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Hypercompetition in the ERP Industry: It takes all the running to stay in place

Michelle Antero
Department of IT Management, Copenhagen Business School, Frederiksberg, Denmark., ma.itm@cbs.dk

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Michelle C. Antero
PhD Research Fellow, Copenhagen Business School
Visiting Scholar, Stanford University
ma.itm@cbs.dk

ABSTRACT

Applying the Red Queen Theory (RQT), the study posits that an enterprise resource planning (ERP) software vendor counters the Red Queen Effect (RQE) in the hypercompetitive ERP industry by strategically aligning itself with multiple partners to form an ecosystem that can be leveraged for growth, provide multiple opportunities for innovation, and produce and deliver a product to its customers. By carrying out a cross-case analysis of ERPCorp, its partners and rivals based on multiple qualitative interviews, the paper shows that ERPCorp was able to survive the entry process as well as adapt and avoid the competency trap by using a partner network to sell, implement and develop complementary offerings. The key finding is that in order to survive the "race", ERPCorp has to adopt new strategies to match or exceed the actions of its rivals which creates various tensions with partners, thus requiring the ability to manage an inter-organizational network effectively.

Keywords

Enterprise Systems, Evolution, ERP, Red Queen Theory, Competency Trap, ERP History

INTRODUCTION

As evidenced by the marked increase in adoption and use of ERP since the 1990s, an ERP system is considered a mainstay for running a business today. Due to the demand for it, the competition in the ERP industry is intense; thus, as more and more companies adopt ERP, ERP vendors have the continuous challenge of out-innovating each other by coming up with more and better features, whether organically or otherwise, in order to grow or simply maintain their market share. The intensity reached feverish point in the early 2000s, when several major ERP vendors opted for the non-organic route by participating in various mergers and acquisitions (M&A). While these vendors were clearly after gains in market share, they were just as clearly after equipping themselves with complementary capabilities to be able to fend off competitors in the industry's "evolutionary arms race" (Barnett 2008).

Given this backdrop, the ERP industry, which is focused on the development and sale of pre-packaged software applications, can be characterized to have hypercompetition, defined as a fast-changing environment where competitors quickly create or erode competitive advantages (D'Aveni et al. 1994). Because markets change quickly and one's competitive advantage does not last long in a hypercompetitive industry, an industry player has to depend to a considerable extent on its access to inter-organizational networks. In the ERP setting, this dynamic requires the capability to mobilize resources that are not part of the organization in order for a vendor to produce an ERP system acceptable to the market. Moreover, it gives rise to relationships to build complementary software products which, incidentally, are found to contribute further to the hypercompetition (Lee et al. 2010).

This paper looks at how an anonymized ERP vendor (ERPCorp) manages an inter-organizational partner network to keep up with the dynamic changes in a hypercompetitive market by applying the Red Queen Theory (RQT) (Barnett 2008; Van Valen 1973). It builds on previous studies which have applied the RQT to explain a firm's ability to compete in relation to its competitors (Barnett 2008; Barnett et al. 2008). It specifically attempts to answer the research question: What challenges does ERPCorp face as it seeks to keep up with an arms race that requires it to coevolve with the technology, the market and its rivals' actions? In answering this question, the paper will first review the ERP literature which provides the empirical basis of the discussion, then describe the RQT as a framework to explain the hypercompetitive dynamics among firms. Subsequently, RQT will be applied to (a) describe how ERP vendors utilize its partner network to co-innovate and outperform its competition; and (b) analyze the tensions which arise between the ERP vendor and its partners when the vendor changes its strategy to respond to the hypercompetitive ERP industry. Finally, the paper concludes by discussing the theoretical and practical implications of the research.

This paper aims to contribute to three main areas: first, to the ERP literature by exploring the problems that an ERP vendor faces as it competes for market share by adopting a business model that co-innovates with partners; second, to the study of co-creation literature by examining the dynamics between the ERP vendor and its partners as it strategically aligns with them to augment its resources; and third, to the study of the history of Information Systems (IS), which is often a missed opportunity by researchers in the field (Land 2010).

