How to Outsource Agile Projects Effectively

Suppliers and client advisors need to work closely with client organizations to ensure key enablers are in place to increase success when outsourcing Agile projects.

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OVERVIEW: Faced with a rapidly changing business environment, organizations are increasingly turning to Agile project management to deliver innovation programs. Deployment of Agile poses specific challenges, often because the required skills, measures, and management behaviors differ greatly than those of traditional project management. When faced with a need to outsource Agile project delivery to a third party, organizations often apply contractual approaches developed for traditional "waterfall" projects, which prove unsuitable. This study investigated the perspective of client-side advisors in Agile projects when delivery is outsourced to a third party. Client-side sourcing advisors are an important component of the Agile delivery ecosystem because clients often rely on advisors' experience when scoping out and procuring digital transformation projects.

KEYWORDS: Agile delivery, Innovation management, Strategic partnerships, Outsourcing

Agile project management is defined here as an iterative approach to project management that focuses on breaking down large projects into more manageable tasks. Agile projects have the following characteristics: the breakdown of tasks is organized into "sprints" (predefined and equal time-blocks of team effort, typically of 2–4 weeks each); the content of the sprints is dynamic; the content of the sprints is decided each cycle by a product owner, who represents the customer; and each sprint results in a deliverable that the customer can inspect. Due to these practices the deliverable shifts over time (at the behest of the customer), making fixed-price delivery of a fixed deliverable challenging. As a result, other contracting approaches are necessary for outsourced Agile deliveries.

Agile offers several advantages, including accelerated delivery, lower overall costs, and enhanced customer centricity (building what the user actually wants). Agile continues to rise in popularity, and organizations (referred to here as "customers") are increasingly embracing Agile principles and practices to deliver a wide range of projects beyond software development (Fernandez and Fernandez 2008; Conforto et al. 2014; Serrador and Pinto 2015; Cooper and Sommer 2020). Agile project management confers the ability to respond flexibly to challenges and find new solutions (Fitzsimons, James, and Denver 2011). This benefit is even more applicable today as organizations must adapt to a "new normal"—in particular, having to rapidly accelerate digital transformation to meet increased demands for remote

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working and end customers' increased need for services via digital channels.

As noted by Thorgren and Caiman (2019), while Agile offers benefits to organizations, specific cultural challenges exist in conjunction with deploying this project management approach. They note that working across company and organizational unit boundaries may intensify these challenges.

The rise of digital transformation and the heightened imperative for innovation has created new opportunities for organizations to cooperate with customers and suppliers, which has also led to unexpected disruptive technology-driven product and business model innovation. The lack of effective integration mechanisms can lead to complications and difficulties in keeping technological solutions and customer requirements coordinated (Annosi, Foss, and Martini 2020).

Agile project management brings specific challenges for projects where delivery is outsourced to a third party (referred to here as "suppliers"). Artto, Eloranta, and Kujala (2008) identified interrelationships with subcontractors as one of the four main categories of risks that organizations encounter in project delivery (the other three are competitors, clients, and non-business actors such as regulators). The emerging challenge of effectively managing interrelationships across supply chains prompted us to explore how organizations that choose to outsource delivery of Agile projects to third parties can increase their likelihood of success.

How Subcontracting Relationships Impact Agile Delivery

Many authors have documented the limitations of more "traditional" commercial models in contracting for Agile, especially because of the challenges of integrating Agile with more structured innovation (Lichtenthaler 2020; Zasa, Patrucco, and Pellizzoni 2021). Russo et al. (2018) noted that fixed-price contracts—where the price to the customer is fixed and based on the supplier implementing the project to an agreed specification or "requirement" for this price—pose specific issues for Agile projects in the public sector. Gajanayaka (2016) observed that this type of contract is fundamentally at odds with the Agile Manifesto (Beck et al. 2001) that advocates "responding to change over following the plan." Beulen (2018) notes that current approaches to contracting are not protecting organizations from poor service provision in Agile deliveries, arguing that service providers are often fully

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compensated leaving customers feeling exposed commercially when the cost of projects is greater than planned. Lindsjørn and Moustafa (2018) studied a large Agile systems development project in the Norwegian public sector, and their work highlighted several issues with the use of fixed-price contracts in this setting. Most of these issues arose from a lack of trust between the customer and supplier.

