The influence of IT outsourcing on organisational success and innovation

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Abstract

This study investigates the domain of IT outsourcing (ITO), focusing on its implications for organisational success or failure, and its impact on innovation. Through a comprehensive literature review, significant gaps were identified, including a lack of empirical studies assessing ITO outcomes for organisations, how ITO impacts innovation, and if an organisation's industry impacts ITO success. In response, three research questions are formulated to address the identified gaps, leading to the creation of a novel conceptual model designed to evaluate the influence of ITO on organisations. Employing a deductive approach, the model informed a triangulation research approach, combining quantitative and qualitative data. A survey garnered responses from 112 senior IT professionals across three industries, complemented by eight interviews with senior and executive management. Findings indicate a concerning rate of perceived ITO failures and reveal that the specific industry of an organisation can affect ITO success. The study also concludes that ITO adversely impacts organisational innovation. Based on these insights, eight best practices are recommended to enhance ITO outcomes, including market research on vendor skillsets and experience, the establishment of well-structured contracts, adherence to SLAs without grace periods, shorter project durations, multi-sourcing strategies, bolstering internal IT capabilities, helping employees to understand ITO value, and rigorous governance. Acknowledging its limitations, this paper calls for future research involving broader industry representation and larger sample sizes to validate and expand upon these findings.

Keywords IT outsourcing, Sourcing, IT governance

Introduction

The concept of IT outsourcing (ITO) rose to prominence in the early nineties, when Eastman Kodak announced a landmark deal to outsource the majority of their IT services [14, 30, 34]. The news of Kodak's success was widely publicised across the IT industry, triggering a bandwagon effect [16], whereby executives started to consider the cost effectiveness of outsourcing their IT to external suppliers rather than maintaining in-house [39]. In those early experiments, executives usually confined ITO to specific functions within their organisation,

predominantly motivated by cost savings [31]. However, ITO has evolved exponentially in the modern age, making its way into the heart of an organisation's competitive core, and covering vast strategic management functions which are integrated with digital transformation [22]. By 2024, global IT spend is expected to reach $5.1 trillion dollars. Within this competitive market, companies are continuing to leverage larger and far-reaching outsourcing deals [20], with ITO rising to an annual market growth rate of 10% [34], and accounting for 67% of all global industry outsourcing deals [28]. However, this paper suggests concerning research gaps and trends in ITO, which are proposed for further investigation.

Firstly, evidence suggests that organisations are becoming disillusioned with ITO [30], with studies citing ITO satisfaction to be as low as 33%, compared with 80% for non-IT related outsourcing agreements [28].

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Additionally, scholars have criticised the ITO literature for being empirically weak, with a lack of evidence supporting the benefits of ITO [13], and literature relying on assumptions and anecdotal evidence [28]. Presumably, this could be caused by the plethora of past literature being overfocused on specific elements of ITO, such as the economics of outsourcing, driving factors in outsourcing, types of agreements, and relationship management [45], with a lack of literature examining the success factors of ITO [37, 38]; Costa [16].

Other trends highlight that, whilst the role of ITO in organisations is transforming rapidly, few scholars have assessed how ITO influences innovation for the modern-day organisation [34]. Scholars have also found a lack of studies focusing on ITO from a UK perspective [37] and have suggested expanding research to consider how an organisation's industry may influence ITO success [36].

This paper further investigates the topic of ITO through an empirical study, assessing the influence of ITO on organisational success/failure, through a study of senior IT professionals working across three organisations operating in the UK.

Background
Definition
Yuang and Huang (2000) define ITO as the transfer of assets and technologies from a user to a vendor. Those assets and technologies could include any IT services such as software development, support, integration, telecommunications, and data centre management [38, 44] and would normally be transferred via an official contract for a specified duration [22, 44]. This transfer of assets should replace internal efforts [30] and transfer the responsibility of profit and loss to the vendor [39]. Fundamentally, ITO involves decisions on whether to make internally, or outsource and buy from one vendor or multiple [38].

