To achieve complex solutions in the rapidly changing world of e-commerce, it is impossible to go it alone. This explains the latest trend in IT outsourcing—global and partner-based alliances. But where do we go from here?

In recent years, headlines have touted successful partnerships like that between CD-Max Enterprises and NetCreations, Inc., which helped turn email list sales into a lucrative business, and blazed the trail for the coming of email list advertising. CD-Max Enterprises was a two-person business specializing in CD-ROM development when it spotted the gold mine in email lists and teamed up with NetCreations, Inc., an email direct marketing company, to capitalize on this opportunity. This new form of tightly coupled partnership, which combines innovative ideas with know-how expertise through outsourcing, is upping the ante of e-commerce competitiveness. IT outsourcing has long played an important role in the field, yet outsourcing trends are little understood. In this article, we attempt to sort through the rich volume of outsourcing research literature for patterns and relationships that help make sense of past, present, and future trends of IT outsourcing.

As the timeline in Figure 1 illustrates, IT outsourcing is not a new phenomenon; it originated from the professional services and facility management services in the financial and operation support areas during the 1960s and 1970s [7]. In the 1960s, the use of external vendors was confined to time-sharing or processing services. Since computers were large and expensive, most companies...
relied on service bureaus, systems houses, and other professional firms to provide facilities management services. The 1970s marked the beginning of the standard application package concept. To overcome the increasing demand for IT applications and the inadequate supply of IT personnel, managers began to rely on contract programming, which became the predominant form of outsourcing during the 1970s. Then came the rapid decline of some processing services from the end of the 1970s, which can be seen in historical perspective as an early manifestation of technological downsizing. The arrival of low-cost minicomputers and then PCs also hit the processing services business at the beginning of the 1980s.

By the time the focus shifted to IT-supported vertical integration in the 1980s [7], the outsourcing trend of the 1970s had lost steam. Controlling the product-development cycle from raw materials through product delivery grew in importance, and IT was now considered a valued in-house function. Organizations generally operated their information systems environment on a custom basis, buying standard equipment, system and application software, and communications, and assembling them into an infrastructure unique to each organization.

Interest in outsourcing resurfaced in the early 1990s, not for contract programming and specific processing services, but for network and telecommunications management, distributed systems integration, application development, and systems operations. While the data processing service bureaus of the 1960s provided service from an off-site location, the outsourcing vendors of the 1990s aggressively targeted onsite facilities management. IT personnel were shifted from the customer to the vendor, with some vendors purchasing customers’ mainframe hardware and managing client services onsite. System integration was another popular outsourcing segment in the 1990s and involved highly complex technology, including network management and telecommunications, along with associated education and training.
Keeping Up With Changes in Practice

When tracing the outsourcing issues over the past three decades, we noted that, like moving targets, research issues had shifted over time [7]. These shifts were not random but reflected changes in practice. By synthesizing past outsourcing research according to issues, we attempt to establish a critical link between the literature and the evolution of IT outsourcing, as illustrated in Figure 2.

Early outsourcing research centered on acquisition [1]. Organizations considered outsourcing a commodity and focused on the make-or-buy decision between internally and externally developed technology. However, with Kodak’s 1989 outsourcing decision, the number of outsourcing contracts surged, and outsourcing emerged as a key method of managing information systems [9].

The next issue concerned the motivation to outsource, with proponents claiming outsourcing resulted in significant cost reduction, effective use of human resources, higher capacity on demand, and better access to advanced technologies. Critics noted the critical risks of outsourcing, including potential loss of control, flexibility, qualified personnel, and competitive advantage in information management. These discourses focused on the impact, as well as the benefits and risks of outsourcing [3].

As outsourcing grew in popularity, debates shifted from whether or not to outsource to how much to outsource [4]. Concerns during this stage of outsourcing evolution included whether outsourcing should be total or selective, service or asset, long or short term, and involve single or multiple vendors. Despite its popularity, no research could determine the exact recipe for effective outsourcing performance [8]. Measures, such as efficiency, user and business satisfaction, service quality, and cost reduction were used for assessment in many studies, but a comparison of these studies revealed multiple and conflicting results. Also, performance measures were often not generalizable, since they depended on the specific nature of the outsourcing projects.

The next step in outsourcing evolution involved a backlash of sorts, in which the virtues of insourcing versus outsourcing were debated [5]. Despite many outsourcing success stories, a number of studies reported that outsourcing did not always yield desired outcomes, and, moreover, insourcing sometimes yielded more benefits. Overall, it was difficult to decisively champion one option over the other, since past studies and actual cases demonstrated that outsourcing decisions were a trade-off between many contingent factors.

