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AN OVERVIEW OF THE ROLE OF INFORMATION TECHNOLOGY IN STRATEGIC MANAGEMENT: PART II

by

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Abstract

Strategic management of the firm includes the strategic management of information technology in the context of business relationships. Firms do not exist in isolation. Multiple constituents make up a relationship network that constitutes the vital resources needed to fulfil the mission of a business. To leverage a firm's business relationships effectively, a relationship 'lens' is needed that can act as a guiding process for strategy creation and tactical fulfilment. In order to engage and manage each business relationship and to execute relationship strategies, the relationship engagement cycle (REC) creates the phases necessary to acquire, learn about, and build memorable experiences with each relationship and to establish trust and loyalty with the most valuable relationships. Information technology, in many various forms, is a key strategic enabler of the REC.

Keywords:

Strategic management, strategy, information technology, relationships, competitive advantage, firm performance, value creation

AN OVERVIEW OF THE ROLE OF INFORMATION TECHNOLOGY IN STRATEGIC MANAGEMENT: PART II

1 Preface

In the first article of this two part series, we discussed the role of information technology in strategic management from a 'purest' point of view (Galbreath, 2003). The purest view encompasses the processes of strategic management: organizational purpose, environmental research, discovery, opportunity identification, recommendations, and implementation. We discovered that while information technology's (hereafter 'IT') role may seem relatively unexciting or unnoticed, modern strategic management processes could not be performed without IT as a vital component in virtually every process. In part two of the series, we turn our attention to a 'functional' discussion. The functional discussion will focus on the practical application of leveraging IT create strategic business success, particularly with respect to business relationships.

For many years IT has been heralded as the quintessential tool for strategically managing information. We argue, however, that IT should rather be viewed as the indispensable tool for strategically managing business relationships. Schrage (1997: 8) states:

It's time to stop thinking about computer networks and digital technologies as media for managing information and to start thinking of them as media to manage relationships. *As a general rule, too many organizations have spent too much time obsessing on the information they want their networks to carry and far too little time on the effective relationships that those networks should create and support.* This is grave strategic error.
(emphasis in original)

In the second and final article in this series, we discuss the concepts of relationship assets, the relationship framework, and the relationship engagement cycle to further explore the role of IT in strategic management, from a functional perspective.

2 Introduction

Hidden, or intangible, assets have been described as the 'vehicle' in the new economy (Lev, 2001). Knowledge is the 'fuel' that powers it (Quinn, 1992; Drucker, 1993). According to Blair and Wallman (2001), the transition to a new economic order, one driven by intangible assets is now a foregone conclusion.

Although intangible assets vary widely in their description and definition, it has been argued that the underlying basis of a firm's efforts at creating value in the market is tied directly to four such relationship assets: customer, employee, partner and supplier assets (Galbreath, 2002a). These four *relationship assets* constitute the cumulative net present value of the expected future opportunities of any business. Sawhney and Zabin (2001) argue that long-term business relationships that create and sustain predictable growing cash flows are *the* key determinants of enterprise value in today's financial markets. One might suggest then, that we are not so much in an 'information age' as we are in a 'relationship age' (Anderson, 2003).

Managing relationships is not a simple proposition. Indeed, because relationship assets are interconnected, they can not be assessed or managed in isolation (Galbreath, 2002a). However, most attempts at better relationship management tend to be based on technology solutions such as customer relationship management (CRM) or supply chain management (SCM) that focus on process improvements or more effective data management; such solutions rarely pay due attention to the relationships that underlie the processes or the data (Galbreath, 2002b). Furthermore, focusing on a single relationship asset (e.g., CRM) ignores the fact that the ability to derive value from any given relationship is often tied to the effective management of other

relationships (Håkansson and Snehota, 1995; Gummesson, 2002). What is needed, then, is a consistent framework for regularly assessing the status of each relationship asset – both independently and corporately. At a minimum it is recommended that, for customer, employee, partner and supplier relationship assets, a business should identify the goal of the relationship, the desired value outcome of the relationship (which could also be viewed as the measure of success for the relationship) and the key ingredient of success for the relationship.

To elaborate on the firm's relationship assets in the context of a relationship management framework, this paper is divided into four parts. First, the *value* of the firm's relationship assets is expounded in order to reveal the connection between relationship assets and value creation. Next, a framework from within which managers can holistically view, assess and develop strategies with respect to their relationship assets is presented. After the discussion of the framework, we discuss relationships within the context of a 'relationship engagement cycle', which is applied so as to ensure the productive life of relationship assets. Finally, various IT that are seen as being instrumental in the process of managing relationships within the framework are discussed. Ultimately, this paper's goal is to help business and IT managers better understand the real economic impact of the relationship assets, and to suggest a an overall method for creating strategies that might more effectively leverage these assets – via the strategic application of IT – for value creation.

3 Relationship Assets: Just How Much Are They Worth?

Suggesting that customers or employees are valuable to a firm is certainly a cliché. However, perhaps a more appropriate debate is: 'How much are they *really* worth?' Rather than rely on rhetoric or anecdotal evidence to answer the question, some revealing quantitative statistics are described below with respect to a firm's relationships assets.

