 DOI: 10.59571/mpi.v1i1.5

Future of IT outsourcing: The role of learning efficiency in vendor selection

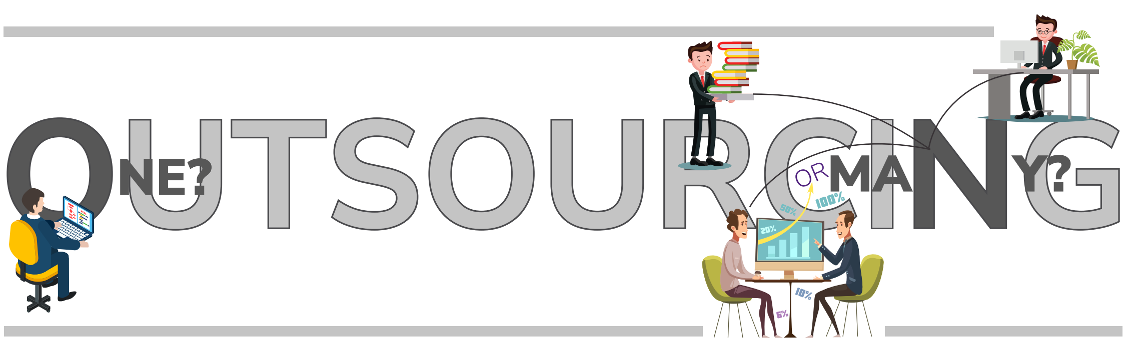
Jyoti Jagasia and Aditi Divatia

Problem of Practice: *A question most companies face while outsourcing any IT project is vendor selection — which vendor to select or whether to opt for multiple vendors? Most companies face difficulties while selecting vendors as they do not have adequate information about the vendors' cost structure. New research by Jain and team[1] can now help navigate this age-old dilemma as it looks at a key factor beyond the pricing—the 'learning efficiency'. The essay provides insights on how companies can implement these learnings in a practical setting*

Outsourcing and its considerations

Imaging solutions company Eastman Kodak was the first company in 1989[2] to outsource its Information Technology (IT) systems, thus beginning the practice of a company outsourcing its IT functions. Fast forward to 2023, where IT outsourcing represents about 35% of all IT services[3], and is estimated to be worth $430 billion[4], with an expected growth of 8% through 2027. Though IT is an important function, many companies choose to outsource this vital component for one primary reason — cost reduction. A 2020 survey by Deloitte[5] found that cost reduction outweighed other factors such as flexibility and agility by a wide margin for a company's decision to outsource.

A prime example is the communications platform company, Slack, which has relied on outsourcing[6] its design and app development services since its inception to save on expenses. By utilizing an outsourced workforce effectively, Slack got 15,000 users within two weeks of its launch in 2014, becoming a unicorn soon after. Even WhatsApp, the social media platform, outsourced most[7], if not all, of its technology development requirements to Eastern Europe early on.



[1] Featured in the June 2020 issue of the journal Decision Sciences; authors Tarun Jain, Jishnu Hazra, and T. C. Edwin Cheng identified conditions for single-sourcing vs. dual-sourcing in their article: "IT Outsourcing and Vendor Cost Improvement Strategies under Asymmetric Information."

A good way for a company to gauge a vendor's preference for learning-by-doing or induced learning can be to include a section in 'Request for Proposal' on how they plan to reduce project costs over time

Even if companies outsource IT functions to reduce costs, the key factor they should keep in mind while choosing vendors should be cost efficiency of the vendors while ensuring that quality is not compromised. But the cost structures of most IT vendors are not visible to firms and the costs incurred by vendors depends not only on the project's complexity and scale, but also on the vendor's ability to improve costs dynamically. The research by Jain and team states that company should consider two factors when choosing an IT vendor. The nature of the base of your vendors — Do the vendors gain efficiency through learning-by-doing or through systematic investments in process improvement? The next consideration is the uncertainty around cost reduction in the crucial initial phase of the project.

