

Introduction

Digital transformation is increasingly critical to an organization's competitiveness [1]. It affects many IT management activities and requires organizations to adapt their business models, rethink their strategy, and collaborate with the business ecosystem to provide more innovative products and services. The way that the organization manages and engages with its suppliers is becoming an increasingly important strategic driver in digital transformation initiatives.

The IT-Capability Maturity Framework (IT-CMF) is an IT management framework that comprises 36 key areas or Critical Capabilities (CC) [2]. Topics related to the framework, such as the digital challenge, are constantly being researched by IVI in order to contribute to the framework's ongoing development. This framework originally included both a Sourcing (SRC) and a Supplier Management (SUM) CC. IVI member feedback suggested that these two CCs were artificially separated, specifically pointing to the fact that it is unrealistic to expect that the activities of sourcing suppliers, and subsequently managing them, to be separate. In response, these two CCs were merged into the new Sourcing and Supplier Management (SSM) CC. SSM has also been updated to respond to the rapidly evolving digital business environment that continually challenges organizations to improve cost effectiveness, increase productivity, and innovate [3]–[6].

Sourcing and Supplier Management in the Digital Context

Key academic and practitioner literature has informed the shape of the SSM CC in the digital business context. In the new digital business era, sourcing and managing suppliers is more complex. This is due both to the increase in potential opportunities and the risks involved [7]. Dependency on external partners has made sourcing more strategic, prompting a re-think of a CEO's involvement in sourcing [3]. Disruptive technologies also contribute to making the role of sourcing increasingly strategic [3], [8]. Additionally, continued growth in outsourcing is expected for the foreseeable future. Deloitte's 2016 Global outsourcing survey showed 72% of respondents outsource elements of their IT function [9].

While traditionally the main reason to outsource was cost savings, in the digital era it is more driven by a search for talent to close digital skills gaps or to acquire new digital services or development capabilities [4], [10], [11]. New outsourcing models such as cloudsourcing, microsourcing, crowdsourcing, impact sourcing, and rural sourcing have evolved to add to the existing onshore, nearshore, or farshore; and single or multiple provider options. While outsourcing is still the dominant approach, insourcing also continues, and there is an emergence of backsourcing due mainly to socio-political drivers [3], [10]–[20].

In the digital context, there is more demand for innovation and transformation through outsourcing supplier engagements [3]. An important incentive for organizations to engage with emerging forms of

sourcing is the perceived potential for innovation on developing products and services. Organizations seek both incremental and radical innovations. They look for benefits from transformative innovations that improve business through various contractual arrangements that incentivize the supplier to innovate for the organization [21]. It is through the make-or-buy-or-cooperate decisions that the organization is able to change its nature and scope, and adapt to an ever-changing business environment [4]. However, it must also be borne in mind that completing knowledge-intensive tasks will become challenging if most of the knowledge exists outside of the organization [20].

It is clear that supplier contracts become more complex in the digital context, with additional factors to address. For instance, customers today are concerned with sustainable supply chain governance, end-to-end traceability, and global compliance challenges of sourcing and supplier management [17]. Political Corporate Social Responsibility (CSR), based on the assumptions of the extended responsibilities and roles of business in a globalized context, is another important sourcing contract consideration [22]. Green procurement and supplier development are also growing trends to be acknowledged [23]. The green agenda, political risk, and customer perceptions can create pressure points in offshore sourcing to ensure it is sustainable [3]. It is increasingly common to have a larger number of smaller suppliers. In fact, the average contract size and duration is getting smaller with higher transaction and management costs due to more bidding excess fees and extras, hidden costs, and inflexible contracts that are not adaptable to change. New practices are emerging to counter these such as flexible pricing, competitive bidding beyond the baseline contract, and a “long-term relationships with short-term contracts” approach [3].