Despite its critics, outsourcing was enmeshed into most organizational strategic plans, and the contract specifying the relationship between outsourcing providers and their clients emerged as a centerpiece issue [10]. Outsourcing contracts were often complex, with multiple clauses aimed at reducing unexpected contingencies, possible cost increases, and opportunistic service provider behavior. But it was impossible to spell out every possible scenario in a contract, and client-provider interactions often went beyond rules, agreements, and exceptions—they also rested on trust, commitment, and mutual interest.

Because these intangible elements were not easily captured in the contract, a closer relationship between clients and their service providers emerged, known as partner-based outsourcing [11]. Many organizations sought this type of flexible partnership with their service providers after identifying the limitations of legal contracts. Consequently, an effective partnership became known as a key predictor of outsourcing success [6]. The table here summarizes the changes in outsourcing issues along with theories from the literature (see [7] for a comprehensive listing of refer-
The Two-Stage Model

Our two-stage model, illustrated in Figure 3, assigns at all developments before the evolution of partnership-based outsourcing as stage one, and partnership-based outsourcing itself as stage two. This conceptual model helps illustrate how global and partner-based alliances evolved from the client-centered view of outsourcing, and how outsourcing may be transformed in the era of e-commerce.

For the sake of simplicity, our proposed model assumes symmetry between the past and future and the exclusion of the time dimension. The model is based on our ideas in Figure 2 and is extended to include the idea of partnership in Figure 3. The continually changing nature of IT outsourcing and subsequent paradigm shifts complicate the projection of future trends, but many changes reflect a symmetry of sorts between the past and future. For instance, in the past, small companies with problematic and mismanaged IT departments were major outsourcing clients. Yet a recent outsourcing trend involves an increasing number of large firms with mature IT departments. In this case, seeing the symmetry of the past with the present enables us to make a better sense of what is emerging.

A contributing factor to the emergence of partner-based outsourcing includes the growth of outsourcing over time. Today’s IT outsourcing frequently involves a much greater range and depth of services than in the past, with an increasing number of IT functions being transferred to IT service providers. In some cases, even IT personnel are part of the transaction. This reverse flow of IT resources indicates a much more proactive role by today’s service providers, who assume more risk and investment than their counterparts in the past.

The acceptance of strategic alliances among business partners is good evidence for the growing popularity of partner-based outsourcing [6]. In the early stages of outsourcing, from the 1960s through the early 1980s, a client normally dictated projects, with control and ownership clearly spelled out in a hierarchical relationship. What was best for the client might not necessarily be best for the service providers. We characterize the first stage of IT outsourcing evolution as driven by client self-interest, shaped by a hierarchical relationship and dictated by a win-lose strategy.

During the second stage of IT outsourcing, marking the beginnings of the partnership concept, organizations begin to realize the strategic advantage not just in owning IT but in using it in specific ways. At this stage, managers tend to be more interested in IT’s impact on efficiency and effectiveness than in the technical superiority of their organizational IT infrastructure [11]. As the extent and scope of outsourcing projects increase during this stage, service providers begin to take on management responsibility and risk [6], eventually joining clients as stakeholders in the process. Mutual trust characterizes the second stage, rather than the pursuit of self-interest, as organizations recognize the mutual-exchange relationship in the long term is a win-win for them, and competitive advantage is to be gained through developing and sustaining high-quality partnerships.

Table 1. The driving theories behind the evolution of outsourcing issues.

<table>
<thead>
<tr>
<th>Outsourcing issue</th>
<th>From</th>
<th>To</th>
<th>Driving Theory</th>
<th>Driving Motto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make-on-Buy</td>
<td>Motivation</td>
<td>Resource-based theory</td>
<td>Core competencies theory</td>
<td>Activities should be performed either in house or by suppliers.</td>
</tr>
<tr>
<td>Scope (options)</td>
<td>Performance</td>
<td>Coordination theory</td>
<td>Resource dependency theory Transaction cost theory</td>
<td>Achieving efficiency depends on balancing the risks and benefits.</td>
</tr>
<tr>
<td>Performance</td>
<td>Insource/Outsourcing</td>
<td>Economic efficiency theory</td>
<td>Power-political theory</td>
<td>How do we know an outside vendor is more efficient than internal functions?</td>
</tr>
<tr>
<td>Contract</td>
<td>Partnership</td>
<td>Social exchange theory</td>
<td>Social contract theory</td>
<td>The acquisition of services or products is through continuous interactions between the parties based on mutual benefit.</td>
</tr>
</tbody>
</table>

Figure 4. An integrative view of IT outsourcing.