LITERATURE REVIEW

A substantial portion of ERP studies conducted between 1990-2011 has looked into the implementation of ERP to reveal the success factors (Lam 2005; Markus et al. 2000; Remus et al. 2010) or explain the complexities that lead to failure (Krumbholz et al. 2001; Lee et al. 2004; Markus et al. 2000; Meissonier et al. 2010; Soh et al. 2000; Soh et al. 2004). These studies focused on providing insights for better implementation, not on the vendor which created the system that was intended to meet the needs of a changing competitive marketplace. There were few studies, however, which have examined the issues from a vendor's point of view by offering alternative ways to model business processes (Scheer et al. 2000), build new architectures (Sprott 2000; Yu et al. 2004), or co-create using partner networks (Antero et al. 2011a; Antero et al. 2011b; Fox et al. 2009; Kude 2009; Sarker et al. 2012). These partner networks are often referred to as ecosystems to reflect the collaborative relations that foster innovation enabling them to build coherent solutions(Adner 2006; Fox et al. 2009).

Indeed, as the ERP industry evolves in phases of incremental and revolutionary changes triggered by important innovation (Shapiro et al. 1999), vendors increasingly rely on inter-organizational relationships to keep up. Not surprisingly, the strategic potential of co-creation to enhance innovation capabilities has been emphasized in an emerging stream of research (Han et al. 2012; Sarker et al. 2012). However, while these studies have contributed greatly in understanding the benefits of utilizing strategic alliances to have access to additional resources as part of a maximization strategy, they do not consider how these complex relationships impact an organization's ability to evolve. Lee, et al. (2010) did look at software alliances and the factors that contribute to hypercompetition at a particular point of time, but did not consider how evolving strategies impact the relationships between the allies.

This paper aims to build on existing ERP literature focused on the use of partner networks to innovate. It uses an evolutionary theoretical perspective to explain that an organization's viability to survive a competition is dependent on its ability to co-evolve and keep up with the market. The Red Queen is a reference to a royal character in the novel, "Through the Looking Glass," who remarked, after the main protagonist complained that despite running as fast as she could, she still only found herself under the tree where she started: "Now, here, you see, it takes all the running you can do to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!" (Caroll 1871). The lesson is clear: In today's hypercompetitive business environment, simply keeping the pace is not enough to outrun the competition.

THEORETICAL FRAMEWORK

Originally put forward by Van Valen (1973) and advanced by Barnett (2008) in strategic management literature, RQT is predicated on the notion of coevolution – a theory which suggests that organizations are in a never-ending race that requires them to constantly adapt simply to sustain their level of relative fitness (Barnett 2008). In this view, organizations are adaptive systems that are able to come up with strategies to respond to competition by searching for innovative solutions locally (Barnett 2008; Levitt et al. 1988). The theory complements existing literature that suggest that organizations recognize new opportunities that will give it first mover advantage (Christensen et al. 2000; Drucker 2002; Lieberman et al. 1988) or scale up and learn from early innovator's experiences (Markides et al. 2005).

RQT views competition as simultaneous actions where competing firms co-evolve, thus rendering a particular firm's competitive advantage as also evolutionary. This view of competitive advantage departs from earlier static theories of competitive advantage (Barney 1991; Porter 1987) which suggest that competitive advantage can be sustained – e.g., by creating core capabilities to market a new product and/or service that is unique (Porter 1987), rare (Barney 1991), low cost (Porter 1987), valuable, inimitable, or non-substitutable (Barney 1991). RQT provides a lens to understand how organizations co-evolve and compete by combining behavioral aspects that take into account organizational learning and economic rationalities – i.e., to increase market share and profitability (Barnett 2008).

An organization's adaptability and selection of innovation strategy can be analyzed through the actions and decisions of human agents (Sundbo 2001). When new challenges are faced, human agents adapt and try to develop new capabilities by searching for innovative solutions that are driven by aspirations which are not only linked with prior aspirations but also social references to others by comparison (Barnett 2008). Consequently, solutions tend to have elements of reflexivity, based on "competitive hysteresis, the current-time effects of having experienced competition in the past" (Barnett 2008), not unlike what Giddens (1984) refers to as bounded knowledgeability. This means that the response to competition is informed by the

experiences that the organization has had in the past and guided by practical consciousness of the human agents to act in a knowledgeable way (Walsham 1993).

Over time, organizations accumulate experiences in responding to competition and gain the capabilities to deal with certain types of problems (Cooper 1992). The more a firm encounters the same problem, the more it develops competitive hysteresis, which allows it to become a stronger competitor. However, one of the dangers for an organization that has established routines for solving similar problems is the possibility of falling into a competency trap, which limits organizational options when circumstances change (Barnett 2008; Levitt et al. 1988). Such a trap occurs when established procedures, although inferior, provide satisfactory results primarily because of familiarity, thus stunting the organization's ability to develop new procedures (Levitt et al. 1988).