3.1 Customer Relationship Value

Customer relationship assets represent the store of value within a firm's customer relationships. From a financial perspective, these assets represent the net present value of positive cash flows to be derived from future periods. To maximize these future cash flows, it is imperative that firms and their managers understand the unique characteristics of their customers (and customer segments) so that measures may be taken to increase the value derived from them (Zeithaml *et al.*, 2001). This means expanding customer share by increasing the frequency and volume by which customers purchase a firm's particular products or services. This also means that costs must be minimized, while at the same time allocated more productively. Lastly, profitable customer relationships must be retained. Consider the statistics described below (Bhote, 1996; Lemke, 2001).

- It costs five to seven times more to find new customers than to retain current customers.
- Retained customers (loyal customers) cost 27 percent less per transaction, yet generate average sales that are 60 percent higher than those of new customers.
- A five percent reduction in customer defection can result in profit increases from 30 to 85 percent.
- If companies can increase their customer retention by two percent, it is the equivalent of cutting their operating expenses by 10 percent.

3.2 Employee Relationship Value

Like customers and other relationship assets, each one has an economic value. Employees are no exception. Pfeffer (1998) suggests that closer attention should be paid, and economic models applied, to the measurement and prediction of the value creation potential associated with employee assets. Without question, employees constitute one of the most critical stores of capital of any business. Recent surveys examining opinions of CEOs from around the world

confirm that employees continue to be rated as the most important asset to future competitive advantage and growth (PricewaterhouseCoopers, 2002). Not only are employees – and the intellectual capital they generate – perceived to be critical to a firm's success, they have a clearly identifiable economic impact on a firm's performance.

By way of example, a recent report found that firms with employee turnover of 10 percent or less have as much as a 10 percent point customer retention rate advantage over a firm with employee turnover of 15 percent or more (Comeau-Kirschner, 1998). In light of the customer value statistics presented above, this is a clear, measurable bottom line advantage. Additionally, another study found that billions of dollars of market capitalization is being lost in four industries in the United States due to share price and operating earnings reductions associated with employee turnover (Sibson & Company, 2000). Gummesson (2002) argues that only when internal (i.e., employee) relationships work can the firm have any hope of creating a delighted – if not totally satisfied – customer.

3.3 Partner Relationship Value

In an era of increasing global business exchange, the ability of firms to produce, sell products and services and to provide after-sales support, requires the involvement of specialized, external participants (Inkpen, 1996; Dyer and Singh, 1998). Partners such as alliances and distribution channels represent such externally-based relationship assets. As such, the value that can potentially be created from various partner relationships should be evaluated with the same rigor as other relationship assets.

Partnerships, whether they are in the form of alliance partners, channel partners or both, can significantly enhance a firm's ability to create value in the market. Consider the following statistics (Harbison *et al.*, 2000):

- Strategic partnerships have consistently produced a return on investment of nearly 17 percent among the top 2,000 companies in the world for nearly a decade. This is 50 percent better than the average return on investment that companies produced overall.
- The 25 companies most active in partnerships achieved a 17.2 percent return on equity – 40 percent more than the average return on equity of the Fortune 500. The 25 companies least active in alliances lagged the Fortune 500, with an average return on equity of only 10.1 percent.
- Companies who successfully manage partnerships see 20 percent higher profitability as compared to companies who manage partnerships less successfully. Revenue generation from high-success alliances equates to 21 percent of a firm's overall sales, as compared to 14 percent of low-success partnerships.

3.4 Supplier Relationship Value

As firms create products and services and engage customers in mutually beneficial exchanges of value, suppliers are playing an increasingly important role. In fact, Prahalad and Ramaswamy (2000) claim that as firms incorporate the customer experience into their business models, the co-opting of customer competence relies heavily on suppliers. Some experts argue that companies are no longer competing so much on their products as on their supply chains (Newton, 2000). Indeed, the reliance on suppliers as part of a firm's overall strategy to create value is becoming increasingly vital.

To confirm the value and importance of suppliers and their impact on firm performance, consider the following benefits derived when firms effectively integrate and manage the supply chain through the use of IT (Teagarden, 2000):

- Inventory turns doubled;
- Inventory levels reduced by as much as 50 percent;

- Stock outs reduced nine fold;
- On-time deliveries increased by as much as 40 percent;
- Cycle times decreased by as much as 27 percent overall;
- Supply chain costs reduced by as much as 20 percent; and
- Revenue increases by as much as 17 percent.

The above statistics represent a small sample of the empirical research highlighting the economic impact of various relationship assets. Although this network of relationships has always been tantamount in market exchanges, Tapscott *et al.* (2000) suggest that an increased emphasis on relationship assets has occurred in the last ten years, particularly with respect to new web-based business models, increased focused on core competencies, globalization, and the need to co-create value with partners, suppliers and even customers in order to extract maximum efficiency and differentiation in the market. According to Schrage (1997), creating the most value in the twenty-first century largely depends on the adept management of relationships. However, Schrage (1997), at the same time, cautions that the largest bottleneck in the pathway to increasing value creation in most organizations today is, in fact, poorly managed relationships.

4 Strategically Managing Relationships Assets: A Proposed Framework

Creating lasting market value today is becoming increasingly dependent on the ability to learn about, learn from, and to manage key relationships – relationships with customers, employees, partners and suppliers (Sawhney and Zabin, 2001; Gummesson, 2002; Anderson, 2003). The ability to do this requires a consistent framework for regularly assessing the status of each relationship asset. At a minimum it is recommended that, for each relationship, a business should identify the goal of the relationship, the desired value outcome of the relationship (which

could also be viewed as the measure of success for the relationship), and the key ingredient of success for the relationship (Table 1).

