On enhancing knowledge transfer from a contingent workforce

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Abstract

Keywords:

Traditionally, management consultancy came in the form of strategic advice. However, over the past decades, the business world has witnessed that organizations increasingly focus on their core business, while outsourcing everything else to a third party or a "contingent workforce": consultants and freelancers (Deleu et al. 2022). This practice has even penetrated organizations' core value chain, a phenomenon known as business process outsourcing or BPO (Shi 2007). However, working with a contingent workforce, entails considerable risk.

1 Relevancy

1. Trend: external > internal
2. Price of consultants
3. Hot topic: *when* to rely on consultants?
4. Productivity: is it worth it? If so, under what circumstances?
5. Job market & macro-economic aspects

2 State of the literature

2.1 What is IT consultancy?

2.1.1 Types of IT consultancy

Defining IT consultancy is no easy task. Over the past decades, their possible roles and variety of responsibilities have expanded drastically. Swanson (2010, 20-25) has described five different ways how consultants can contribute to an organization's innovation process through IT.

- *Business strategy*: IT consultancy can lead the organization to new pursuits and technologies they wouldn't have discovered themselves. Second, IT consultancy can frame the need for innovation in strategic terms, and they prepare and legitimize the need for change.

- *Technology assessment*: IT consultancy can facilitate the comprehension of IT technologies and its alternatives.
- *Business process improvement*: Innovations that involve IT usually come to fruition only after business processes have been revamped. Business process changes usually require an outside-in view and offer rich opportunities for consulting.
- *Systems integration*: In many cases, introducing a new technology requires that it needs to be integrated with existing systems and users need to be onboarded. This type of IT consultancy usually requires coding skills, hands-on design and implementation expertise
- *Business support services*: Finally, once the implementation is completed, it can take a while before the solution is entirely assimilated. IT consultants can provide complementary IT services such as support and maintenance until the technology is entirely embedded in the organization.

2.1.2 Expectations of IT Consultancy

- Knowledge transfer?
- Crisis management?
- Operational excellence?

Knowledge transfer & diffusion There is substantial research on knowledge management (as a multidisciplinary discipline within the field of information science) and knowledge transfer (as a broad topic within the discipline). Furthermore, there seems to be some academic interest in knowledge transfer in a principal-agent context (Nan 2008, Haines & Goodhue 2003), as is the case with between an organization and their contingent workforce. This research could be key in steering and narrowing the scope of the research.

- `https://journals.sagepub.com/doi/10.1177/1350508409338435`

2.1.3 Link with Management Consultancy

There is already a fair amount of research with regards to management consultancy (i.e. in the narrow sense of the term, meaning "strategic business advice") that describes why con-

sultants exist (Canback 1998, Sturdy et al. 2009) and how they operate (Clark & Salaman 1998, Bessant & Rush 1995, Whittle 2006). Central in this literature is the diffusion and transferring of knowledge. Canback (1999) summarizes it neatly by stating that "external consultants have a wider knowledge base than their internal counterparts, having worked with more clients and in a wider range of industries. Having seen similar problems before, the cost of leveraging this knowledge base is lower for external consultants." Despite this body of literature on management consultancy, research that focuses on IT-related consultancy is fairly scarce (Bloomfield & Danieli 1995, Nevo et al. 2007, Swanson 2010).

2.2 Why IT Consultancy?

<Unsure if this part should be expanded, or even in the final paper> Nevo et al. (2007, 8-10) outlines five theoretical frameworks that contribute to the question why firms should (not) utilize external IT capabilities.

- The *resource-based view* (RBV) claims that firms can earn sustainable above-normal returns by possessing rare and valuable resources and that they have isolating mechanisms that prevent the dissemination of those resources.
- The *micro-economic* view assumes that firms operate in fully competitive markets and, contrary to RBV, that above-normal returns are competed away by rivals or new entrants. Utilizing IT and external capabilities is simply a matter of delivering the optimal quantity of products and their prices.
- *Transaction cost economics* claims that firms are interested in identifying areas in which they can outperform market-based interactions and do themselves. The commodity-like nature of IT solutions make them very prone to being outsourced to consultants.
- *Institutional theory* does not reject the micro-economic theory that firms try to make rational choices, but acknowledges that there are cognitive and rational constraints. Consequently, the choice for internal or external capabilities involves trust, relationships, personal beliefs and aspirations.
- *Identification theory*: Individuals derive value and meaning from group membership. This can impact the involvement of external actors for IT projects in a negative way.

2.2.1 Transaction cost economics

Nevo et al. (2007, 16-17) concludes that his research supports the transaction cost hypothesis: "when the internal IT capability is weak, developing and implementing an IT solution is likely to cost more compared with hiring external IT consultants to do the same job." Furthermore, the reverse situation also supports the identification theory: "IT consultants will not receive the legitimacy they require [...] if their knowledge and expertise do not differ from that possessed by the in-house IT team. Under these circumstances, external IT consultants' impact on IT productivity is expected to be lower."

Nevertheless, there is a serious limitation in the work of Nevo et al. (2007). An IT project is assumed to be fixed in time, with fixed parameters. It does not account for "vendor learning" (Wu et al. 2004) during the project. Cha et al. (2009) tackles this shortcoming with a model built around two parameters:

1. (production) knowledge transfer rate: the ability of the client to capture knowledge from the vendor.
2. (coordination) knowledge depreciation rate: the ability of the client to retain coordination knowledge as it outsources IT activities.