Background and driving factors of ITO
According to scholars, the concept of ITO became established sometime between the 1950s–1960s [30, 52] when EDS formed a deal with Blue Cross to outsource some of their IT functions. ITO continued to receive more attention in the eighties, when executives started to realise the strategic role IT could provide to an organisation [39]. However, it was Eastman Kodak's landmark deal to outsource their IT function in 1989 that became a turning point for organisations, winning acceptance for ITO as a strategic tool and sparking the interest of executives across the globe [9, 14, 30, 34]. Suddenly, academics and practitioners were heavily advocating the adoption of ITO, quoting savings of between 10 and 50% [39]. The trend of ITO became increasingly popular and garnered

more attention in the late nineties [32] where the growth of ITO was continually advertised in popular academic and management presses across the globe [46]. ITO has since evolved to become a standard operating model within virtually every Fortune 500 company worldwide [22, 34]. Such has the reputation and merits of ITO evolved, that it is no longer reserved for large corporate enterprises, but is now common practice for companies of all sizes and industries [34].

There are numerous driving forces for ITO which are just as prevalent today as they were in its conception. IT is one of the most expensive parts of an organisation to establish and maintain [10], and organisations are often overwhelmed by the complexity and attention required by IT [48]. Without ITO, organisations would need to spend money investing in hardware, software development, and skilled personnel Yuang and Huang [52]. Adding to this expense is the risk of IT downtime, which can impact profits and organisational reputation Yuang and Huang [52]. Therefore, ITO initially started out as a cost-cutting tool [30], Konning et al. [34]; Yuang and Huang [52] and a method of passing financial risk and organisational complexity to a third party [10, 48, 52]. By transitioning their IT to vendors in developing nations, organisations were benefitting from resources who were 30% to 75% lower cost than developed nations [44], enabling reduced labour costs, increased shareholder value and time to focus on core business activities [16, 44]. ITO has also evolved to focus not just on cost-cutting exercises, but to also be seen as having benefits in improving quality of service and technological expertise [9, 10, 34]. By leveraging ITO, organisations have access to vendors with specific technological expertise who can follow the latest trends and provide cutting edge services on a scale that organisations cannot keep up with [10].

Historic research
Early research in ITO started out studying the decision factors in pursuing ITO, and how to implement ITO in organisations Costa [16]; Dibbern et al. [21]. The early nineties were heavily dominated by a European and USA lens, with few studies analysing and validating the success factors of ITO Costa [16]. Rather, existing studies referred to anecdotal or past evidence of success. This early research found three core business drivers for ITO: cost reduction, technical expertise, and a desire to focus on core business activities without worrying about future IT trends [21]; Costa [16]. In the early 2000s, research evolved to study ITO not just from the vendor perspective, with academics assessing how best to manage vendor/client relationships in ITO [24]. It was in this timeframe that researchers became more aware of the risks ITO could present, and thus trends evolved to pay

attention to risk mitigation strategies [6, 40]. The majority of the research continued to be heavily focused on the USA [6]. Following the attention focused on risk factors, research later evolved to focus on how to effectively govern ITO agreements, and the contractual and relationship management factors which needed to be considered [36]. Presumably this research trend evolved as risk management response. These themes continued towards the end of the decade in the 2000s, and through the early 2010s, as scholars continued to assess decision factors in pursuing ITO, the risks related to ITO, and governance factors [36, 37, 42]. However, research also started to present conceptual models to assess the growing number of decisions factors in pursuing ITO [36] and scholars started to investigate a new theme of ITO focused on multi-sourcing from multiple vendors [42]. It was within this time-frame that scholars raised gaps in the literature, such as whether customer industry had any influence on the outcomes of ITO [36], the lack of research being presented from the UK [37] and requests for further research into ITO [38]. In the late 2010s, research shifted away from the decision factors in pursuing ITO, to investigating the vendor characteristics and capabilities which are now being sought by modern clients [34]. This research also presented a worrying finding in that research on ITO has declined year-by-year since 2015.