Strategic partnerships with suppliers may result in greater levels of Agile capabilities and responsiveness through enhanced flexibility and quicker access to information (Tavani, Sharifi, and Ismail 2014). Hoda, Noble, and Marshall (2009) conducted research in the IT industry in India and found that fixed-price was the predominant model for Agile projects. The authors interviewed Agile project practitioners and identified strategies to overcome challenges in negotiating and delivering such contracts, including the extreme approach of keeping the delivery methodology hidden from the customer. The same authors extended their study to New Zealand and discovered that a lack of collaboration and customer involvement was one of the biggest challenges faced by Agile teams (Hoda, Noble, and Marshall 2011).

Postol (2015) has noted that more innovative projects bring challenges for contracting because it is impossible for the customer to prepare detailed specifications on which to base a commercial commitment (the fixed price). Franklin (2008) documents how contracting models have evolved within a single customer organization and observes that procurement teams tend to prefer projects where the requirements and price are fixed prior to development.

While the literature reports extensively on the constraints of commercial models in Agile projects, solutions to this problem are less prevalent. Book, Gruhn, and Striemer (2016) present the spectrum of commercial models available for Agile software development, and Eckfeldt, Madden, and Horowitz (2005) propose target cost contracts as the most suitable model. McMahon (2006) highlights the areas to consider in commercial constructs by looking specifically at Agile software development in large government and defense contracts and reflecting on the key lessons learned. Several authors propose how contracts for Agile projects can be implemented in specific jurisdictions—for example, for Italy (Russo, Taccogna, and Ciancarini 2018) and for the Netherlands (Beulen 2018). However, as Zijdemans and Stettina (2014) note, a shared view on how to effectively deploy contractual models for Agile deliveries is generally lacking.

Increasing the Success Rate of Outsourced Agile Projects

Previous authors have highlighted the limitations of traditional contractual models for Agile project delivery and identified the potentially conflicting interests of customers and suppliers. Until now, the literature has focused primarily on either client organizations or suppliers, and the perspectives of consultants and business advisors has not been widely reported. The lack of focus on their perspectives is all the more poignant given that as many as half of digital transformation projects using Agile are procured with the guidance of consultants and business advisors ("client side" or

"sourcing" advisors) from either "big 4" firms, management consultancies, or independent consultants. These advisors play a critical role in helping organizations to frame their program requirements, engage the supplier community, and then establish necessary contracts with the preferred bidder. This study explores the views of sourcing advisors to understand how to maximize the success of Agile projects where delivery has been outsourced to a third party.

Method

We adopted an inductive approach and followed a two-phase research design using qualitative data collection. In the first phase of our research we conducted semi-structured, in-depth interviews with 12 executive-level sourcing consultants working predominantly with UK customers. In the second phase, we conducted three focus group discussions with the same audience plus three supplier participants.

In the first phase we aimed to understand the key challenges and issues faced by consultants when discussing Agile outsourcing opportunities with their clients. We explored project characteristics, client expectations and needs, practices observed, and Agile adoption and implementation challenges. Each interview lasted approximately 60 minutes, and we recorded and transcribed them for analysis. We then reviewed the data and identified key issues and themes.

The second phase was built around the focus groups and involved both sourcing consultants and supplier participants, which helped us to facilitate discussions with both parties to explore the interview findings further. We used the challenges identified as discussion stimuli in the focus group exercise to explore any significant further contributions to the key themes identified during interviews and investigate

potential areas for suppliers to provide additional support to consultants and vice versa.

The focus group discussions involved the 12 senior sourcing consultants and three supplier personnel from the IT industry—namely, project managers employed by the same global IT supplier, delivering waterfall and Agile projects for large and medium-sized organizations in the UK. There were three focus groups with five participants in each.