Relationship Asset	Relationship Goal	Key Ingredients For Success	Measurements/ Outcome
Customers	<ul style="list-style-type: none"> ▪ Customer share ▪ Totally satisfied customers ▪ Accelerated purchase frequency ▪ Loyalty 	<ul style="list-style-type: none"> ▪ Knowledge of the customer ▪ Segmentation by profitability tiers ▪ Integrated, multi-channel business model 	<ul style="list-style-type: none"> ▪ Improved retention rates ▪ Captured lifetime revenue ▪ Higher profitability ▪ Referral source
Employees	<ul style="list-style-type: none"> ▪ Personal growth/development ▪ Varied job experiences ▪ Retention 	<ul style="list-style-type: none"> ▪ Organizational design & leadership ▪ Strategic HRM policies & programs ▪ Knowledge tools 	<ul style="list-style-type: none"> ▪ Higher firm productivity ▪ Higher customer retention ▪ Reduced operational costs
Partners	<ul style="list-style-type: none"> ▪ Product/service speed to market ▪ Improved innovation ▪ Accelerated business velocity 	<ul style="list-style-type: none"> ▪ Effective collaboration ▪ Continuous and open communications ▪ Sharing of assets ▪ Integration of IT systems 	<ul style="list-style-type: none"> ▪ Revenue growth ▪ Increased customer share ▪ Improved customer retention
Suppliers	<ul style="list-style-type: none"> ▪ Real-time inventory management ▪ Maximum component quality 	<ul style="list-style-type: none"> ▪ Supply chain automation ▪ Business process integration ▪ Open information & best practice sharing 	<ul style="list-style-type: none"> ▪ On-time deliveries ▪ Less stock-outs ▪ Fewer product returns ▪ Decreased supply chain costs ▪ Higher customer satisfaction

Table 1 Proposed framework

The relationship framework serves not only as a tool for the leadership of the firm to focus attention and resources on key relationship assets, but also serves as a guide to better understand their interdependencies. For example, as was discussed earlier, employee turnover affects customer turnover, which affects profitability and market capitalization. Partners impact on sales and even new product development (or service delivery), which impact customer satisfaction and loyalty and ultimately a firm's economic performance. Supplier provided, poor

quality components may ultimately lead to poor quality products, which will likely affect customer satisfaction and may even affect employee morale, possibly leading to customer defection and employee turnover.

When considering relationship assets from a strategic, and even tactical perspective, we believe that the key is not to assess a single constituent in isolation, but rather to understand the links among the constituents that will maximize the opportunity to create value. As Håkansson and Snehota (1995: 384, 385) state:

What makes the economy of relationships so special is indeed that a relationship has functions (has economic consequences) for several actors and thus the outcomes of different relationships are interdependent. . . Thus it is not enough for any actor to be concerned just about itself in order to be successful.

Taking such a holistic view will assist in developing a strategic approach to managing relationships. The relationship framework outlined in this paper is a good first step towards viewing relationship assets holistically, and in doing so, offers a means of formulating strategies that will help ease the burden of such a complex management issue.

In order to fully leverage the relationship framework, we suggest viewing relationship assets in the context of a life cycle. For example, regardless of a given firm's strategy, traditional fixed assets – such as plant and equipment – that may be necessary for the execution of that strategy, typically go through a cycle in terms of their productive life: acquisition, use and disposal. Similarly, we argue that relationship assets should be managed through a cycle to maximize their value. That is, although relationship asset strategies will be unique, to ensure the

productive life of each asset, they should be managed through a 'relationship engagement cycle'.

4.1 The Relationship Engagement Cycle

In order to manage relationship assets through a relationship life cycle, we propose the relationship engagement cycle (REC). The REC consists of: 1) harnessing relationship assets by applying acquired knowledge; to 2) create differentiated, memorable experiences; that 3) earn trust, build loyalty and create more knowledge:

1. Acquired and Applied Knowledge – Knowledge is information that, when viewed relative to other information and filtered by experience, translates into the ability to act (Pfeffer and Sutton, 1999). In order to leverage relationship assets effectively, the firm should identify, understand and manage knowledge about each relationship (cf. Kohli and Jaworski, 1990; Slater and Narver, 2000). Amazon.com's ability to personalize web pages for its customers, including the capability of making sales recommendations based on user preferences and past purchases, is a good example of acquired and applied knowledge. However, while learning about and learning from customers is important, they should not be the only focus. Learning from and about other relationship assets such as partners, suppliers and certainly employees, is vitally important too. Evidence suggests that such learning has positive benefits to financial performance (Slater and Narver, 1994; Chang and Chen, 1998). This first phase of the REC is the fundamental building block for executing the remaining phases in the cycle.
2. Memorable Experiences – Experiences, as an economic offering, are becoming a key competitive differentiator (Pine and Gilmore, 1999; Berry *et al.*, 2002; Haeckel *et al.*, 2003). Where products are tangible commodities that businesses standardize and inventory, and

services are intangible activities performed for a particular client, experiences occur when businesses intentionally use services as a stage and products as a prop to engage an individual in a relationship (Pine and Gilmore, 1999). While the experience itself is an intangible, it has real value, which is retained by the recipient long after the value of the component products and services have dissipated. A good example would include a trip to Disney World, where even parking the car is designed to be an experience that won't be easily forgotten (Carbone and Haeckel, 1994). To leverage this second phase of the REC, firms must translate learning and knowledge into distinct, positive interactions that can be repeated time and again across multiple touch points and interaction channels. Positive interactions that are repeated time and again, regardless of the touch point or interaction channel, leads to the creation of consistently memorable experiences and better financial performance (Kotha *et al.*, 2004). The more the firm learns about each relationship (the first phase of the REC), the greater the prospects of successfully creating experiences that are memorable.