Historic research has also highlighted alarming trends, finding little empirical evidence of economic benefits or productivity gains with ITO [13, 35, 49] with one study finding such a degradation of service in Fortune 500 companies, that organisations chose to prematurely terminate contracts and erect their own IT departments and data centres, at huge internal costs [39]. A similar study by Gorla and Lau [28] 17 years after Lacity and Hirschheim's report found that out of 160 IT projects which had been outsourced across 148 organisations, 90 of them had been back sourced into the organisation due to the negative vendor experiences lack of IT skillsets available. A study by Udo [48] found that ITO can lead to dependence on a third party for critical processes, losses of internal capabilities and assets, declining morale, and increased costs. A further worrying trend was found by Lin et al.'s [43] study of over 500 organisations, whereby only 35% had a plan in place to assess ITO benefits delivered by vendors, and alarmingly, only 17% were utilising that plan. Thus, research in ITO evolved to look at the risk management governance and relationship aspects which were needed to protect organisations from negative ITO impacts.

The risks that could impact an organisation in relation to ITO were found to be wide-ranging in the literature. Risks such as outsourced task complexity, level of supplier investment and internal organisational readiness were quoted as frequent risks for organisations to consider [9, 10]. The main findings of the research suggested that well-structured contracts, governance departments, and SLAs were needed to hold ITO vendors accountable to deliver on promises of service and mitigate against such risks [25–27, 29, 43]. Some scholars suggested these contracts should be short, to reduce external dependency [31]. One of the most critical contract management aspects of ITO was found to be a well-structured SLA. Scholars found that most contracts do not specify explicit details and are based on mutual trust [26], and SLAs can help to provide organisations with a safety net and an accountability metric to challenge vendors with [25–27, 39, 43]. A further aspect which research explored was the necessity of a well-structured contract, which establishes a balance of power and presents clearly defined key performance indicators (KPIs), accountability, and escalation procedures [2, 39, 43]. Some scholars suggested adding cash penalties for non-performance and contract change methods [39], whereas other scholars suggested organisations should instead focus on growing a relationship through trust and commitment, and contract change clauses may provide a detrimental relationship effect [26].

In contrary to the initial themes of ITO whereby organisations sought to fully outsource all IT functions, some scholars suggested an internal skill presence was needed. In a study of over 300 firms in the USA, Han and Milthas [29] found that organisations had more success with ITO if they had an internal IT capability. They saw ITO not as a substitute, but a complimentary investment to internal IT capability. By not maintaining a strong IT capability, organisations put themselves at risk of losing future talent, future ideas, and a loss of critical knowledge, which can reduce organisational performance [44]. Scholars found that by maintaining a strong internal IT presence, it helped to facilitate knowledge transfer, vendor accountability, relationship building, and governance [2, 27, 29, 43, 49]. Hoecht and Trott [31] mentioned this internal IT capability was essential to maintain internal innovation and act as experts in the field to work alongside and challenge vendors to deliver more.

In summary, research to-date has been heavily focused in specific ITO areas: decision factors in pursuing ITO, risk factors in adopting ITO, managing client and vendor relationships/governance, multi-sourcing, and vendor characteristics and capabilities. Only a small volume of studies focused on independent variables impacting ITO outcomes [34, 37, 38], and these were predominantly focused on how independent variables impact ITO sourcing decisions, not organisational success, or failure. These research gaps led to Konning et al. [34] raising a call to action for scholars to conduct new research focusing on

the outcomes of ITO for modern-day organisations, and a specific focus on how ITO influences innovation.

Conceptual model development

Due to the research gaps highlighted thus far, there is a lack of empirical models that can be used to test the influence of ITO on organisational success or failure. Thus, this paper creates a new conceptual model.

Firstly, papers which cited anecdotal or previously referenced variables impacting ITO success were documented to gather a list of performance variables. Secondly, following the advice of Lacity et al. [37], [38] and Konning et al. [34], these variables were then combined into general higher-level factors, as documented in

Table 1. Following this stage, a new conceptual model was designed (Fig. 1) to assess the influence of these independent variables on ITO success or failure.

Methods

The research methodology in this paper follows what Saunders et al. [47] refer to as a deductive approach. An assessment has been conducted of existing literature, which has resulted in the development of several hypotheses (detailed in this chapter). A new conceptual model is then utilised to empirically test those hypotheses through research questions with a sample audience.