We followed principles of the focus group discussion to facilitate scientific rigor (Parker and Jonathan 2006). Each focus group workshop lasted three hours, with 30 minutes dedicated to kick off presentations (background and context overview, clarification of desired outcomes, and value in discussion), a welcome round, and participant introduction. We used the remaining time to discuss how to increase the success rate in outsourced Agile deliveries. We encouraged participants to clarify and augment their views. The focus group workshop ended with a wrap-up of the results. The research team documented and summarized discussion results afterwards.

We used the Gioia method (Corley and Gioia 2004; Gioia, Corley, and Hamilton 2013) for subsequent analysis of the data from the interviews and focus groups. The Gioia method enables a more rigorous and transparent analysis of qualitative data. Gioia mapping is a well-established way of deriving major themes from qualitative research, and we used a consistent process of reading, coding, and interpreting (Saldaña 2015). The first stage of the analysis entailed first-order coding of the data, which relied on coding using the respondents' language as much as possible, with limited interpretation at this stage (Figure 1). We derived second-order themes from this coding, which we then grouped into five aggregate dimensions. We identified these aggregate dimensions, which
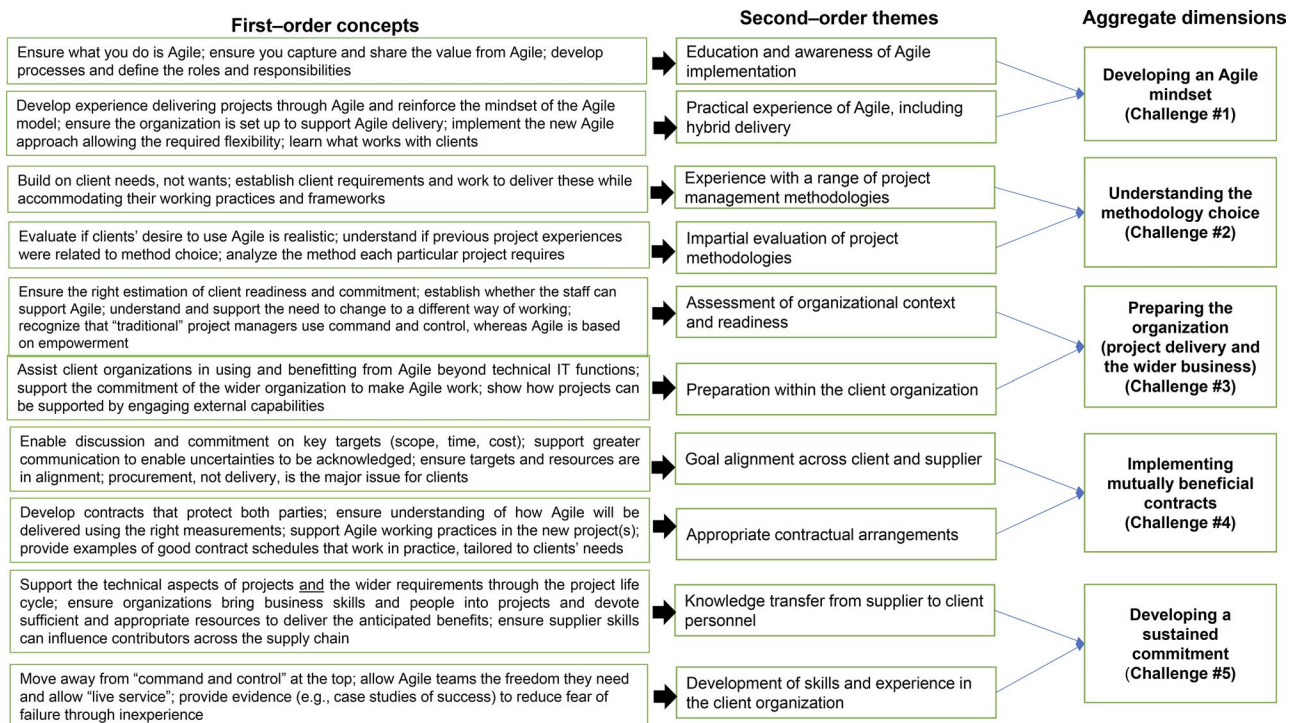

FIGURE 1. Key themes derived from first- and second-order mapping of data

are the key challenges that need to be addressed for successfully contracting Agile projects.