The outsourcing landscape is constantly changing, so retaining the flexibility to change direction rapidly is key, and building a strategic supplier management and governance capability is necessary to achieve this [9]. Choosing the appropriate sourcing model is critical. Multisourcing - blended sourcing alternatives that astutely mix outsourcing and insourcing to integrate complementary strengths of different organizations - is the recommended approach for the dynamic, complex, and hybrid future of sourcing [3], [24]. Deloitte say that organizations will seek to leverage multi-supplier strategies requiring transition and service integration capabilities [9]. Outsourcing contracts must evolve in order to create value and mitigate risk for the IT-outsourcing organization and sourcing models must address both risk and benefit. Cybersecurity and data privacy are some of the key concerns [7]. The critical issues cited when sourcing via the internet, or esourcing, are relationships, workforce, threat management, service delivery, continual improvement, service transfer, and managing the sourcing itself [25].

Many new sourcing models require behavioural and managerial shifts. For example, cloud-sourcing requires a shift in attitudes, behaviours, capabilities, and project management of the transition. A time-boxed approach (i.e. allocating a fixed time period, a ‘time-box’, to each planned activity) is recommended in this context, since time discipline reduces the associated risks. While cloud-sourcing changes the risk profile it also offers innovation opportunities. When cloud-sourcing, it is crucial to understand and ensure that data privacy, security regulations, compliance, standards, tolerance for

risk, governance, and service level agreements are all addressed. Challenges include legal and regulatory compliance, contracts lock-in, dependency, and flexibility [3].

Relationships matter. Despite our greater reliance on technology, the single best performance improver in a Business Process Outsourcing (BPO) study by Lacity and Willcocks was *“to assign a great pair of leaders, one from the client and one from the provider”*. This and other practices such as taking steps to build trust, and using modes of operation that support collaboration and openness, promote innovation through outsourcing [26]. Sometimes having the external perspectives alone can result in improved innovation. In an earlier study, the same authors concluded that adaptive work, which requires versatility and learning in the workforce, using multifunctional teams, leadership, and multiple stakeholder involvement and learning, is vital for innovation [3]. McKinsey suggest establishing rapid decision-making and escalation processes to match the digital way of working [27].

As traditional supply chains give way to supply ecosystems, organizations need to adapt their strategic sourcing to this evolution. In this arrangement, each member must create value for itself, but not at the expense of the ecosystem [8]. In the Business-to-Business (B2B) world, co-evolution of capabilities and business specialisms are developed [4]. Different types of IT outsourcing relationships and supplier governance structures are appropriate for the specific management of each outsourcing client type based on their underlying expectations [28]. Both contractual and relational governance are important; clients and suppliers need strong complementary capabilities to make relationships successful [16]. New modes of openness and collaboration are evolving, such as co-opetitiveness, where normally competing actors gain mutual benefits by co-operating in certain activities [20].

Organizations need to maintain a strategy of adaptability in order to mitigate the risks associated with suppliers. Data security and the quality of resources of the supplier seem to be the risks with the highest priority as perceived by organizations. The supplier risk profile must be balanced with other risks taken by the organization [3]. A major influence on the adaptability of an organization in the short- and long-term is the cost of switching suppliers [15]. Organizations also need to assess their attitude towards sharing critical knowledge with suppliers [27]. As a result, data privacy regulation is becoming a negative driver for outsourcing [9]. Organizations will need to explore new sourcing contract mechanisms, such as risk-sharing agreements and innovative pricing schemes that reward experimentation and collaboration to optimize the supplier relationship [27].

Sourcing and Supplier Management Guiding Principles

Based on the digital trends described above, a set of guiding principles were adopted for developing the new SSM CC. These are detailed as follows:

1. Sourcing is strategic

The requirement for additional knowledge-based skills and disruptive technologies make the role of sourcing increasingly strategic. This is prompting a re-thinking of a CEO's involvement/role in sourcing. A strategic approach to sourcing will open up new opportunities for an organization to access skills,

expertise, and technologies rather than building full capabilities in-house. Failing to approach sourcing strategically may impede an organization's ability to operate successfully in the digital era organization.

