

# Information Technology Outsourcing

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## INTRODUCTION

Organizations have used external vendors to supply information technology (IT) functions since the first commercial implementations. In the sixties, the use of facilities management, contract programmers, and contract project management were common, but during the 70s, many organizations relied increasingly on internal delivery of IT services. The term “outsourcing” arose in the late 80s. Since that time industry has seen a fundamental change in the way information technology (IT) services are organized and delivered, with increasing reliance on external, outsourced providers. Managing outsourced IT service delivery has now become a core competence for organizations

## BACKGROUND

According to Willcocks and Lacity (1998, p. 3), outsourcing involves “handing over to a third party [the] management of IS/IT assets, resources and/or activities for required results”. There is general consensus that outsourcing involves delegating the responsibility for “how” to produce definable outcomes to an external party, while retaining responsibility for specifying “what” is to be delivered. Instead of controlling the behavior of service staff directly, the purchaser controls performance through a contract or service agreement, which articulates the services required, and the performance criteria.

The rise of the term “outsourcing” occurred when, in the 80s, several large U.S. corporations announced they were handing over control of their IT function to one or more vendors. The most prominent of these was Eastman Kodak. At that time, it was common in the trade literature (and some academic literature) to argue that IT had become a commodity. By outsourcing IT, it was asserted that organizations could more easily concentrate on core business. In the early 90s, announcements like Eastman Kodak’s tended to produce a rise in share price, as the market anticipated consequent cost savings or improved organizational performance. Thus, the stock market response was an important outsourcing driver. Another significant driver was the growth of communications technologies, which enabled vendors to provide services remotely.

A less-frequently acknowledged reason for the rise in outsourcing was IBM’s entry into the IT services arena,

joining Electronic Data Systems (EDS), which had been spun off as a separate IT service vendor from its parent, General Motors. The dwindling profitability of hardware and software sales acted as an impetus, as outsourcing provided a relatively stable and long-term source of income and profits. Thus, in many ways, outsourcing is a vendor-driven phenomenon.

In the fifteen years since IT outsourcing emerged as an academic topic, the phenomenon has grown and adapted, and now embraces a range of variants. These include “business process outsourcing” (BPO), “offshore outsourcing” or “offshoring”, and “application service provider” services (ASPs). Gartner (2005) reports that outsourcing is the prime driver for the IT services market, estimated to be around \$US600 billion in 2004. While growth in the IT outsourcing market has slowed, the growth in new outsourcing forms (offshoring, and BPO) is reportedly strong, so the topic is likely to remain important in the IS discipline for some time.

## THEORETICAL UNDERPINNINGS

There is no generally agreed “theory” of outsourcing but a range of theories drawn from economics, strategy, marketing, and public policy have been used to understand the phenomenon.

### Economic Theory

Economic theories tend to view outsourcing as a variation on the “make or buy” decision that organizations must take and to view sourcing decisions as being based on relative costs. Outsourcing is seen to lead to lower cost of delivery under certain circumstances.

The most influential economic theory, and probably the most widely used in outsourcing research, is *transaction cost theory (TCT)* (Williamson & Masten, 1999). This theory predicts when decision makers will choose the *market* to deliver services and when they will choose in-house delivery through the organizational *hierarchy*. These are seen as polar forms of service provision, although a range of hybrid forms are possible.

According to TCT, the relative costs for these two strategies depend on two types of costs: production costs—usually reduced in markets because of competition—and transaction costs; and the costs of finding, contracting with and dealing

with vendors in the market. Transaction costs are difficult to measure and can be so high as to outweigh the outsourcing savings associated with reduced production costs. TCT predicts that several factors will influence whether outsourcing leads to cost savings, including level of uncertainty, frequency of transactions, and extent to which the services are “asset specific”, that is, tailored to a specific vendor or purchaser and so not easily deployed elsewhere. Some TCT propositions have been confirmed for IT outsourcing (Aubert, Rivard, & Patry, 2004) though it is also argued that many of the TCT constructs are difficult to operationalize and so the theory is difficult to disprove (Ghoshal & Moran, 2005).

*Resource dependency theory*, and the *Resource-based view (RBV)* of the firm are two economic theories that underlie the “core competency” argument discussed next. Resource dependency theory argues that organizations will seek to reduce dependency on external providers for key resources and that factors increasing dependency include a small number of potential suppliers, and switching costs. Resource-based theory (Barney, 2002) argues that it is differences (heterogeneity) in resources between firms that allow some to sustain competitive advantage and that outsourcing allows firms to access resources (usually intangible) they do not currently have. They can then devote attention to resources and capabilities they do possess that are likely to lead to greater profitability. These include resources/capabilities that are rare, valuable, difficult to imitate, and not easily substituted—such services should not be outsourced.

Another economic theory with implications for outsourcing is *agency theory* (Laffont & Martimort, 2002). This recognizes that the provider has different motives from the purchaser and that there is often information asymmetry between the two. This theory proposes that the purchaser needs different forms of control for different types of services. Where it is difficult to measure the effort involved in service delivery, agency theory predicts that an outcomes-based, contractual form of control (like that associated with outsourcing) will lead to lower costs.

### Strategic Management Theories

Much of the impetus to outsource IT has come from strategic theories related to the idea of *core competency* and the notion that managerial attention is a limited resource. The underlying proposition is that modern organizations cannot concentrate on all business functions and still achieve sustainable advantage so they must focus on those key processes or capabilities where they have unique advantages. Organizations should delegate to external providers as many non-core processes as possible, in the expectation that vendors will, through specialization and economies of scale, be able to provide higher quality services at lower cost.

As a result of this theory, there appears to be general consensus (e.g., Lacity & Willcocks, 2001) that core, or

“strategic” IT services, should be kept in-house, while non-core services and commodities should be outsourced. However, this proposition has proved difficult to test as few IT services are commodities, and it is not easy to operationalize “core” services. An assumption underlying the core-competency view is that managing the relationship with a vendor will drain less attention than providing services in-house and that economies of scale and specialization will reduce vendor production costs low enough to outweigh increased transaction costs. These propositions have not been empirically verified.

### Marketing Theories

While economic theories concentrate on the relative costs of outsourcing, marketing theories concentrate on the way quality, success, and value are judged by purchasers of outsourced services, and the way relationship elements, like trust, affect these judgments. An important notion that is used in studying outsourcing is that of *service quality* (Parasuraman & Zeithaml, 2002), which predicts long-term satisfaction with a vendor and intention to re-purchase.

There has been increasing attention devoted in the IT outsourcing literature to the effects that the quality of the outsourcing relationship and notions of trust have on outsourcing satisfaction and other success measures (Kern & Willcocks, 2002; Lee, Huynh, Kwok, & Pi, 2003). Theories underlying this research include service quality theory, theories related to trust, and exchange theory. Good overviews of service marketing and relationship theories can be found in White and Schneider (2003).

### Public Policy Theories

The public sector is a major user of IT outsourcing, and in some regions (particularly, the UK and Australasia) has pioneered large-scale outsourcing arrangements. In the public policy literature, outsourcing is often couched as part of the “steer rather than row” philosophy (Osborne & Gaebler, 1993). This philosophy, in turn, has been influenced by strategic management theories discussed previously.

## OUTSOURCING RESEARCH

A brief check of electronic resources (like ABI Inform) reveals thousands of articles on outsourcing and hundreds of papers labeled “peer reviewed” or “academic”. An examination of these, though, will show that most of them are practitioner (or academic) opinion. Much of the IT outsourcing literature is written either directly, or indirectly by staff employed by outsourcing vendors or by specialist outsourcing advisory services.

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