How IT vendors 'learn'

Most IT vendors use one of the two primary means to improve their own efficiency. The first method is learning-by-doing, where the vendor gains experience from handling clients' outsourcing assignments over time. As a vendor carries out the client's IT operations, they learn the software and applications and understand other assets that are unique to the client. This results in improved productivity, which, in turn, drives down costs. For instance, Infosys[8] typically deploys concurrent offshore and onsite teams. The offshore team transfers technology and product development expertise to the onshore team, which, in turn, serves up knowledge of their client's requirements and specs. This iterative knowledge transfer inevitably translates to productivity and quality gains, while whittling down the cost requirements.

The second method is when vendors make additional investments to improve their processes and reduce costs, also known as induced learning. Vendors may make improvements such as automating software processes, deploying lean software development practices and investments in process sophistication, as indicated by higher levels of the popular industry standard—Capability Maturity Model (CMM). IT services giant 'Wipro's shift to lean practices in 2011[9], where the establishment of systems to remove redundant materials and excess labor allowed the

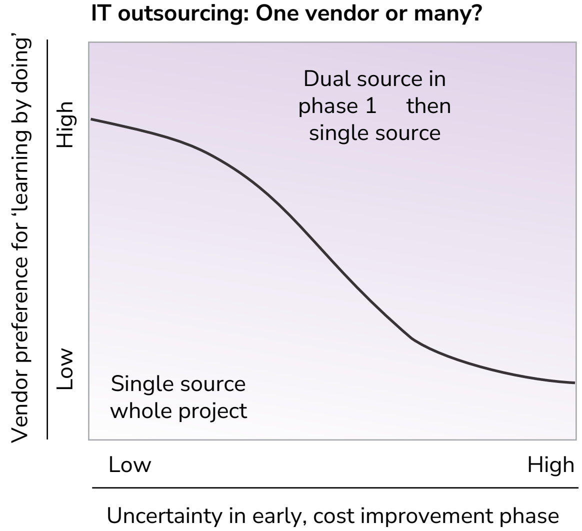
company to realize savings of up to 20% across the board, is a prime example of induced learning. A vendor can also reduce costs while maintaining quality by adopting a team structure with fewer workflows and specialized and highly productive personnel.

Once a company identifies the vendor's working method, it can decide on which vendor to pick. If the top vendors are experts at learning-by-doing, then the company is better off by outsourcing an initial module of the project to the top two vendors. This initial phase will help both vendors to reduce costs by learning the company's systems, platforms, and organizational processes. Assuming the company gets comparable quality of output from the two vendors, it can ask these vendors bid for the rest of the project and then go with the lowest-cost bid, as the vendor with the greatest learning for cost reduction in phase one is likely to offer a lower bid. If both vendors are highly invested in lean practices, process automation and advanced software development processes, then a company is better off outsourcing the whole project to the single lowest bidder, as the learning on the job is unlikely to overshadow the gains of intrinsic or induced cost reductions due to superior processes.

The uncertainty in cost reduction

The only hitch in the selection process is if the project is highly complex, and the vendors seem to have different cost structures, and/or approaches to cost reduction. Such a situation can cause uncertainty, especially in the early stages of the project. To solve this uncertainty, a company can opt for two phases— dual-sourcing to the top two vendors in phase one and awarding the rest of the project to the lowest-bid vendor in phase two. The exhibit 'IT Outsourcing: One or More Vendors' provides a better understanding of the concept, as it combines the level of uncertainty in the cost reduction phase and the approach to learning employed by the vendors.

IT outsourcing: One vendor or many?



Conceptual representation of research findings: not intended to be a numerically exact

In practice

Many IT consulting and business process services companies like Infosys, Wipro, Cognizant, IBM, or Accenture, who have achieved the highest level of CMM implementation, feature on IT vendors lists[10] of the world's biggest companies such as Apple, Microsoft, Amazon and Google.

A good way for a company to gauge a vendor's preference for learning-by-doing or induced learning can be to include a section in 'Request for Proposal' on how they plan to reduce project costs over time.

If the vendor response focuses on process documentation, and relies on customizing processes for your organization, then the chances are the vendor prefers learning-by-doing. But if the vendors respond by sharing their standard processes for software process automation, optimization, continuous improvement, and lean practices, then they are more aligned to cost improvements through induced learning and often demonstrate higher levels of process sophistication.