Results

Our research revealed five key challenges that need to be addressed for successful outsourcing of Agile projects: developing an Agile mindset; understanding the methodology choice; preparing the organization; implementing mutually beneficial contracts; and developing a sustained commitment. We discuss each challenge, expanding on the views the advisors shared in the study and exploring what these findings mean for organizations.

Challenge #1: Developing an Agile Mindset

Agile is an established delivery approach in the outsourcing market and is generally well understood as a concept across the UK's private and public sectors. When it comes to implementing, capturing, and sharing Agile practices, however, our findings suggest that organizations can perceive themselves as more advanced than they are in reality. As one advisor said, "Very few organizations truly do Agile." Uncertainty exists regarding the efficacy and rationale for using Agile on specific projects or elements of projects.

There is also a perception in the market that using Agile at scale in complex business critical environments is less suitable than for simpler projects such as web-based customer interface applications. One advisor said, "The smaller and less complex the project, the easier to handle—but all projects can potentially be handled through an Agile model—it's a mindset and new approach that's required." The fact that almost half of the advisors interviewed raised the notion of Agile as a mindset, as opposed to just a delivery method, has an important implication—namely, to be successful, Agile initiatives require organizational change beyond the scope of traditional IT projects. This finding is consistent with wider research that has demonstrated the role of "soft" leadership skills in successful project delivery as opposed to skills purely focused on "hard" project management qualifications and technical aspects (Azim et al. 2010; Sommer 2019).

Expressing a common theme, one advisor suggested that "Agile is a mindset way more than a methodology. . . Most organizations are not set up for Agile to succeed. If an organization cannot recognize the value from trying but failing fast, then it is not Agile. I don't know many organizations, distinct from IT functions, where that is the case." The advisors identified some examples of requisite change to business practice: senior leadership need to value Agile projects as

business change initiatives (Kanwal, Zafar, and Bashir 2017); a need exists to curb risk-averse management behavior and punitive attitudes to failure that run counter to core Agile principles; underlying "zero-sum" assumptions in contractual and procurement engagement need to be challenged; and greater support for the empowerment of relatively junior staff must be made explicit to support Agile delivery.

Challenge #2: Understanding the Methodology Choice

One key challenge for advisors is providing evidence-based guidance on the appropriateness of Agile as a solution to client needs. Advisors reported that clients, especially larger organizations, are often unclear about separating their needs from their wants, which has consequences for their engagement with suppliers when they change their mind. One advisor characterized this behavior as clients often effectively asking, "Bring me a rock, no another one, no not that one, another one!" Currently, suppliers provide limited support to help advisors and clients through this process of problem formulation, solution selection, and assessment of the suitability of delivery methodology, including the evaluation of supplier credibility and fit. Advisors stressed the importance of understanding the method choice that meets clients' needs. We found that just over half of the advisors we interviewed were concerned about this absence of hard evidence and that some clients might be moving to Agile because it's seen as the latest thing—"Everybody wants to be Agile"—rather than it being the most appropriate solution for their needs. Several advisors suggested that a lack of clarity and rigor in the process of determining client requirements is often reflected in "less than optimal" requests for proposals, which are more difficult for suppliers to engage with and may lead to projects that are less likely to succeed.

Challenge #3: Preparing the Organization

The advisors reported differences in the maturity of approaches to Agile within different sectors. The most noticeable difference was that the UK public sector is generally more proactive in its use of procurement frameworks than the private sector in specifying that Agile be adopted for significant new projects. One advisor's observation, "The public sector rewards not making any mistakes," echoed many advisors' responses, which suggests a procedural rather than cultural adoption of Agile.