Table 1 Performance variables which may influence ITO success or failure

Performance variable	Study where performance factor is referenced
Cost reduction	Ensslin et al. [22], Lacity et al. [38], Hirschheim and Dibbern [30], Hoecht and Trott [31], Bahli and Rivard [9], Pfannenstein and Tsai [44], Bahli and Rivard [8], Costa [16], Udo [48], Yang and Huang [52], Aubert et al. [1], Lederer and Tucker [41]
Service performance/quality	Ensslin et al. [22], Dahlberg and Nyrhinen [19], Bahli and Rivard [9], Bahli and Rivard [8], Aubert et al. [1], Lacity and Hirschheim [39]
User satisfaction	Ensslin et al. [22], Lacity et al. [38], Dahlberg and Nyrhinen [19]
Focus on core business	Ensslin et al. [22], Lacity et al. [38], Chang and Gurbaxani [13], Dahlberg and Nyrhinen [19], Hoecht and Trott [31], Pfannenstein and Tsai [44], Costa [16], Udo [48], Lederer and Tucker [41]
Access to vendor expertise	Konning et al. [34], Lacity et al. [38], Lacity et al. [37], Dahlberg and Nyrhinen [19], Aubert et al. [7], Bahli and Rivard [9], Costa [16], Udo [48], Yang and Huang [52], Aubert et al. [1], Lederer and Tucker [41], Lacity and Willcocks [5]
Delivery capability and response time	Konning et al. [34], Lacity et al. [38], Lacity et al. [37], Gorla and Lau [28], Aubert et al. [1]
Flexibility	Lacity et al. [38], Bahli and Rivard [8]
Innovation	Konning et al. [34], Hoecht and Trott [31]
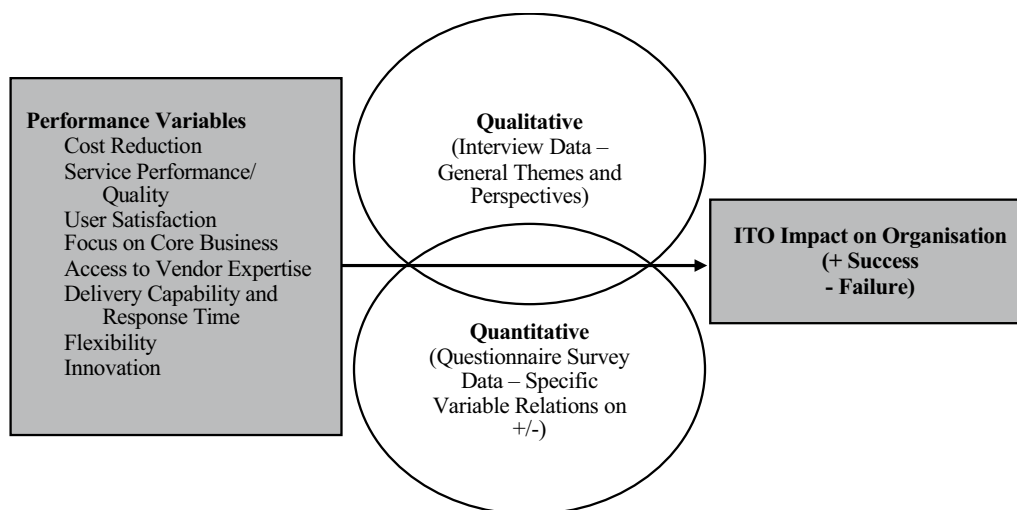
Fig. 1 A model for assessing ITO success or failure (created by the author)

Research objectives

This paper explores the following research questions and tests three hypotheses (H) which were developed from the literature review.

RQ 1   To what extent do organisations perceive IT outsourcing to be a success or failure?

H1   Organisations will deem some aspects of ITO as a failure, such as innovation, due to vendor skillsets and expertise. ITO will be more successful in organisations which maintain internal IT capabilities and have robust contractual and governance processes.

