensions. These challenges will inevitably reduce the spun-off business' short-term and long-term performance. In our sample, EnergyCo and UtilityCo experienced relatively benign strategic renewal, while the other three firms experienced extremely disruptive one, and their aftermath shows the disruptive nature of strategic renewal. So, as our baseline proposition, we propose that:

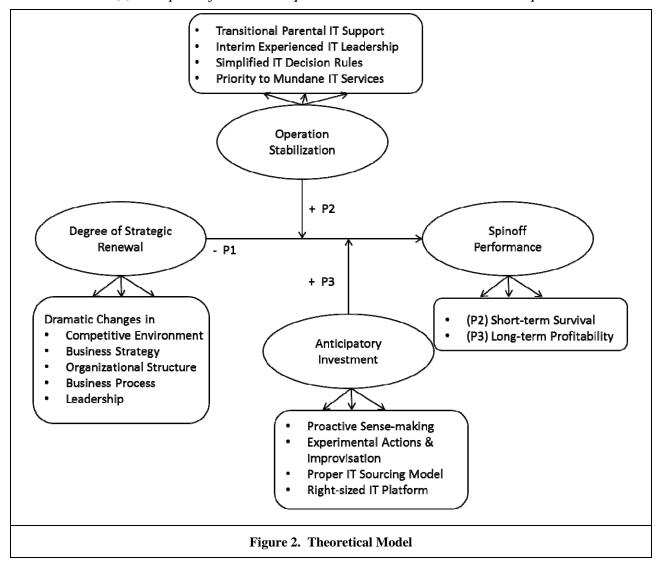
Proposition-1: After a spin-off, the degree of strategic renewal in the spun-off firm is negatively associated with its both short-term and long-term performance.

In the face of enormous challenges, our case study sites invariantly employ some approaches to first stabilize their operational environment. Somewhat counter-intuitive, the mundane IT services and capabilities, rather than those superior, competitively advantageous ones, appear more critical to stabilize spun-off businesses' operational environments and contribute to their short-term survival. Unable to develop their own IT infrastructure and IT function overnight, our study sites all turn to transitional IT support from their former parent organizations. Transitional services serve as resource buffer to ensure the continuity of operations of spun-off firms and shield them from the shocks of dramatic transformation (Miner et al. 1990). Our study sites all involve external consultants with abundant experiences in spinoffs to help make sense of the transition requirements and prioritize tasks. Last, instead of having complicated rules to optimize business operations, spun-off firms adopt simple rules and guiding principles to accelerate decision making cycles and simplify the decision making processes. Overall, these approaches

stabilize the operational environment of spun-off business and gain them valuable time to prepare for the future. Thus, we propose that:

Proposition-2: The negative influence of strategic renewal on short-term spinoff performance can be attenuated if the spun-off firm takes actions to stabilize operational environments in the transition period. Such actions may include:

- (a) Obtaining transitional IT support from the former parent organization
- (b) Hiring interim IT leadership with experiences in similar situations
- (c) Developing simple IT decision rules
- (d) Give priority to the development of mundane IT resources and capabilities



Nevertheless, if the business rationale of spinning off a business is to unleash its value (Woo et al. 1992), the spun-off firm needs to change those business parameters imposed by its parent and strategically renew itself. The transitional period, regardless of its extremity in disequilibrium, is also a window of opportunities for the spun-off firm to set up for the future. Our study sites differed in how they proactively prepare for new emerging equilibrium, and they experienced different consequences. The findings indicate that spun-off firms are more likely to achieve IT readiness for long term strategic renewal when IT leaders use strategic IT planning as sensemaking, learning, and improvisation processes in which they discover those emerging key business parameters of the spinoff. They can also prepare for the newly emerging equilibrium by deciding on proper IT sourcing models and identify the right size of IT

platforms. Failure to do so inhibited strategic renewal efforts at two of our sites at least. Thus, we propose that:

Proposition-3: The negative influence of strategic renewal on long-term spinoff performance can be attenuated or converted positive if the spun-off firm takes proactive and anticipatory actions to prepare for the emerging new equilibrium. Such actions may include:

- (a) Actively making sense of the emerging operational environments
- (b) Taking experimental actions and improvising
- (c) Choosing IT sourcing models anticipatorily
- (d) Developing right-sized IT platforms anticipatorily

Discussion and Conclusion

This study focuses on strategic IT management during periods of extreme disequilibrium such as major organizational restructuring, and strategic renewal. Our findings highlight the distinction of strategic IT management in periods of equilibrium and disequilibrium. In periods of equilibrium, strategic IT management is a mechanism to guide and discipline business and IT executives to implement IT systems and activities in support of firms' desired business strategy and operating models and achieve business value. During periods of disequilibrium, major business parameters such as positioning of the firm in the competitive landscape, business strategies, organizational structures, leadership, and business processes all changes. There is no baseline for strategic IT decisions to refer to. Strategic IT management tasks during extreme organizational disequilibrium thus have a different scope: it is first of all an operation stabilization process, enabling short-term survival, but, more importantly, it is also a discovery process enabling IT managers to proactively prepare for the emerging business and accomplish long-term prosperity. Theories of strategic IT management may need to make a clear distinction between periods of equilibrium and disequilibrium because the research questions addressed, assumptions made, and explanatory mechanisms provided may vary significantly between these two periods.