How to produce goods and services in order to achieve the economics of scale
How to explain the reason why organizations enter into closer relationship with their service providers
How to get and sustain a competitive advantage by acquiring the valued resources from outside

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Outsourcing in the second stage is no longer viewed only as a strategic management issue, a commodity, or a social relation, but rather encompasses all of these perspectives. This integrative viewpoint allows companies to minimize the limitations of one-dimensional views of outsourcing. For example, the strategic view (involving resource-dependency, core competencies, and coordination theories) focuses on competitive advantage, without considering how relationships between an organization and its external environment are managed. Similarly, while the economic view (involving transaction cost, economic efficiency, and agency cost theories) stresses cost efficiency, it fails to consider other important environmental, structural, and strategic factors that affect an organization. Although the social view (involved with political, social contract, and social exchange theories) provides meaningful implications and suggests frameworks for analysis of partnership relationship, it fails to explain why a large percentage of partnerships do not succeed.

Operating from the integrative viewpoint in Figure 4, companies benefit from the mutual trust of the social view, the cost efficiency of the economic view, and the competitive gain of the strategic management view of IT outsourcing, while minimizing the limitations of each view. The integrative view provides deeper insight into the roles of partnerships among organizations and the determinants of various partnership practices. To achieve complex solutions in today’s rapidly changing world, it is impossible to do all alone. Partnering in the computer-solutions industry is now becoming prevalent and is an integral part of new and diverse Internet solutions, such as application service providers (ASPs).

**ASP: The Future of Outsourcing**

Among the new ideas for outsourcing in the era of e-commerce is the ASP, a company that offers the deployment and management of applications via the Internet or a private network based on monthly or per-user fees. Its core concept, based on providing software as a service driven by the Internet, enables software and IT infrastructure markets to converge. Typical services provided by ASPs are packaged software applications developed by independent software vendors; systems implementation and integration offered by systems integrators; data centers and connectivity from hosting companies, hardware vendors, and telecommunication providers; application monitoring and ongoing support from consulting firms; and ongoing support from systems integrators or independent software vendors.

Faster time to market, IT expertise, ease of use, and lower cost make ASPs attractive, but potential drawbacks also exist. ASP system failure can shut down critical operations and result in a major loss of client productivity. Also, system incompatibility can complicate the integration between the client and its ASP, and system security and trust issues can complicate the sharing of important data between the client and its ASP.

Figure 5 outlines a number of major service providers, including several ASPs. Before choosing an ASP service, one needs to recognize the ASP model is the synthesis of several products and services, such as software, connectivity, Web hosting, hardware, systems integration, network and application monitoring, and extended support and help desk.

A strong alliance with a capable ASP allows a firm to leverage a key part of the value chain to create new business opportunities. Maximizing such a tightly coupled partnership requires the integration of the strategic, economic, and social perspectives. Strategically, the competitive position of an ASP partner depends on its ability to acquire valuable resources important to production and distribution, without substantial investment [2]. From the economic view-
point, ASPs achieve cost efficiency by retaining goods and services for specialized organizations and maximizing expertise and economies of scale. From the social perspective, since partnering with an ASP involves exchanging valuable resources, this relationship requires mutual trust rather than the sole pursuit of self-interest.

Conclusion
The future prosperity of an organization depends on the quality of its information services. An organization’s overarching objective in managing its information resources should be to maximize flexibility and control in order to pursue different options as its circumstances change. To accomplish this objective, we find that more and more organizations are looking to IT outsourcing through external service providers. As the scope and complexity of IT expand, many organizations are less inclined to shoulder the burden of in-house development, since outsourcing allows them to better leverage their resources and focus on core applications to increase IT’s value to corporate missions.

In the era of e-commerce, IT outsourcing is quickly transforming into numerous partnership types that demand not only IT know-how but also the conception of innovative ideas and the creative forging of critical and scarce resources. Crafting an outsourcing partnership involves many challenges, including understanding the service provider’s focus, core competency, and organizational structure, as well as establishing relationships with key personnel. It is also important to evaluate the service provider’s corporate values. Once the best-suited partner is identified, the following eight pointers can help achieve a productive partner relationship.

- Understand each other’s business. Strive toward a shared understanding of important goals and policies.
- Set short- and long-term goals. Prioritize to accomplish intermediate goals without losing the long-term focus.
- Define realistic expectations clearly. Set reasonable expectations and anticipate a learning curve. No partnership is perfect on the first day.
- Share benefits and risks. Establish explicit articulation and agreement upon the benefits and risks. Good performance should be rewarded, while a bad situation should be addressed together.
- Develop performance standards. Define, agree, and communicate clear and measurable standards of performance.
- Expect changes and revisions. Improvement and growth come from revision and refinement.
- Prepare for the unexpected. Try to identify potential problems by playing out what-if scenarios and discussing options.
- Nurture the relationship. Like any relationship, a successful partnership requires continual maintenance to increase its value.

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