2. Key suppliers as strategic partners

Traditional supply chains are giving way to supply ecosystems that see key suppliers as partners, which brings both risks and opportunities, as well as new requirements for collaboration, negotiation, and governance. New sourcing models may require a shift in organizational culture, managerial perspectives, and traditional approaches, for example, organizations need to assess their attitude towards sharing critical knowledge. Failing to address underlying organizational cultural and historical approaches to supplier relationships may impede the organization's ability to mitigate associated risks and seize opportunities related to the supply ecosystem.

3. Value focus

It may not always be in an organization's best interests to award contracts based on lowest bid price alone. By awarding contracts on a broader basis focusing on creating and sustaining value, while balancing cost efficiency and quality, the organization can secure suppliers with whom they can innovate to transform the underlying cost structure of IT services. This will help to optimize the value contribution of the supply base to the organization's strategic objectives. By awarding contracts based on 'lowest bid price' only, organizations may miss opportunities to work with IT product and service suppliers who offer superior technical expertise, longer-term economies of scale, and more synergistic long-term strategic relationships.

4. Relationships matter

Despite the greater reliance on technology, the single best performance-improver is the quality of the relationship between the organization and the supplier. Good communication is essential to maintaining good relationships. A strong, mutually-beneficial relationship between the organization and the supplier will strengthen the organization's capabilities to address existing business challenges. An organization should acknowledge good service and provide prompt and constructive feedback when things go wrong, and acknowledge and act on feedback received. Suppliers may need to be categorized according to the scope of the relationship (e.g. operational trust, risk). Failing to focus on strengthening relationships and building trust may lead to a breakdown of relationships between client and supplier. This will adversely affect the organization's ability to operate successfully in the digital era.

5. Focus on talent and innovation

Sourcing is increasingly driven by a search for talent to close digital skills gaps, or to acquire new digital services or development capabilities through collaboration with partners and suppliers. Treating key suppliers as partners and incentivizing them to bring innovative solutions to the table can provide competitive advantage. Outsourcing and new sourcing models offer an opportunity to address existing skills and talent gaps. Treating suppliers as partners and sharing future plans with them encourages collaboration and building innovative partnerships. Traditional models of outsourcing that focus exclusively on cost savings may contribute to an organization's inability to address digital skills and technology shortages.

6. Flexible contracting

Flexibility is key. The outsourcing landscape is constantly changing so retaining the flexibility to change direction rapidly is key, and building a strategic provider management and governance capability is necessary. The organization should negotiate contracts to facilitate agile sourcing and transition to/from, and switching between, suppliers. To avoid higher transaction and management costs, flexible contracts are needed that are adaptable to change. By not having flexible contracts the organization may become a victim of contract lock-in with one or more suppliers.

7. 'We are as strong as our weakest link'

The influence of the organization should extend across the full supply chain/ecosystem (i.e. supplier's suppliers). Any issue arising in the supplier's supply chain/ecosystem is also likely to become an issue for the organization. Oversight of the supplier should also consider the suppliers own supply chain/ecosystem and ensure that there are no weaknesses that could impact the organization's needs. A contingency plan is warranted for all key supply areas. By not extending oversight into the supply chain/ecosystem, the organization may be vulnerable to sub-supplier issues. Without a contingency plan, valuable time can be lost establishing what needs to be done.

8. 'A supplier is not just for Christmas' (usually)

Putting the effort in upfront to source suppliers who are a good match both for current and future plans leads to reaping benefits throughout the relationship. Organizations put a lot of effort into finding good suppliers with a view to establishing long-term strategic relationships, which deliver benefits not just in relation to current needs, but also contribute to future developments. Not thinking of the future plans of the organization may result in a high turnover of suppliers and therefore supplier sourcing and selection costs may be higher. Supplier relationships would tend to be poorer and more short-term.

Conclusions

The new SSM CC provides guidance on how to establish the organization's strategic approach to IT sourcing decisions, how IT suppliers are integrated into the organization, and how strategic partnerships are fostered. Further, it covers selecting suppliers, establishing contract criteria, and classifying qualified and preferred suppliers. The procurement activities to manage orders and contracts, and co-developing capabilities related to talent and innovation are also incorporated. The new SSM CC reflects current thinking on addressing the key business challenges of sourcing and managing suppliers in the digital context.

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Recommended Reading

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