They conclude that firms with a low production knowledge transfer rate (e.g. unmotivated employees) should insource or outsource all their IT capabilities. When they also have a high coordination knowledge deprecation rate (e.g. bad project management), insourcing is the only option. On the other hand, when both the production knowledge transfer and coordination knowledge depreciation rate are high, the optimal rate of of IT outsourcing is also high.

- Ronald Coase!

2.2.2 Resource-based View

In Willcocks & Plant (2003, 177-180), four types of sourcing options for developing IT projects are outlined, of which three involve consultants.

1. Internal development: has the the advantage of internalization of the learning outcomes, but comes with high costs related to mistakes and being the first mover.

2. Outsourcing: has the advantage of tapping into existing knowledge and experience, and the ability to get quickly up to speed. However, internalization of learning outcomes is not guaranteed, and consultants may not be familiar with existing organizational processes. For example, the development of an internal application by an external party.
3. Insourcing/partnering: has the same advantages as outsouring, with the added bonus of facilitating the internalization of the learning outcomes. The disadvantage is mostly related to a more complex project management, with a variety of parties involved. For example: long-term contracts with IT consultants who operate side-by-side with an organization's own staff.
4. Cheap-sourcing: when IT projects are low risk, and far from the core business, and organization should consider cheap-sourcing. This option involves low investments and effort, but also comes with no internal learning. For example: development of a new promotional website by a digital agency.

In the same research paper, Willcocks & Plant (2003, 188-189) identify two congruent four-quadrant matrices to assess sourcing options.

- By business activity: non-critical, commoditized applications should be out-sourced. Critical, commoditized applications should be insourced or built in-house, and differentiating, critical applications should be built in-house or acquired.
- By market comparison: A high-cost, low-quality market leads to in-house development, while a high-cost, high-quality market should lead to insourcing. A low-cost, low-quality market leads to cheap-sourcing and a low-cost, high-quality market is perfect for outsourcing.

2.2.3 Identification Theory

The research by Schwarz & Watson (2005, 311-313) claims that it matters *who* implements an IT project: "technology-enabled inertia can be explained through understanding an employee's social identifications and his or her associated cognitions, where inertia exists on a sliding scale of change." By defending their self-image, low-status groups can hinder

the implementation of an application. The sourcing assessment needs to incorporate this finding.

3 Problem statement

3.1 Quality problems & Adverse Selection

According to some, assessing the quality of consultants is impossible, so one has to rely on informal and relational criteria (Wright & Kitay 2002, 277).

To read: - Wright & Kitay (2002) - David et al. (2013) - O'Mahoney & Sturdy (2016) - https://www.tandfonline.com/doi/abs/10.1080/02642069800000002

3.2 Moral Hazard

3.3 Potential solutions

Several mechanisms have already been proposed. https://link.springer.com/chapter/10.1057/9780230362994_12

3.3.1 Psychological contract obligations

According to Ang et al. (2004, 357), the legal interpretation of an IT outsourcing contract is too limited. Instead, they claim that the construct of a *psychological contract* is more appropriate for analyzing the relationship between an IT service supplier and customer. The strength of psychological contract theory is threefold:

1. it focuses on mutual obligations;
2. the emphasis is on psychological obligations;
3. the emphasis is on the individual level–not on the organizations as parties of the contract.

Consequently, the psychological contract not only comprises the legal contract, but also the unwritten promises, interpersonal relations, and the individual interpretations and perceptions. Since consultancy contracts can become extremely complex (with project

descriptions going into the ten thousands of words), and the involved parties entangled in multiple ways, these intangible aspects can gain prominence. The research in Ang et al. (2004, 369-70) outlines several psychological contract obligations that positively impact the success of an outsourced IT project.

- On the supplier side: (1) clear authority structures, (2) knowledge transfer by educating the customer, (3) building inter-organizational teams.
- On the customer side: (1) clear specification of requirements, (2) prompt payment, and (3) project ownership and monitoring.

Closely related is the work by Willcocks & Kern (1997, 9-13) that makes a distinction between the contractual level and the cooperative level. The contractual level is about payment for the exchange of services and the transfer of assets, information & consultants. The cooperative level involves formal communication mechanisms; personal investments in time, resources & knowledge; mutual goals & objectives and social bonds. The atmosphere surrounding the former is heavily impacted by developments at the latter. A respondent in Willcocks & Kern (1997, 9) states that "the contract is a bit like a nuclear deterrent. You need one and you have got to have a framework, but if you've got to use it you are probably in trouble."

4 Research Questions

Novel research is feasible for drawing conclusions regarding the *raison d'être* of IT consultants with regards to knowledge transfer between IT consultants and their principals.

Given these observations, I propose the following research questions.

1. How successful is knowledge transfer between IT implementation consultants and internal employees at corporations with regards to adoption and implementation of IT solutions? (Methodology: Quantitative such as surveys)

2. What factors have a positive impact on knowledge transfer between IT implementation consultants and internal employees of corporations? (Methodology: Qualitative research such as deep interviews and focus groups)

The most relevant outcome of this research could be a set of recommendations, or a framework for maximizing knowledge transfer in the described setting.

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