RQ 2   What influence does IT outsourcing have on an organisation's ability to innovate?

H2   Organisations with a mix of internal IT capability and ITO will continue to drive innovation, whilst organisations with a lack of internal IT capability will not be able to drive innovation as effectively, due to vendors focusing on contractual delivery versus going above and beyond.

RQ 3   What influence does an organisation's industry have on the perceived success or failure of IT outsourcing?

H3   ITO success or failure will not differ across industry, but instead will be perceived as more successful, or a failure, depending on the level of internal IT capability and contractual/governance processes the organisations have in place.

Research methodology

The surveying research method is one of the oldest and widely utilised methods across the globe [3, 18, 50]. They are also one of the most easily understood research methods in society [3] due to their wide usage in public and private sector research. Scholars also note that the surveying methodology is well-suited to academic studies observing organisational trends [11] and provides a method for analysing relationships between independent variables [47]. Firstly, this paper utilises the electronic questionnaire method of surveying. Due to the lack of empirical data quoted in the literature review, questionnaires were chosen due to their merits in gathering data from large sample sizes [47], and their ability to make comparisons utilising dependent variables to validate hypotheses [12, 17]. Questions were created based on Fig. 1, and respondents were asked as to how those variables relate to ITO success or failure.

Following on from the questionnaire, semi-structured interviews were conducted with a smaller sample audience. Semi-structured interviews are another method in the surveying methodology and have strong merits in exploratory study [23]. Interviews are important for this study since relying on quantitative methods alone would provide limitations in that they fail to understand the deeper themes of a topic [33]. After the first round of survey data collection, responses were analysed for each company, and any correlated patterns documented. Following this, interview prompts were created based on those responses. The prompts were created to aid in structuring follow-up conversations with the organisations. These follow-up conversations aimed to examine the questionnaire data further, asking questions around any erroneous data or patterns, and gather further qualitative data and understanding to interpret the responses. This approach aids in contributing further academic findings to this literature gap and allows for open questions to gain a richer interpretation of the topic [33].

Selection and identification

The survey methods utilised in this paper followed what Cohen and Manion [15] refer to as the non-probability method of sampling, and utilised snowballing and convenience sampling based on the contacts in the author's professional network. The questionnaire was issued to 140 participants across three organisations: two manufacturing companies (Company M1 and M2) and a telecommunications company (Company T), with 112 participants responding. Such a large sample size was chosen since the deduction approach requires large samples to be able to make accurate and generalisable statements relating to the research topic [47]. The participants were selected based on their experience with ITO and their seniority.

After the questionnaire stage, eight semi-structured interviews were conducted. Participants were selected based on their longer work experience and higher seniority in the organisations.

Data collection

An electronic survey tool (Survey Monkey) was utilised to support the quick and efficient data gathering and quantitative coding of questionnaire responses. To support the anonymity of the organisations taking part in the study, three separate questionnaires were developed, one for each company. Each of these questionnaires was identical in design. Participants were able to self-complete the questionnaire, and their answers were extracted into Microsoft Excel and combined for data analysis. By using each independent questionnaire as an identifier, it

enables this paper to analyse the data and trends across different industries, answering RQ3 of this paper.

Semi-structured interviews were all conducted via telephone, with data being manually recorded in a Microsoft Word document.

Method reliability and validity

To ensure reliability of results, the same survey was issued to all three participant organisations. Before issuing, the survey was initially piloted with seven people from the original sampling pool. These participant responses were isolated and not included in the main survey findings. The intent of piloting was to ensure adequate comprehension of questions and to assess if the answers created actionable results.

In terms of validity, the interviewing approach provides a triangulation method, which scholars advise is important when conducting surveys, to test validity [4, 47, 51], and is something many business and management studies utilise to explain findings from questionnaires [47].

Whilst focus groups were considered instead of semi-structured interviews, the author decided that interviews would better allow individual perceptions to be captured, whereas focus groups could lead to only dominant voices being heard.