Then, specific to spin-off studies, our findings also generate significant new insights and preliminary explanations about how and why IT might be affecting operating performance declines of spun-off firms within three years of the spinoff transaction (Woo et al. 1992). The spinoffs are experiencing the dual challenges of cutting links to their parents' IT infrastructures and creating brand new ones. Conventional strategic IT management challenges are multiplied in this context. Firms' inability to address these IT management challenges may be contributing to their high failure rates.

In concluding this exploratory case study, we proposed a conceptual model that needs future empirical validation. In addition, future studies may extend our research in several directions. For corporate spinoff studies in particular, future studies may take the perspective of parent firms and study their IT carveout processes. Beyond spinoffs, researchers interested in other forms of corporate transactions may extend our theoretical arguments to other contexts such as acquisitions, divestitures, bankruptcy restructuring, and dramatic business expansion. Those scenarios all represent organizational disequilibrium periods and may be studied from a lens similar to this paper's. With more knowledge gradually accumulated about strategic IT management in different contexts, scholars may then join force towards developing generic theories on strategic IT management during organizational disequilibrium.

References

- Barney, J. 1991. "Firm Resources and Sustained Competitive Advantage," Journal of Management (17:1), pp 99-120.
- Bergh, D. D., Johnson, R. A., and Dewitt, R.-L. 2008. "Restructuring through Spin-Off or Sell-Off: Transforming Information Asymmetries into Financial Gain," Strategic Management Journal (29:2), pp 133-148.
- Brauer, M. 2006. "What Have We Acquired and What Should We Acquire in Divestiture Research? A Review and Research Agenda," *Journal of Management* (32:6) Dec, pp 751-785.
- Cusatis, P. J., Miles, J. A., and Woolridge, J. R. 1993. "Restructuring through Spinoffs: The Stock Market Evidence," Journal of Financial Economics (33:3), pp 293-311.
- Davis, J. P., Eisenhardt, K. M., and Bingham, C. B. 2009. "Optimal Structure, Market Dynamism, and the Strategy of Simple Rules," *Administrative Science Quarterly* (54:3), pp 413-452.

- Desai, H., and Jain, P. C. 1999. "Firm Performance and Focus: Long-Run Stock Market Performance Following Spinoffs," *Journal of Financial Economics* (54:1), pp 75-101.
- Du, K., and Tanriverdi, H. 2010. "The Performance Effects of Transitional IT Services in Corporate Spin-Offs," the Proceedings of 31st International Conference on Information Systems (ICIS), St. Louis,
- Eisenhardt, K. M. 1989. "Building Theories from Case Study Research," Academy of Management Review (14:4), pp 532-550.
- Gable, G. 2010. "Strategic Information Systems Research: An Archival Analysis," The Journal of Strategic Information Systems (19:1), pp 3-16.
- Gavetti, G., Levinthal, D. A., and Rivkin, J. W. 2005. "Strategy Making in Novel and Complex Worlds: The Power of Analogy," Strategic Management Journal (26:8), pp 691-712.
- Henderson, J. C., and Venkatraman, N. 1993. "Strategic Alignment: Leveraging Information Technology for Transforming Organizations," IBM Systems Journal (32:1), pp 472-484.
- Krishnaswami, S., and Subramaniam, V. 1999. "Information Asymmetry, Valuation, and the Corporate Spin-Off Decision," *Journal of Financial Economics* (53:1), pp 73-112.
- Lyytinen, K., and Newman, M. 2008. "Explaining Information Systems Change: A Punctuated Socio-Technical Change Model," European Journal of Information Systems (17), pp 589-613.
- Miner, A. S., Amburgey, T. L., and Stearns, T. M. 1990. "Interorganizational Linkages and Population Dynamics: Buffering and Transformational Shields." Administrative Science Quarterly (35:4), pp.
- Moschieri, C. 2011. "The Implementation and Structuring of Divestitures: The Unit's Perspective," Strategic Management Journal (32:4), pp 368–401.
- Romanelli, E., and Tushman, M. L. 1994. "Organizational Transformation as Punctuated Equilibrium: An Empirical Test," The Academy of Management Journal (37:5) October, pp 1141-1166
- Sabherwal, R., Hirschheim, R., and Goles, T. 2001. "The Dynamics of Alignment: Insights from a Punctuated Equilibrium Model," *Organization Science* (12:2), pp 179-197.
- Sambamurthy, V., and Zmud, R. W. 1999. "Arrangements for Information Technology Governance: A Theory of Multiple Contingencies.," MIS Quarterly (23:2) Jun pp 261-290.
- Semadeni, M., and Cannella, A. A. 2011. "Examining the Performance Effects of Post Spin-Off Links to Parent Firms: Should the Apron Strings Be Cut?," Strategic Management Journal (32:10), pp 1083-1098.
- Seward, J. K., and Walsh, J. P. 1996. "The Governance and Control of Voluntary Corporate Spin-Offs," Strategic Management Journal (17:1) Jan, pp 25-39.
- Tanriverdi, H., Rai, A., and Venkatraman, N. 2010. "Reframing the Dominant Quests of Information Systems Strategy Research for Complex Adaptive Business Systems," Information Systems Research (21:4) December, pp 822-834.
- Vessey, I., and Ward, K. 2013. "The Dynamics of Sustainable IS Alignment: The Case for IS Adaptivity," Journal of the Association for Information Systems (14:6) June, pp 283-311,.
- Woo, C. Y., Willard, G. E., and Daellenbach, U. S. 1992. "Spin-Off Performance a Case of Overstated Expectations," Strategic Management Journal (13:6) Sep, pp 433-447.
- Yin, R. K. 1994. Case Study Research: Design and Methods, (2nd ed.) Sage Publications: Thousand Oaks, CA.