In contrast, the advisors' experience in the private sector was that Agile gets used for specific and often smaller-scale applications, such as those developed for website or smaller business applications, while retaining traditional project management ("waterfall") for core business processes and "back-office" enterprise systems. This heterogeneous development approach is evident in many of the companies the advisors work with who operate a mixed Agile and waterfall environment. Given this market trend to hybrid methodologies, some advisors we interviewed indicated it was not clear how the "Agile by default" stance fits within this mixed environment and whether the benefits of such an

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approach accrue primarily for the supplier rather than the client. More than three-quarters of advisors in the study expressed the view that Agile could be used in many situations: from being the "front end" of a traditional waterfall project, to being used for a specific project, or the default for all of a client's development projects no matter how complex. In practice, however, the prevailing view was that Agile was more likely to be used for "greenfield" projects (those with no legacy systems involved) or simpler applications, such as customer analytics, where the integration boundaries with existing large complex systems are generally more readily understood and manageable. Our research showed that suppliers often overestimated client readiness. Thus, while the advisors' experience was that Agile implementations within the market are becoming increasingly common, it is not clear that organizations appreciate the extent to which the decision to adopt Agile will have an impact beyond their technical IT functions. This lack of understanding by clients of the impact on the wider organization was a common concern expressed by advisors and summed up by one who said, "Organizations need to understand the commitment of business resources to make Agile work."

Some challenges, such as appropriately skilled and experienced people, are more widely recognized. As one advisor explained, "Agile means you need different and better people." Less obvious challenges included how to build sufficient "Agile coach" capability. Many advisors expressed that simply training traditional project managers is rarely effective. One advisor said, "Good project managers and Agile coaches have fundamentally different characteristics. Project managers use command and control, whereas Agile is based on empowerment." The interviews highlighted that change is required for the traditional waterfall testing and integration procedures (and associated infrequent release cycles) to align with the pace of frequent deliverable iterations evident in an Agile development team. Moreover, several of the advisors interviewed stated that to realize the benefits of Agile their client organizations need help in recognizing the business challenge of adjusting aspects of their organizational culture so that it aligns with, rather than competes against, an Agile approach.

Challenge #4: Implementing Mutually Beneficial Contracts

The advisors we interviewed had significant concerns about the suitability of current contracting practices for Agile projects. One advisor's remarks summarize the generally expressed view: "Current contracts for Agile projects don't protect any party." Partly driven by precedent and partly by legal professionals' need for clarity, our interviews revealed that most Agile contracts are based upon a traditional waterfall approach, which attempts to set out clearly the cost and time to deliver specific outcomes, with associated penalties for failure to do so. In addition, during the contracting phase the client's procurement function, and at times the supplier's commercial team, often reinforces the need for contractual certainty on financial risk

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and project deliverables. Most advisors indicated that such an adversarial approach, which works against the supplier-client collaboration necessary for Agile, was one of the major challenges in successfully outsourcing Agile. In response to this primary tension, and inherent in their efforts to apply a waterfall approach to Agile projects, advisors are increasingly seeing suppliers charging for "time and materials"—that is, based on hours worked. As one advisor explained, this trend highlights that "the major issue for clients is how to buy it not how to deliver it." Many advisors expressed concern that suppliers are using this unresolved Agile contractual challenge to avoid committing on scope, time, and price. These contractual difficulties reflect one of the fundamental tensions between suppliers and customers as the market shifts from upfront specification associated with traditional waterfall projects to the uncertain, emergent, and iterative solution offered by Agile.

The emergent nature of Agile also begs the contractual question about how to measure the success of such projects: what should replace the now-inappropriate operational key performance indicators of traditional contracts (for example, delivery against fixed contractual milestones)? Possible alternatives discussed in the interviews included forms of user or customer satisfaction or the use of net promoter scores as a proxy for the delivery of the best possible solution for a given fee within a particular time frame. The advisors indicated that within the outsourced Agile market space, they are witnessing a shift in the balance of power in favor of the supplier to the extent that, as one advisor stated, "it looks like an unfair fight" as suppliers become unwilling to commit to outcomes and dates. The advisors cited examples that reflect this power imbalance: a lack of balance in allocation of risk; issues about the retention and protection of intellectual property generated on projects; a lack of control of the supplier development team; the retention of key supplier project personnel on the client contract; and a lack of commitment to measurable outcomes (be they price, scope, or timelines). As the advisors we interviewed pointed out, these concerns all erode trust and create conflict between suppliers and clients, undermining the collaborative supplier-client culture required for success in Agile initiatives.