Results

Defining ITO success or failure

Firstly, it was thought important to understand what research participants defined as ITO success or failure for their organisation, to assess the influence of ITO. The conceptual model developed in Fig. 1 was used to identify 8 ITO performance variables which could have a positive or negative outcome on organisational success. The respondents were then asked to select which of these variables they saw as representing a successful or unsuccessful ITO outcome for their organisation (Fig. 2).

The results in Fig. 2 are coded as positive or negative. For example, taking the 'Cost Reduction' performance variable from Fig. 1, 'IT Cost Reduction' would be a positive outcome of that variable, and 'IT Cost Increases' would be a negative outcome of that variable.

Analysis of responses

Service improvements and user satisfaction The responses in Fig. 2 suggest that the positive outcomes associated with ITO remain consistent with those identified in the literature review. However, the responses suggest that 'service performance improvements' and 'user satisfaction with ITO' are less likely to be perceived as successful outcomes, which contrasts with the literature review, whereby authors indicated these factors as key driving forces and benefits of ITO [9, 19, 22]. Only

55% and 53% of respondents identified these variables as something they would see as a positive outcome of ITO. Interestingly, whilst a smaller majority would see these two factors as positive outcomes for their organisations, 79% and 69% of respondents stated they would view it as a negative outcome for the organisation if ITO service performance, or user satisfaction with the service deteriorated. Interviews were used to investigate the contradictory data presented. Some example responses from the organisations are presented below.

> *"My core goals are to reduce my budget spend and gain access to new expertise to drive the business forward. However, I don't want my teams or users to be less satisfied in future than they are today, or the performance to drop, so if ITO resulted in that then those aspects would be seen as a failure by the vendor for me."* **Company M2.**
> *"My contract with (the vendor) is for the service I want them to run. I expect them to deliver that in a satisfactory way that obviously improves our performance. Otherwise, what are we paying them for?"* **Company M1.**
> *"I look at this as outsourcing programmes, projects, and services. My goal is to hand these over to experts who deliver with excellence in a manner that reduces costs. I expect those services to be delivered with the same professionalism as if I used my internal IT teams. I'm not going to reward or praise these vendors for doing that, it's something I expect as part of the package I pay for. If these vendors resulted in performance downgrades or user satisfaction drops, then I would consider that a failure."* **Company T.**

The wider responses from the interviews suggested that customer expectations may be rising in the ITO sector, and whilst the successful delivery of some performance variables may not lead to the perception of ITO success, rather just business as usual, non-delivery of those performance variables would be considered as ITO failure.

Focus on core business activities A further finding which raises contradictions is that of the performance variable 'Focus on Core Business Activities'. Whilst 71% of respondents highlighted this as something they would see as a positive outcome, only 27% selected this variable as something they would perceive to be a negative outcome, in the scenario that ITO did not enable the time to focus. Interview responses suggested that whilst less time 'managing IT', and more time focusing on core business is a target of ITO, the reality is that there is still a considerable amount of work involved to manage supplier adherence to SLAs, to govern contracts and to build relationships. An example response is noted below.