3. **Earned Trust** – Trust is a driving force in any long-term business relationship (Morgan and Hunt, 1994). Creating trust helps a firm establish barriers of exit, where constituents such as employees, customers, partners and suppliers choose to remain loyal to the firm over time. As shown above, loyalty can be very important to the firm's financial productivity. Additionally, the more trust that is built and the longer the relationship, the greater the likelihood that additional knowledge can be gleaned which can then be used for continuously improving the management of the firm's relationships. Firms should strive to earn trust and build loyalty with the most valued relationship assets while at the same time capturing better, actionable knowledge about them. Indeed, trust impacts on performance positively as it reduces transaction costs because fewer protective devices are needed if the firm has trustworthy agents and less time is spent in negotiation if initial claims are truthful

(Milgrom and Roberts, 1992; Barney and Hansen, 1994; Hosmer, 1995). Thus, the costs of an option based on these characteristics are lowered, so that it may become the preferred option, especially where transaction costs are high relative to other costs. Dell Computer, for example, through its highly integrated business model, including the integration of multiple relationship assets through complex IT, has created a highly trusted bond that generates superior performance relative to peers in the computer industry (Hill *et al.*, 2004).

By viewing relationship assets through the framework proposed in this paper and by considering these assets through the REC, a firm can strategically apply a set of tools that we believe will help them improve their relationship management efforts. However, we suggest that a missing ingredient is the means of *tactical* execution. Tactical execution requires applying the concepts of the relationship framework and the REC to specific relationship asset programs/projects. To do so, it is suggested that IT be considered a fundamental component of this effort. More specifically, IT that lend themselves to the management of relationship assets should be considered. Assessing IT for tactical fulfillment essentially comes down to three requirements: 1) do the IT aid in collecting, analyzing, and building knowledge around a given relationship asset or, if possible, more than one?; 2) do the IT help to create memorable experiences for relationship assets; and 3) do the IT help to facilitate earning the trust of relationships assets? With these questions in mind, we next turn our attention to the some of the technologies that meet the three requirements.

5 IT, Relationship Management and the REC

Without question, IT has completely revolutionized the world of information processing. However, while an enormous amount of time and money have been spent on building more

reliable, scaleable and cost-effective information networks, the genuine significance of IT is not rooted in the information they process or store. A sober assessment of the impact of IT in most industries yields a very simple observation: the most profound impact that IT can have is on relationships between people and between organizations (Schrage, 1997).

5.1 The Technologies of Relationship Asset Management

Business relationships are about people – learning from them and about them, creating mutually rewarding experiences and building trust in order to establish long-term loyalty and more learning and knowledge. Certainly, any relationship management strategy requires the human touch; however, in today's ever-expanding global economy, where the complexity of establishing and maintaining business relationships is more difficult than ever, IT are critically important tools to help create competitive advantage, and to build and maintain the relationships that bind businesses together (Schrage, 1997). Managers face many difficult investment decisions and day-to-day operational questions when it comes to IT and business relationships. For example, which of the relationships should the firm focus on first? Does one relationship create more value than the others or do the interworkings of two or more relationships generate even higher value? Which technologies will help the firm best manage its many relationships? Where will the highest return from technology come from in the least amount of time?

The vastness of IT solutions makes any discussion on the topic difficult at best and will not be examined in-depth in this paper. However, from a relationship management perspective, we can distil the effort in view of the REC by focusing the discussion of IT on: 1) acquired and applied knowledge; 2) memorable experiences; and 3) earned trust.

Technologies of Acquired and Applied Knowledge

The ability to effectively use knowledge is marked by the ability to create content (Pfeffer and Sutton, 1999). Content is information beyond mere data; it offers knowledge for specific purposes (Moffett and McAdam, 2003). Furthermore, content enables a firm to use knowledge about relationship assets in order to create memorable experiences that build trust and loyalty. In essence, the question any firm must ask about its relationships is simply: 'What do we know?' For customer relationships, a firm must have knowledge of demographics, acquisition costs of customers, product or service purchase histories, annual revenue per customer or customer segment, customers lost, service costs to customers, profitability per customer or segment, retention rates, satisfaction scores, etc. For employee relationships, it must have knowledge of revenue and profit per employee, level of skill and experience, turnover to customer defection ratios, revenue loss impact, etc. For partner relationships, average monthly or quarterly leads generated and closed, revenue attainment, service costs to revenue generation ratios, profitability levels, customer share gain contribution, and so forth should be monitored for each partner. Lastly, a firm must build knowledge of relative costs, number of defects, percent on-time deliveries, frequency of stock outs, among others, for each supplier.

The key technologies for the acquired and applied knowledge phase of the REC include data staging technology, data analysis and analytical applications, business intelligence and decision support software, knowledge management systems, workflow and enterprise application integration (EAI) software (Figure 1). The aforementioned technologies, and certainly many others, are largely geared towards the enablement of a better understanding of the dynamics of individual relationship assets as well as their interactions. By designing IT to focus on knowledge acquisition that can provide a supreme understanding of relationship assets, firms are better positioned to develop strategies for one and to fulfill the other two phases in the REC.