Challenge #5: Developing a Sustained Commitment

The successful delivery of Agile projects depends on many factors. Some factors relate to clarity in the client needs or the nature of the contract, while others fall into the execution phase. Many advisors presented the following observations, which they considered important considerations during the delivery stage of a project:

1. Customer organizations cannot outsource the leadership, ownership, and through-life engagement of Agile initiatives, but suppliers should continually provide advice on delivery issues—for example, on the appropriate client resources that will be needed. Suppliers can often focus primarily on the technical aspects of projects at the expense of supporting clients through the project life cycle—for example, via engagement with senior business leaders; understanding the client business drivers for the project; or assessment of, and guidance on, a client's readiness for Agile.

2. Organizations need to bring business skills and people into projects and devote sufficient and appropriate resources throughout the development process. Agile system development demands high quality software developers and likely has a broad organizational change impact. In addition, careful supplier-client team composition is required to blend sufficient experienced expertise with Agile "novices" and non-technical team members.

3. The pace of delivery across the client and supplier needs careful attention from both parties to ensure they maintain sufficient momentum and that the organization can accept the deliverables into "live service" and absorb the new ways of working into "business as usual."

4. Suppliers leading Agile initiatives must be skillful influencers across the IT supply chain and key customer stakeholder groups, including client senior business management. Delivery leads need to be of adequate seniority and experience.

5. Supplier and customer organizational cultures need to support an Agile approach into the delivery phase, keeping in mind that when, as one respondent observed, "management puts command and control on top of an Agile team they choke velocity, and it's often resisted by the Agile teams." An important consideration here is the use of appropriate metrics throughout delivery (client satisfaction or net promoter score) rather than purely financial measures (spend against budget) that are lagging (rather than leading) indicators of project success.

TABLE 1. Actions for client and supplier organizations adopting Agile

	Actions for Adopting Agile for:	
Challenge	Business Leaders in Client Organizations	Project Leaders in Supplier Organizations
1) Developing an Agile mindset	• Provide executive briefings and induction to the senior leadership team so they fully understand Agile and the support required from them as change sponsors. • Provide guidance around the concept of "servant leadership" and develop role models to exemplify required behaviors.	• Provide guidance to clients around what leadership behaviors are needed for successful Agile delivery—for example, encourage peer-to-peer conversations with other business leaders experienced in Agile. • Demonstrate experience and use examples to assure the client.
2) Understanding the methodology choice	• Undertake an objective assessment of the most suitable project methodology. Support this action with a project "premortem" looking at the potential downfalls of taking an Agile rather than traditional approach.	• Be willing to propose alternative project methodologies (waterfall) if more appropriate. • If a hybrid approach (Agile and waterfall) is used, be very clear why and how this is being adopted and ensure that the monitoring and tracking of projects is appropriate.
3) Preparing the organization	• Ensure that project plans include dependencies from the wider organization—for example, time needed from product owners and subject matter experts in the business. • Engage peers and counterparts in other organizations that have had recent experience of similar deliveries to understand what the work entails.	• Ensure a consistent understanding of key roles—for example, product owner, business analyst, scrum master—and highlight the interdependencies across the team. • Build a deliberate "pre-mobilization" checkpoint into the project and program plans to assess organizational readiness. Share case studies and lessons learned.
4) Implementing mutually beneficial contracts	• Be flexible around contractual constructs and be receptive to alternatives to fixed price. • Use previous experience; offer risk/reward. • Encourage the right behaviors in suppliers by stipulating measures around customer satisfaction and organizational learning (for example, upskilling of customer teams by supplier).	• Consider alternative charging mechanisms to "time and materials" so that risk is shared. • Provide transparency around sprint planning, resource allocation, and cost management so that trust is enhanced with the customer. • Provide examples of good contract schedules that work in practice, tailored to clients' needs. • Have a strong contracting model with controls and service level agreements that can be committed to.
5) Developing a sustained commitment	• Ensure alignment across the senior team in terms of need for sustained investment in developing Agile project management capability (for example, skills transfer and secondments).	• Be open about the degree of client commitment needed throughout the project lifecycle. Develop capable Centers of Excellence that can integrate Agile platforms and tools.