Responses Defining the Degree of ITO Success or Failure
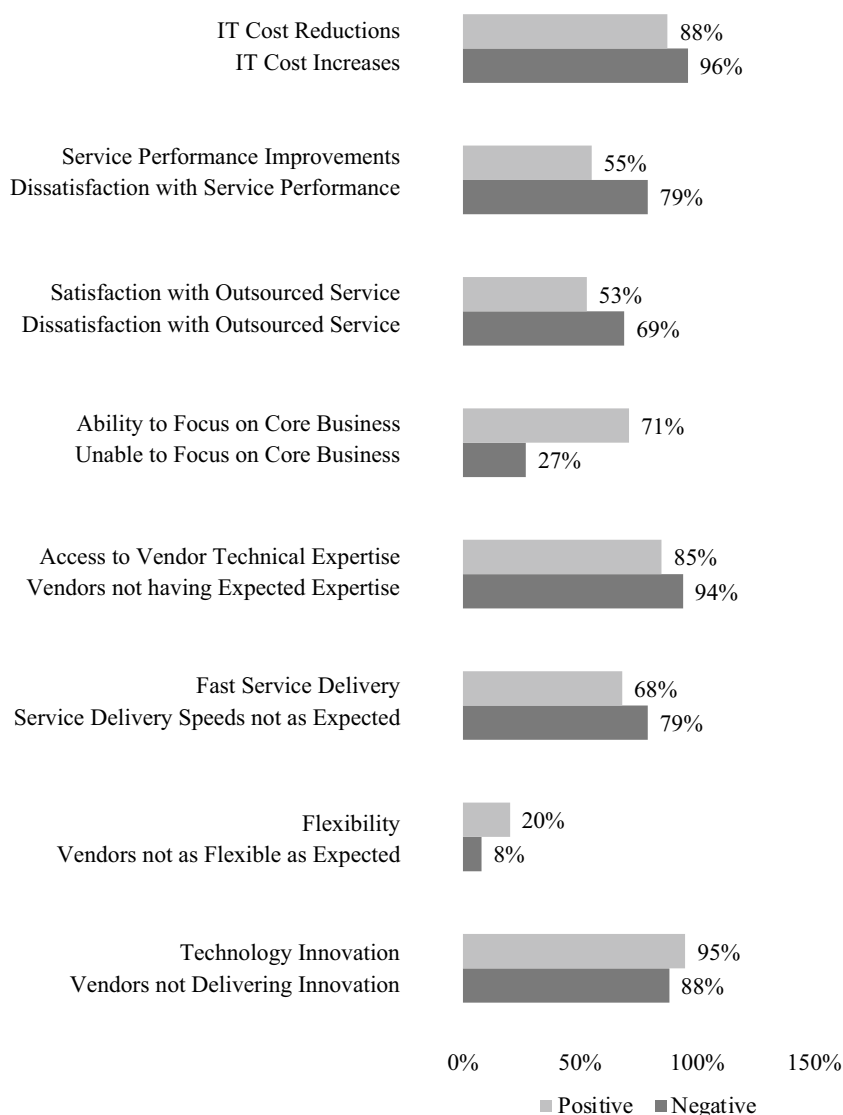
**Fig. 2** Defining the degree of ITO success or failure

"The reality is that for every vendor we use, we still need to have some form of governance team to monitor them and manage the contract or expectations. Thus, we have governance teams who have a sole focus of managing these vendors vs what you'd refer to as core business activities." **Company T.**

This is not surprising, since the literature review referenced the findings of scholars whereby contracts, governance departments, and SLAs were key prerequisites to ensuring vendors deliver to expectations [25–27, 29, 43]. Thus, the interviews indicated that this seems to have become an expectation associated with ITO, and thus

being unable to focus on core business activities is not necessarily perceived as a failure. One interviewee also gave the context that a lot of the respondents most likely see managing suppliers as their core business activities, since it is often part of their job scope.

Flexibility and innovation Finally, two of the standout findings from Fig. 2 are those of the 'Flexibility' and 'Innovation' performance variables. Firstly, several of the studies analysed during the literature review mention flexibility as a key performance factor which organisations wish to obtain from ITO [8, 38]. However, findings