Acquired & Applied **Knowledge**

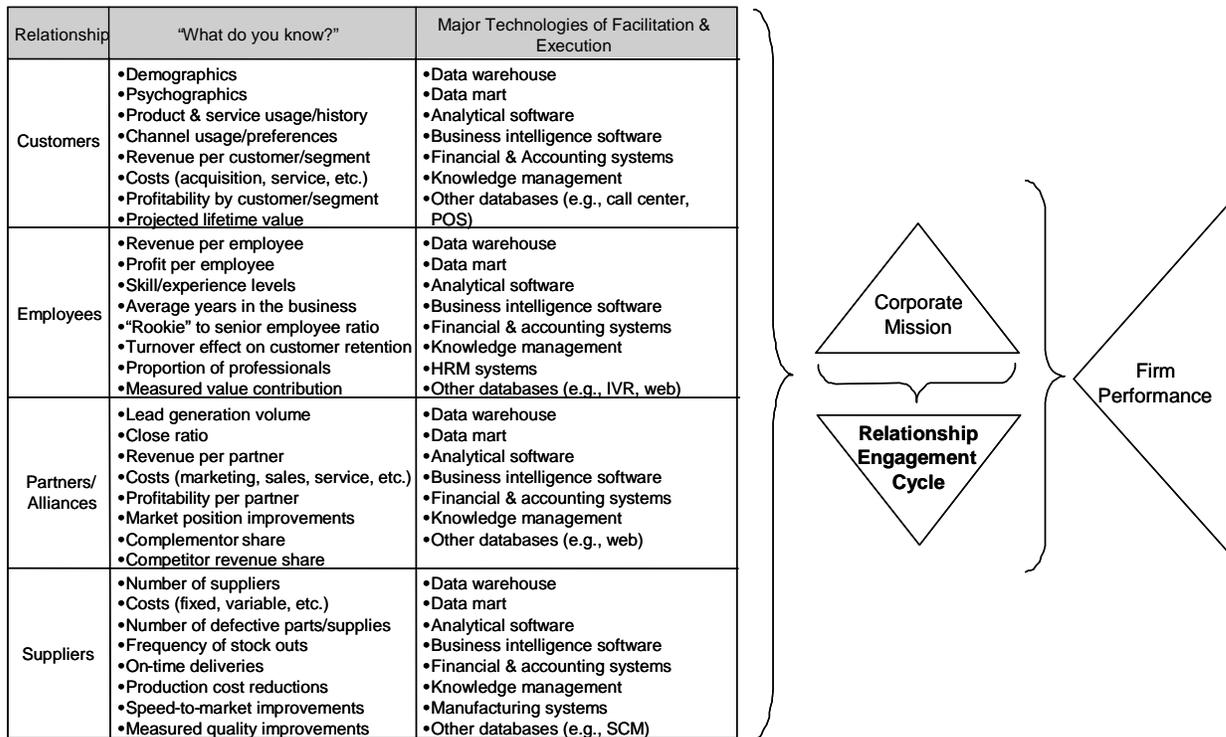


Figure 1 Acquired and applied knowledge phase

Technologies of Memorable Experiences

The second phase of executing the REC is concerned with staging memorable experiences. While many factors comprise the tactical execution of an experience, technology is playing an increasingly important role (Kotha *et al.*, 2004). And although the central focus is on the customer experience, firms should also consider how to create positive experiences for other relationship assets. As such, firms might ask the question: How are we marketing and selling to, treating and/or collaborating with our business relationships? In other words, when a relationship asset (either internal or external) has an interaction with the firm, are they encountering positive, productive experiences, or are they encountering detrimental or poor experiences?

For customer relationships, firms need to consider segments and target markets, product or service customization and personalization and the quality of sales or service interactions. For employee relationships, the quality of productivity tools, the availability of on-line education and training tools, the breadth and depth of access to customer records, and the ease of knowledge-sharing capabilities must be addressed. For partner and alliance relationships, the level and ease of information sharing, the level of process automation, and the sharing of best practice experiences need to be taken into account. For supplier relationships, the issues include: the level and ease of information sharing and exchange; level of process automation; and ease of replenishing parts and supplies either via on-line purchasing or via automatic stock-out alerts.

The representative technologies for the memorable experiences phase of the REC include e-commerce systems, collaborative filtering software, web agents, call centers (sales, after-sales service), business rules, customer relationship management (CRM) software, unified messaging systems, intranet systems, enterprise information portals (EIP), partner relationship management (PRM) software, extranet systems, electronic data interchange (EDI) systems, supply chain management (SCM) software, workflow and enterprise application integration (EAI) software (Figure 2). The technologies mentioned here are largely geared towards engineering consistently positive experiences (via a variety of interaction channels), not only for customers, but also for all the firm's relationship assets.