TABLE 2. Challenges in successful Agile delivery and implications for business leaders

Challenge	Key Implications for Business Leaders in Client Organizations	Key Implications for Project Leaders in Supplier Organizations
#1 Developing an Agile mindset	Awareness and acknowledgement of required leadership support (**essential to project success and enabler of wider adoption of Agile**).	Willingness to share wider experience; for example, from projects with other customers (**essential to project success**).
#2 Understanding the methodology choice	Discipline in matching project methodology to each delivery (**essential to project success**).	Impartial view on project methodology (**essential to project success**).
#3 Preparing the organization	Realistic view of likely demands on the customer organization (**essential to project success**).	Transparency around the time and effort needed to ensure project success (**essential to project success**).
#4 Implementing mutually beneficial contracts	Openness to new contracting approaches (**essential to project success and enabler of wider adoption of Agile**).	Flexibility to put a portion of fees at risk to incentivize delivery of customer outcomes (**essential to project success**).
#5 Developing a sustained commitment	Longer term perspective beyond the timescale of individual projects (**enabler of wider adoption of Agile**).	Skills transfer to team members in customer organization (**enabler of wider adoption of Agile**).

Discussion

Agile delivery poses several challenges for practitioners, whether they are sponsors in client organizations contracting for projects or project leaders in suppliers responsible for project implementation. We identified key challenges and actions business leaders in client organizations and project leaders in supplier organizations can take to adopt Agile (Table 1).

By engaging with a hitherto-ignored constituency, sourcing advisors, we have identified the core ingredients that contribute to project success. We summarize the implications for leaders of Agile deliveries (whether they are business leaders in client organizations or supplier/partner organizations). We also categorize interventions as either essential to successful delivery of individual projects, as enablers of wider adoption of Agile, or both (Table 2). We propose that these implications are a useful checklist for organizations embarking on outsourced Agile projects. Client organizations, advisors, and consultants, as well as suppliers, can significantly increase their chances of success by discussing the key challenges at an early stage of project planning and using these as a basis for frequent dialogue throughout subsequent procurement, contract negotiation, and mobilization.

Limitations

The current study has limitations. Notably, customers (the clients that advisors would be advising) were not participants in the interviews or focus groups. Furthermore, the number of interviews and participants in focus groups represented a relatively small sample size. Finally, the focus of this paper is quite broad, across five areas of organizational challenge. Future investigations can address these limitations by involving an extensive set of interviews, including the clients' side, and focusing on a specific challenge area (such as organizational readiness) to gain further insights regarding the issues raised in this research. Future studies can explore the outsourcing of Agile in more detail. A valuable addition may be gained through longitudinal studies in different sectors covering the client, supplier, and advisors' perspectives over the duration of an Agile project, which will help us understand better the complexities that arise and responses that are implemented in a number of contexts.

Conclusion

The increasing appetite for organizations to adopt Agile delivery, driven by an ever more demanding business environment, is often hampered by a lack of relevant skills and capacity to deliver these projects and programs. Outsourcing Agile project delivery can help address these challenges, but organizations cannot completely devolve responsibility to suppliers. Our study has highlighted the importance for suppliers and advisors to work closely with client organizations so that the necessary enablers are in place before deploying Agile. Accepting the need for a shift in mindset, choosing Agile for the right reasons, assessing the readiness of the business, contracting in the right way, and sustaining commitment are all key ingredients that will significantly increase the likelihood of success in outsourcing Agile projects.

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