RQT assumes that the organization's viability is relative to the number, size and fitness of its competitors. Moreover, the context of competition is dependent on its historical and social setting which determines whether an organization has the requisite capability to succeed (Barnett 2008). Accordingly, an organization historically exposed to competition produces stronger competitors and is more likely to be fit compared to an average organization that has not faced much competition. For new entrants, surviving the entry process typically entails coming up with a revolutionary innovation that changes the industry as part of a selection-driven process.

This selection process responds to a certain logic of competition – i.e., "a system of principles in a given context that determines who can compete, how they compete, on what criteria they succeed or fail, and what are the consequences of success or failure". To win the race, an organization needs to outperform its rivals according to the context's logic of competition by "matching or exceeding the actions of its rivals" (Barnett 2008; Derfus et al. 2008). This can be carried out in two ways: by innovating to compete or by preying on rival organizations (essentially killing the Red Queen) (Barnett 2008).

RESEARCH METHODOLOGY

To illustrate how ERPCorp has employed various strategies in order to compete, the paper applies qualitative analysis (Miles et al. 1994) to an embedded case study (Yin 2009). Qualitative data was collected between October 2011 and March 2012 through face-to-face and phone interviews with senior corporate executives of the vendor, its partners and its rivals. Each interview lasted anywhere between one to two-and-a-half hours. The interviewees were selected based on their employers' importance in the ERP field, as evidenced either by their market share or dominance of a particular niche. In order to get a wider spread of partner types, partners were solicited from multiple geographic regions through cold-calling from a partner list and referrals from the vendor or its partners. Table 1 below anonymizes and summarizes the list of interviewees, their roles within their respective companies (likewise anonymized) and how the interviews were conducted.

Position	Company Name and Description	Interview Type
Director	ERPCorp	Face-to-face
Director	ERPCorp	Face-to-face
Director	ERPCorp	Phone
General Manager Research & Development	ERPCorp	Face-to-face
Vice President, Partner Management	ERPCorp	Face-to-face
Founder/Business Development Manager	Red Queen Alpha, Rival ERP Vendor	Face-to-face
Founder/Director of Business Development	Red Queen Alpha, Rival ERP Vendor	Face-to-face
Executive Vice President	Red Queen Beta, Rival ERP Vendor	Phone
Vice President	Red Queen Beta, Rival ERP Vendor	Face-to-face
Vice President, Product Strategy	Red Queen Beta, Rival ERP Vendor	Face-to-face

CEO	Independent Software Vendor, Non-Selling Alpha	Face-to-face
CEO, Partner Management	Independent Software Vendor Selling Beta	Face-to-face
CTO	Independent Software Vendor Selling Beta	Face-to-face
Board Member	Independent Software Vendor Non-Selling Charlie	Face-to-face
General Manager/Founder	Independent Software Vendor Selling Delta	Face-to-face
Senior Consultant	Independent Software Vendor Selling Delta	Face-to-face
Senior Manager	Systems Integrator Alpha	Face-to-face
Team Lead/Senior Consultant	Value Added Reseller Alpha	Face-to-face
Department Head	Value Added Reseller Beta	Face-to-face
Department Head	Value Added Reseller Charlie	Face-to-face
CEO	Value Added Reseller Delta	Face-to-face

Table 1. Interview List

The data from the interviews were triangulated using corporate documents, news articles and information from websites of the participating companies and their rivals. Based on the theoretical framework, the interview data were coded to reflect the relevant patterns of action, and then used as inputs to illustrate various practices within the ERP industry through a narrative (Czarniawska 2011). This narrative presents a complex network of events from the perspective of ERPCorp, which was selected for being recognized as a leader in a particular market segment. Simultaneously, the actions of ERPCorp's rivals and network partners were investigated to enable a cross-case analysis in order to see if the logic surrounding one vendor could be replicated to provide theoretical, industry-wide insights (Eisenhardt 1991).

CASE STUDY ANALYSIS

In the early 2000s, the ERP industry went through a period of consolidation participated in by ERPCorp, Red Queen Alpha and Red Queen Beta. Twelve years later, the ERP packages developed by these companies still dominate the market.