Memorable Experiences

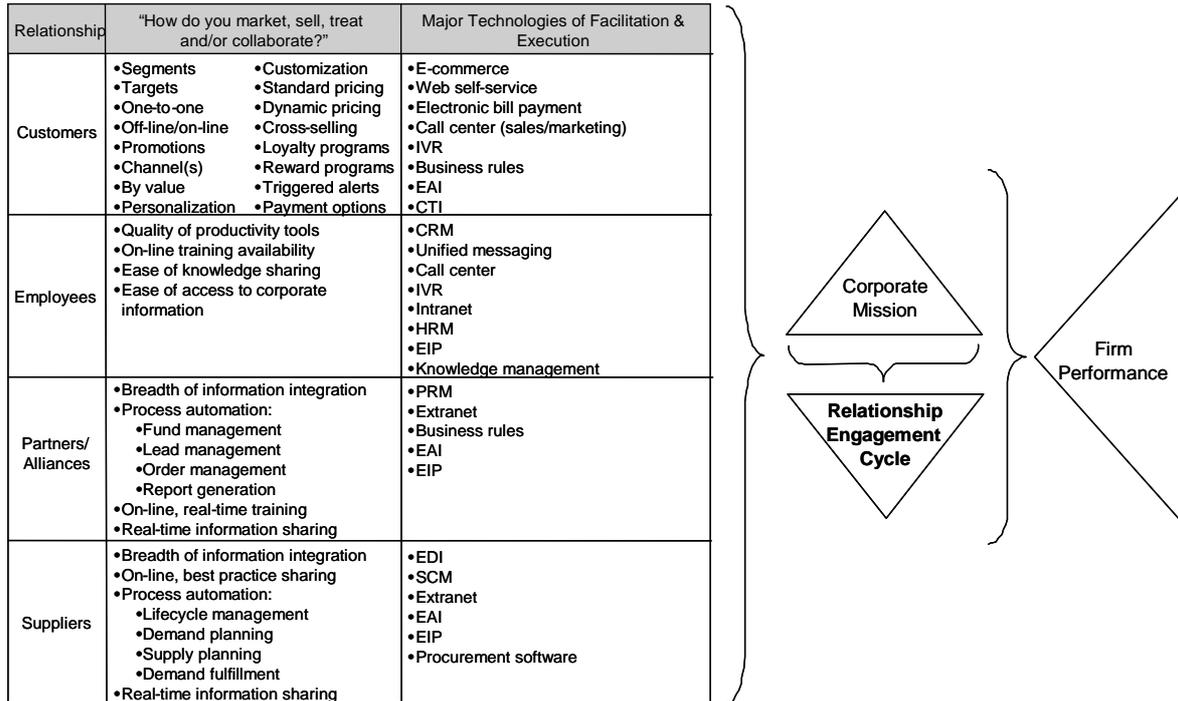


Figure 2 Memorable experiences phase

Technologies of Earned Trust

The third and final phase of executing the REC is concerned with establishing trust. Trust is the lynchpin of any long-term business relationship (Barney and Hansen, 1994; Morgan and Hunt, 1994). To no surprise, evidence presented in this paper suggests that long-term business relationships can have a dramatic impact on revenue growth, profitability and, for public firms, market capitalization. Interestingly, in America, Reichheld and Scheffer (2000) find that individuals who purchase products or services through the Internet rank trust as the number-one purchasing factor. Other attributes, including lowest price and product selection, lag behind.

In the case of earned trust, the firm might simply ask: Are we establishing trust with our relationship assets? For customers, this question may lead to a focus on satisfaction levels, average customer tenure, percent repeat customers, and the degree and level to which

customers are willing to share personal information. For employees, satisfaction levels, average employee tenure, annual employee turnover, and percent new employees referred by existing employees should be considered. For partners, scrutiny should be given to average tenure, impact on product and service reputation, and the number of exclusive partnership contracts. For suppliers, average tenure, level and degree of information/best practice sharing, and the favorability of contract terms relative to other firms must be addressed.

Representative technologies of the trust phase of the REC include firewalls and Internet security systems, call centers (after-sale service), web self-service systems, field service automation software, help desks, enterprise information portals (EIP), and enterprise application integration (EAI) software (Figure 3).