But keep in mind, if the company's project requirements are complex and custom and the vendor base does not have a routinized approach to such requirements, then the uncertainty factor can be rated as high. When the project uncertainty is high, a two-step outsourcing strategy can be adopted, as was done in 2015, when Infosys and Accenture bid for a $150-million contract[11] from Australia-based financial services provider Macquarie Group. The contract had a five-year duration and included complex application development, testing and tech infrastructure management. So, Macquarie modularized the project, awarded the initial module to both the vendors, and subsequently awarded the remainder of the contract to one vendor. Conversely, for large-scale but low-uncertainty projects, a single vendor typically wins the day, as when Macquarie chose Infosys for a $25 million procurement and accounts-payable outsourcing project in 2012.

Choosing IT vendors can be a difficult task, especially if the project is complex and large-scale. The best bet to improve the ROI and risk management in such projects is opting to structure the project as a two-phase, multi-vendor outsource.

Jyoti Jagasia *is Associate Professor in the department of Information Management & Analytics at SPJIMR. She also serves as Director for Digital Infrastructure at SPJIMR.*

You can reach out to her @ ***jyoti.jagasia@spjimr.org***

Aditi Divatia *is Associate Professor in the department of Information Management & Analytics at SPJIMR. She also serves as Deputy Programme Chairperson for Post Graduation Diploma in Management programme at SPJIMR.*

You can reach out to her @ ***divatia@spjimr.org***

This article may contain links to third party content, which we do not warrant, endorse, or assume liability for. The authors' views are personal.

What is your take as a company on outsouring your IT functions? Do you, as a vendor, have any interesting insights? You can let us know at ***mpi@spjimr.org***

REFERENCES

[1]Tarun Jain, Jishnu Hazra, and TC Edwin Cheng, "IT Outsourcing and Vendor Cost Improvement Strategies under Asymmetric Information," *Decision Sciences* 52, no. 5 (October 2021): 110936, https://doi.org/10.1111/deci.12446.

[2]Mary Ritchie, "Outsourcings Booming Business," ISO, January 6, 2015, https://www.iso.org/cms/render/live/en/sites/isoorg/contents/news/2015/01/Ref1922.html.

[3]"IT Services - Market Data Analysis & Forecast," Statista, accessed March 21, 2023, https://www.statista.com/study/108044/it-services-report/.

[4]"IT Outsourcing - Worldwide | Statista Market Forecast," Statista, accessed March 21, 2023, https://www.statista.com/outlook/tmo/it-services/it-outsourcing/worldwide.

[5]Michael Stoler and Miles Underwood, "Deloitte Global Outsourcing Survey 2020" (Deloitte, 2020), https://www2.deloitte.com/content/dam/Deloitte/us/Documents/process-and-operations/us-how-much-disruption.pdf.

[6]Stan Burenko, "6 IT Outsourcing Case Studies Every Startup Can Learn From," July 23, 2021, https://www.uptech.team/blog/outsourcing-case-study.

[7]Stan Burenko.

[8]Infosys PR, "Infosys Rated as a Leader for Basic Offshore Capabilities" (Infosys, August 20, 2004), https://www.infosys.com/newsroom/press-releases/2004/basic-offshore-capabilities.html.

[9]Pankaj Mishra and Pankaj Mishra, ET Bureau, "Toyotas Lean Lessons for Wipro," *The Economic Times*, April 14, 2011, https://economictimes.indiatimes.com/management-leaders/toyotas-lean-lessons-for-wipro/step-one-assess-the-amount-of-work/slideshow/7977112.cms.

[10]Anirban Sen, "Google IT: Outsourcing Deal Search May Become More Rewarding for Indian Firms," *The Economic Times*, March 31, 2016, https://economictimes.indiatimes.com/tech/ites/google-it-outsourcing-deal-search-may-become-more-rewarding-for-indian-firms/articleshow/51624112.cms?from=mdr.

[11]Shilpa Phadnis, "Infosys, Accenture in Last Lap for Rs 900-Crore Deal in Australia," *The Times of India*, March 23, 2015, https://timesofindia.indiatimes.com/business/india-business/infosys-accenture-in-last-lap-for-rs-900-crore-deal-in-australia/articleshow/46656530.cms.

Article Information:
Received: 13.07.2022
Approved: 27.02.2023
Published: 09.05.2023

image courtesy : www.freepik.com