ERPCorp's early success can be attributed to its strategic decision to co-innovate with multiple partners through a certification process wherein the partners became authorized resellers of the ERPCorp product. The collaborative arrangement was made possible because of ERPCorp's decision to split its revenues with its partners while allowing them to also make money on consulting fees. Revenues were generated from initial installation and maintenance fees for five years, which benefited all parties.

Using this certification strategy, ERPCorp developed a flexible architecture which allowed its partners to make localizations to cater to various customer requirements (e.g., language, legal, etc.) and develop industry verticals using a software development tool. Additionally, ERPCorp also allowed its partners to resell their products, scale up their operations, achieve economies of scope, and develop their own complementary modules and add-ons.

Since it was able to amass a larger number of customers using the strategy, ERPCorp was also able to spread out development costs over a larger number of systems, thus making the cost of producing another system marginal. Hence, over time, ERPCorp was able to build up competencies in various functional areas such as customer relationship management (CRM), supply chain management (SCM), human resource management (HRM), product life cycle management (PLM), and workflow management (WFM).

ERPCorp's Ecosystem

As a result of ERPCorp's arrangement with its partners, an ERP Ecosystem developed around it composed of several diverse actors: (1) Independent Software Vendors - Non-Selling (ISVs-NS); (2) Independent Software Vendors - Selling (ISVs-S); (3) Value Added Resellers (VARs).

Independent Software Vendors - Non-Selling

An ISV-NS is a software vendor which develops business application add-ons to the platform and does not sell directly to a customer; it generates profit for itself through license-fees for its products. In some cases, it develops and sells its own software products but is incapable of selling ERPCorp products directly to the customer; it can, however, sell through VARs.

ISV-NS Alpha and ISV-NS Charlie fall under this category. ISV-NS Alpha was formed by an ex-ERPCorp employee who recognized the need to develop add-ons for VARs to enable them to migrate their solutions to newer versions of ERPCorp code, while ISV-NS Charlie was formed as a spin-off from a VAR focused in the furniture and fashion industry. ISV-NS Charlie's parent company recognized the potential of developing a generic vertical solution that facilitates a partnership with other VARs.

Independent Software Vendors - Selling

An ISV-S is a software vendor which develops business application add-ons on the code base (kernel), and directly sells and implements these applications. It is capable of developing its own custom solutions that it can sell directly to the customers or through VARs. It has insight into the buying behavior of customers in a particular local market and, in some cases, even specific knowledge about a vertical. It generates profit for itself through consulting fees as well as license fees, either from selling its own product or the ERPCorp package.

ISV-S Beta focused on developing WFM modules without an industry vertical focus so they could be integrated into a wider range of solutions offered by VARs. Its founders, who were former ERPCorp employees, also decided to sell the firm's own solutions because they felt they have the capability to make modifications at the customer site, having been part of the original design team at ERPCorp.

Meanwhile, ISV-S Delta focused on developing packages for the printing industry after it recognized that business applications that ran on a particular operating system was scarce. Learning quickly that ERPCorp pushes software updates on a regular basis, it has forbidden its partners to make non-repeatable customizations to its software. It also recognized that in order to have a stronger bargaining power to request for changes to the kernel, it needed to sell more licenses. Keen on doing just that, it therefore created a department in its headquarters to focus on sales.

Value Added Resellers

A VAR is a software vendor capable of developing business application add-ons on an ISV-NS solution or directly on the platform. A VAR can combine an ISV-NS solution with its own products as well as other ERPCorp products to create a custom solution for the customer. It has some insight about the buying behavior of business applications and specific knowledge about a vertical and local market. It sells and implements these applications directly to customers. Like an ISV-S, it generates profit for itself from consulting fees as well as license fees, either by selling its own product in combination with an ERPCorp solution.

VAR Alpha, VAR Charlie and VAR Delta developed solutions without a particular industry focus. VAR Alpha recognized a demand for cloud-based solutions for ERP and decided to fulfill that by hosting a private cloud for SMEs. While VAR Charlie focused on a particular market segment, VAR Delta opted to develop solutions for multiple markets. VAR Beta developed solutions that catered to the fashion industry and partnered with ISV-NS Charlie, Red Queen Alpha and Red Queen Beta.