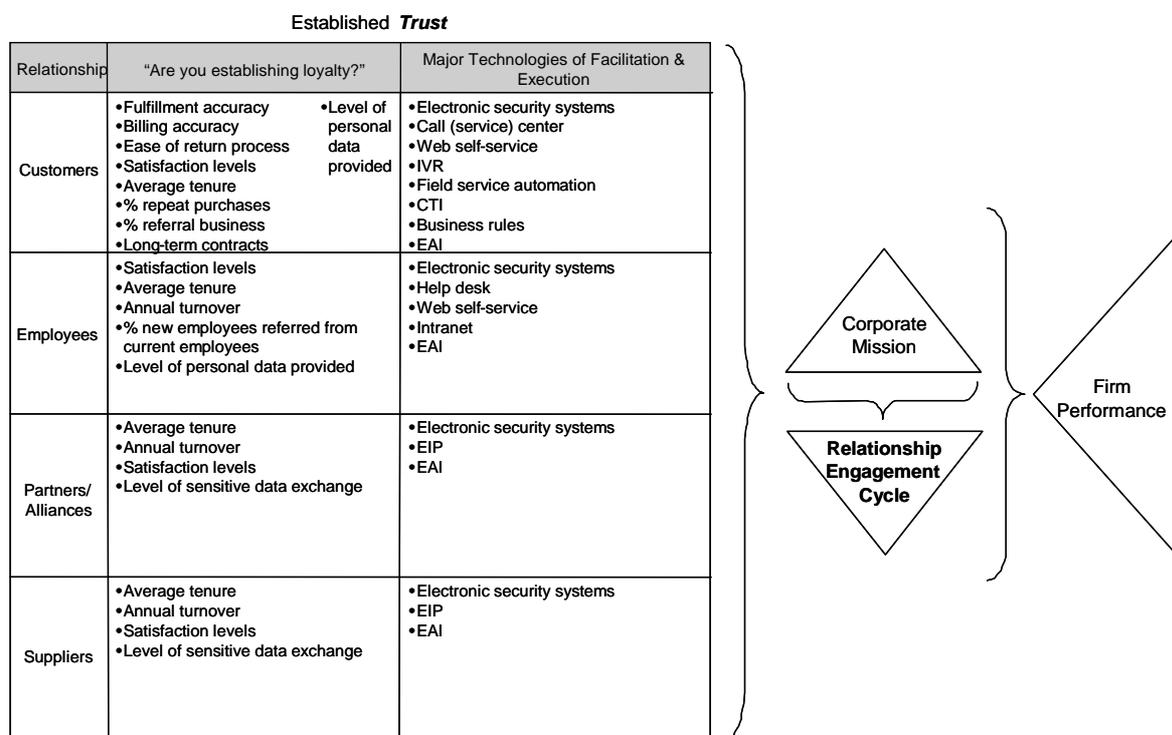


Figure 3 Established trust phase

Although this article has covered many technologies of relationship management in business, it falls short in discussing all available technologies that can be brought to bear in managing the firm's multiple business relationships (for more discussion on technologies, see Moffett and McAdam, 2003). However, we have described some key technologies that firms can leverage to help facilitate the REC. Interestingly, upon close inspection of the technologies discussed in this article, one will find that many of the same tools can be leveraged across multiple relationships. This leverage poses important issues for management, as decisions are made on which technologies are best for the enterprise to better manage its business relationships. Considerable time and money can be wasted if technology decisions are made from looking at a single constituent rather than in context with all relationships important to the firm. Political or departmental fiefdoms have no place among management personnel when decisions of this criticality need to be made. Unfortunately, isolated or politically motivated decisions have and continue to cost firms efficiency, revenue and profitability every year, especially where technology project overruns, delays or incompletions occur (Holmes & Poulymenakou, 1995).

6 Conclusion

In this paper, it has been suggested that the current business climate might be described better as a 'relationship age' than an 'information age'. Of course, relationships have been important to business since the beginning of economic exchange. However, only within the last 10 years or so have we begun to more fully understand their *quantitative* impact on multiple dimensions of firm performance (Zeithaml, 2000). As suggested in this paper, the empirical evidence suggests that relationship assets can have a significantly positive impact on the performance of a firm; conversely, relationship assets that are mismanaged or neglected can have dire financial consequences for the firm.

One potential approach in the pursuit of more effectively managing relationship assets is to implement a relationship framework, where it is recommended that for each relationship a

business identify the goal of the relationship, the key value outcome of the relationship and the key ingredient of success for the relationship. Once strategies are developed for each relationship, applying the framework to the practical management of a firm's relationship assets takes the form of a relationship engagement cycle: 1) harnessing relationship assets by applying acquired knowledge; to 2) create differentiated, memorable experiences; that 3) earns trust, builds loyalty, and creates more knowledge.

Tactical fulfillment of the REC is furthered by the use of a variety of IT, each of which not only serves a particular need of an individual relationship asset, but can be leveraged across multiple relationships to ensure scalability, cost sharing and ease of management. For example, although a firm may, in fact, need to leverage separate technology to address a specific relationship asset (e.g., CRM, SCM), by using technology such as enterprise application integration (EAI) software, the two systems can be interconnected for more effective knowledge sharing and management. Thus, a more holistic approach to relationship management can be achieved.

By using IT strategically, firms can become more effective relationship builders – and managers. Of course, IT alone is no panacea for creating a relationship-centric firm. Executive leadership, effective development of business processes and the development of firm capabilities must be co-evolved and co-sequenced with managerial and technological innovation to develop a relationship-centric culture.

References

- Anderson, J. (2003) *The path to corporate nirvana*, Silver Falls Press, Salem, Oregon.
- Barney, J.B. and Hansen, M.H. (1994) 'Trustworthiness as a source of competitive advantage', *Strategic Management Journal*, Vol. 15 (Special Issue), pp. 175-190.
- Berry, L.L., Carbone, L.P., and Haeckel, S.H. (2002) 'Managing the customer experience', *Sloan Management Review*, Vol. 43, No. 3, pp. 85-89.
- Bhote, K.R. (1996) *Beyond customer satisfaction to customer loyalty*, American Management Association, New York, NY.
- Blair, M. and Wallman, S. (2001) *Unseen wealth*, Brookings Institution Press, Washington, DC.
- Carbone, L. and Haeckel, S. (1994) 'Engineering customer experiences', *Marketing Management*, Vol. 3, No. 3, pp. 8-19.
- Chang, T.Z. and Chen, S.J. (1998) 'Market orientation, service quality and business profitability: A conceptual model and empirical evidence', *The Journal of Services Marketing*, Vol. 12, No. 4, pp. 246-264.
- Comeau-Kirschner, C. (1998) 'Making retention work', *Management Review*, Vol. 87, No. 10, pp. 7-8.
- Drucker, P.F. (1993) *Post-capitalist society*, Butterworth-Heinemann, Oxford, England.
- Dyer, J.H. and Singh, H. (1998) 'The relational view: Cooperative strategy and sources of interorganizational competitive advantage', *Academy of Management Review*, Vol. 23, No. 4, pp. 660-679.
- Galbreath, J. (2002a) 'Twenty-first century management rules: the management of relationships as intangible assets', *Management Decision*, Vol. 40, No. 2, pp. 116-126.
- Galbreath, J. (2002b) 'Success in the relationship age: building quality relationship assets for market value creation', *The TQM Magazine*, Vol. 14, No. 1, pp. 8-24.
- Galbreath, J. (2003) 'The role of information technology in strategic management: Part I', *International Journal of Information Technology and Management*, Vol. 2, No. 4, pp. 291-311.
- Gummesson, E. (2002) 'Relationship marketing in the new economy', *Journal of Relationship Marketing*, Vol. 1, No. 1, pp. 37-57.
- Haeckel, S.H., Carbone, L.P., and Berry, L.L. (2003) 'How to lead the customer experience', *Marketing Management*, Vol. 12, No. 1, pp. 18-23.
- Håkansson, H. and Snehota, I. (1995) *Developing business relationships in marketing*, Routledge, London, England.
- Harbison, J, Pekar, P., Moloney, D., and Viscio, A. (2000) 'The allied enterprise: Breakout strategy for the new millennium', Booz-Allen & Hamilton White paper.