ERPCorp's Rivals

Red Queen Alpha was established as a consulting company around the same time as ERPCorp. Like ERPCorp, Red Queen Alpha developed its own client-server accounting system which was distributed by a major hardware manufacturing company. To ensure that its software met its clients' demands, Red Queen Alpha focused on forming user groups that met a couple of times each year to brainstorm on new features that need to be included to the core package. This enabled Red Queen Alpha and the user groups to discuss the future technology roadmap for Red Queen Alpha and get immediate feedback on the system designs. The approach served it well as it developed a system that was easy to use, thus allowing it to gain a strong foothold in a particular market.

Red Queen Beta is reputed as a market leader known to set the pace of the competition. It developed its market by using implementation partners, typically referred to as systems integrators (SI), to keep up with the demands for ERP in the 90s. It managed to capture specific industry verticals through the SIs, enabling it to capture a major share of a specific market.

Avoiding the Competency Trap

As the race to get the lion's share of the market became cut-throat, more complementary products became available and ERP vendors were challenged to come up with new strategies to keep up with the pace of competition. Red Queen Alpha decided to focus on developing solutions targeting a specific market in a particular industry vertical. Unfortunately, although many analysts believed it was poised to compete globally having undergone major changes in its operations and had managed to resist earlier takeover attempts, it recently fell victim to the RQE and was acquired by another player in the field. For its part, Red Queen Beta expanded its innovation initiatives by entering into strategic alliances with various partners and user groups; it also expanded its offerings to target other segments of the market.

The actions of ERPCorp's rivals prompted it to rethink its current strategy. As one of the Directors of ERPCorp put it, "I think some of our competitors have done us a favor by making the rest of ERPCorp wake up a little bit." ERPCorp responded by changing its strategy from one focused on a single target market to one focused on different customer groups (i.e., large companies, mid-size companies, and small and medium enterprises). However, as ERPCorp made changes to its strategy to avoid the competency trap, conflicts with some of its partners arose.

First, the changes in the certification requirements for its partners meant that only those who met the certification criteria would be able to stay in the network. For ERPCorp, the ideal partners were those which (1) have a vertical competency to produce proven and repeatable solutions; and/or (2) could effectively gain market share through their increased capacity to implement, sell and support a software solution. In return for the higher standard of requirements, ERPCorp committed itself to subsidize advanced training, guidance and business systems that would allow the partners to monitor, manage and identify areas of opportunities so they could grow their businesses according to ERPCorp's strategic directions and priorities. ERPCorp's new partner strategy also contained several elements: marketing, training, new systems & tools, and support services.

While the changes in the certification process fit well with ISV-NS Charlie, ISV-S Delta and VAR Beta which develop ERP packages for a particular vertical, they were painful for VAR Delta and VAR Charlie. In particular, because it makes its money on consulting fees, VAR Delta came to believe that ERPCorp is squeezing out the revenues from its partners. VAR Delta therefore viewed this period as an opportune time to change its role from a regular VAR to what ERPCorp would now consider a SI. VAR Delta also entered into preliminary discussions with Red Queen Beta, a signal suggesting the possibility of leaving ERPCorp's Ecosystem altogether. In parallel, VAR Charlie changed its course to be in line with ERPCorp's strategy, thereby quickly winning the approval of ERPCorp. Said ERPCorp's Vice President: "I think VAR Charlie is doing the right thing: They're starting to be more precise about what they want to do whereas they used to be everything to everyone, with a little bit of a gun-slinging mentality."

Second, ERPCorp made changes to the revenue structures for its partners, which some found dispiriting. However, according to the VP of ERPCorp, the attrition of partners from a self-elected network was necessary to ensure that only partners whose goals are strongly aligned with it remain. As he clearly puts it: "We're going to pay for performances, just like they do. So we have lost some but the ones that we've lost, candidly, were the ones we wanted to see move on. Now, in parallel to that, we want a place for some of that capacity to go for the ones that decided they didn't want to be doing this as a full-time business anymore."

Finally, ERPCorp began developing product features in its core package that are in the process of being offered or were already being offered by an existing partner. For instance, VAR Alpha has been developing a cloud-based offering, which appears to be an offering also included in ERPCorp's new release. While VAR Alpha is apprehensive, it is waiting to see the features and functionality of the new package from ERPCorp in order to allow it to position and differentiate its own product.

DISCUSSION

In order for ERPCorp to survive the entry process, it needed to understand the prevailing logic of competition in the market and establish itself as a significant player. For a vendor whose business model is dependent on the development and sale of an ERP system, this meant that it needed the requisite knowledge about its customers and the ability to offer a product that was technically comparable to all other market substitutes as well as respond to market demands and technological innovations.