- Harreld, H. (2001) 'Channel management', *InfoWorld*, pp. 47-52.
- Hill, C.W.L., Jones, G.R., and Galvin, P. (2004) *Strategic management*, John Wiley & Sons, Milton, Queensland (Australia).
- Holmes, A. & Poulymenakou, A. (1995) 'Towards a conceptual framework for investigating IS failure', *Proceedings of the 3rd European Conference on Information Systems*, Athens, Greece, pp. 237-253.
- Hosmer, L.T. (1995) 'Trust: The connecting link between organization theory and philosophical ethics', *Academy of Management Review*, Vol. 20, No. 2, pp. 379-403.
- Inkpen, A.C. (1996) 'Creating knowledge through collaboration', *California Management Review*, Vol. 39, No. 1, pp. 123-139.
- Kohli, A.K. and Jaworski, B.J. (1990) 'Market orientation: The construct, research propositions, and managerial implications', *Journal of Marketing*, Vol. 54, No. 2, pp. 1-18.
- Kotha, S., Rajgopal, S., and Venkatachalam, M. (2002) 'The role of online buying experience as a competitive advantage: Evidence from third-party ratings for e-commerce firms', *Journal of Business*, Vol. 77, No. 2, pp. S109-S133.
- Lemke, G. (2001) 'CRM trends: Learn from churn—or burn', *Customer Support Management*, October, pp. 17-18.
- Lev, B. (2001) *Intangibles: Management, measurement, and reporting*, Brookings Institution Press, Washington, DC.
- Milgrom, P. and Roberts, D.J. (1992) *Economics, organizations, and management*, Prentice Hall, Englewood Cliffs, NJ.
- Moffett, S. and McAdam, R. (2003) 'Contributing and enabling technologies for knowledge management', *International Journal of Information Technology and Management*, Vol. 2, Nos. 1/2, pp. 31-49.
- Morgan, R.M. and Hunt, S.D. (1994) 'The commitment-trust theory of relationship marketing', *Journal of Marketing*, Vol. 58, No. 3, pp. 20-38.
- Newton, C. (2000), 'Setting a supply-chain course' *eCRM* (Special Supplement), August.
- Pfeffer, J. (1998) *The human equation: Building profits by putting people first*, Harvard Business School Press, Boston, MA.
- Pfeffer, J. and Sutton, R.I. (1999) 'Knowing 'what' to do is not enough: Turing knowledge into action', *California Management Review*, Vol. 42, No. 1, pp. 83-108.
- Pine, J. and Gilmore, J. (1999) *The experience economy*, Harvard Business School Press, Boston, MA.
- Prahalad, C.K. and Ramaswamy, V. (2000) 'Co-opting customer competence', *Harvard Business Review*, Vol. 78, No. 1, pp. 79-88.
- PricewaterhouseCoopers (2002) *5th annual global CEO survey*, Report available at www.pwcglobal.com.

- Quinn, J.B. (1992) *Intelligent enterprise*, The Free Press, New York, NY.
- Reichheld, F.F. and Schefter, P. (2000) 'E-Loyalty: Your secret weapon on the web', *Harvard Business Review*, Vol. 78, No. 4, pp. 105-114.
- Sawhney, M. and Zabin, J. (2001) *The seven steps to nirvana*, McGraw Hill, New York, NY.
- Sibson & Company (2000) *Employee turnover study*, Sibson & Company, New York, NY.
- Schrage, M. (1997) *The relationship revolution: Understanding the essence of the digital age*, The Merrill Lynch Forum, March.
- Slater, S.F. and Narver, J.C. (1994) 'Does competitive environment moderate the market orientation-performance relationship?', *Journal of Marketing*, Vol. 58, No. 1, pp. 46-55.
- Slater, S.F. and Narver, J.C. (2000) 'Intelligence generation and superior customer value', *Journal of the Academy of Marketing Science*, Vol. 28, No. 1, pp. 120-127.
- Tapscott, D., Ticoll, D., and Lowy, A. (2000) *Digital capital*, Harvard Business School Press, Boston, MA.
- Teagarden, G. (2000) *i2 Technologies, Inc.*, Salomon Smith Barney Industry Report, October.
- Zeithaml, V.A. (2000) 'Service quality, profitability, and the economic worth of customers: What we know and what we need to learn', *Journal of the Academy of Marketing Science*, Vol. 28, No. 1, pp. 67-85.
- Zeithaml, V.A., Rust, R. T., and Lemon, K.N. (2001) 'The customer pyramid: Creating and serving profitable customers', *California Management Review*, Vol. 43, No. 4, pp. 118-142.