ERPCorp's success can be attributed to: (1) its ability to makes changes to its strategies in order to evolve with the hypercompetitive market where other rivals compete; and (2) its use of a partner network to keep up with technological

changes and market demands. These two things become especially important when technologies are in flux and customers demand for more features to be incorporated in the ERP package. By being an adaptable organization that can leverage its partners' competencies, ERPCorp could build the complementary capabilities that avoid the competency trap. Its partner network also allows ERPCorp to see from a distance which technologies or features are necessary to incorporate in its core package so that it can offer the functionalities demanded by the customers.

The results of the case study not only highlight the importance of using alliances in order to avoid the competency trap but also the challenges when alliances have established routines. As shown above, as ERPCorp strategically evolved, its actions sometimes became misaligned with its partners'. Further, because of ERPCorp's distance from the customers and its dependence on its partner network to deliver its package, it runs the risk of losing its customers to another vendor altogether. For instance, the more stringent partner-certification requirements which ERPCorp implemented have increased the possibility of partners leaving its network for another.

While there is a significant lock-in effect that deters its partners from leaving, ERPCorp, as the vendor, has to tread a very fine line. It needs to define clear criteria such as when and under what circumstances it needs to cut its losses for those partners incapable of making a transition. It also needs to balance incentive mechanisms to keep partners who can threaten the stability of the business if they opt to leave. For ERPCorp, this was a challenge when it wanted its partners to sell more products and upgrades to generate more license fees but partners preferred to customize the core product instead so they could generate more consulting fees. Likewise, conflicts arise when the ERP vendor incorporates features that are being offered by its partners in the kernel. Essentially, by innovating and increasing the features in the kernel, it makes the features developed by certain partners obsolete, thereby reducing their ability to succeed in the market place. As also shown, the affected partners' response to ERPCorp's actions also vary, suggesting that they too will do what it takes to keep their chances of survival higher in this hypercompetitive market. This suggests that as ERP changed its strategy, previous collaborative relationships where undermined resulting to a role reversal – i.e., partner to competitor.

CONCLUSION

By applying an evolutionary theory that has not been widely applied in IS, the paper focused on the complexities that an ERP vendor is faced with as it evolves relative to its competition. In the hypercompetitive ERP industry, an ERP vendor must be able to analyze the actions of market participants that can occur simultaneously, and then react adeptly. In order to survive the rivalry among the vendors as well as the tensions that arise in the ERP ecosystem, the ERP vendor must be attuned to the dynamics of the marketplace.

By looking at the actions of the players from an industry-wide perspective, the paper was able to show the tensions that arise from the process of changing strategies. It further illustrated that an innovation ecosystem created to sustain product development requires the ability to manage innovation by challenging routines to avoid a competency trap. In the case of ERPCorp, it was shown that innovation in an ecosystem does not only emanate from within the bastion of a large organization, but can also occur at the nodes (i.e., the smaller niche players). It was also shown that by changing various strategies in order to leverage multiple opportunities for innovation, an ERP vendor runs the risk of losing partners in its network. Although the network creates a significant lock-in effect that can discourage partners to defect, when routines are challenged, the affected partners view the occasion as an opportunity to explore other options. Therefore, the trade-offs in having an efficient and innovative network need to be managed in order to increase the chances of survival in a hypercompetitive environment.

The paper was able to look at disruptive challenges that threatened the survival of an ERP vendor because the qualitative study that had a longitudinal focus. While it focused on only three anonymized ERP vendors, it was able to consider actions across multiple periods of time to show how the industry evolved and how certain actions led to the survival or demise of an organization. As the industry continually evolves to produce dominant market solutions, more companies will experience the RQE. By viewing competitive advantage as something that is temporary, ERP vendors need the requisite capability to constantly co-evolve with rivals who also innovate. This means being adept at managing strategic changes (e.g., markets, technologies and relationships between various organizations) in order to maintain the stability of the ERP ecosystem.

As industries begin to converge, the challenge for ERP vendors is how to survive the next revolution and stay as a focal player in the ecosystem. Further research can be done to expand on this study by either looking from the perspective of other vendors or longer period. In hypercompetition, it takes all the running, constant innovation and adaptation to the environment, to stay in the same place because others are co-evolving at the same time. If these vendors grow complacent and fall into the competency trap, they may fall in the ranks of the Big Blues who no longer are the masters of its ecosystem.

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