Total Percentage of Responses Illustrating the ITO Outcomes Experienced
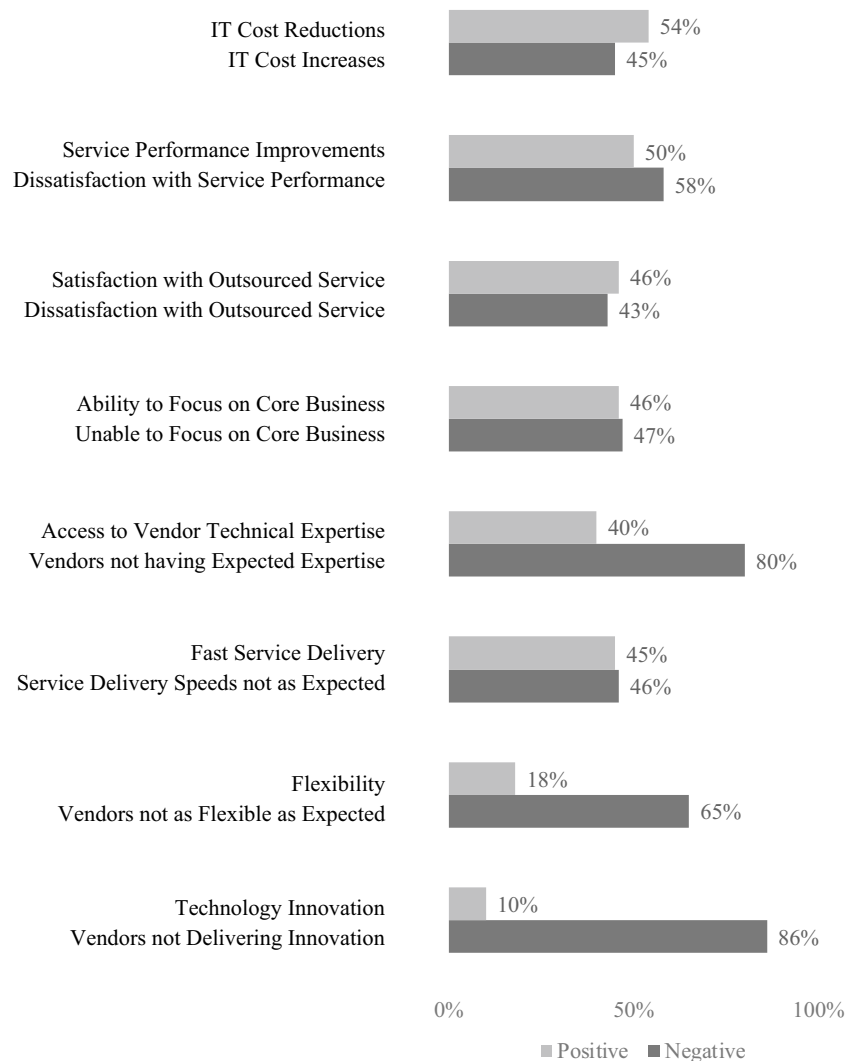
Fig. 3 ITO outcomes experienced by organisations

from this paper would suggest that this is the least important variable of all, and few participants would see vendor flexibility as being a positive or negative outcome of ITO. Only two of the articles assessed through the literature review quoted flexibility as a key ITO performance factor, whereas the other performance factors had stronger academic backing.

Secondly, the topic of innovation in ITO was stated as a research gap by Konning et al. [34]. However, the findings in Fig. 2 suggest that technology innovation is the largest driving force for pursuing ITO, and that the successful delivery of innovation would have a large impact on whether an organisation perceives ITO to be a success

or failure. Once again, this finding demonstrates that the concept of ITO is evolving from the original definition and drivers.

ITO success or failure in organisations
ITO outcomes experienced by organisations
Having used the performance variables from Fig. 1 to gain an understanding of the definition of ITO success or failure, the same variables were used to ask respondents which of the ITO outcomes they had experienced in their organisations (Fig. 3).

Firstly, Fig. 3 suggests that two of the largest drivers towards ITO and perceived success factors, 'Technology

Innovation' and 'Access to Vendor Expertise', are not being experienced by organisations. These results are similar to the findings by Gorla and Lau [28] and Lacity and Hirschheim [39], whereby large-scale ITO projects were back sourced because of negative experiences and lack of IT skillsets available from vendors.

The Innovation variable is perhaps of the most concern here, considering only 10% of respondents claimed they had witnessed innovation, with an enormous 86% of respondents indicating they had not witnessed innovation as part of ITO.

Another finding suggests vendors are not as flexible as expected when delivering ITO, but this could be considered less of a concern since flexibility was identified as the least important ITO performance variable in Fig. 2. The rest of the data in Fig. 3 indicates that respondents have equally witnessed both positives and negatives for the remaining performance variables in ITO. For example, whilst 54% of respondents highlight that they have witnessed IT cost reductions, 45% of respondents identified that they have also seen IT cost increases as part of ITO. These findings would appear to echo the assertions made in literature whereby scholars affirmed there was little empirical evidence of economic benefits with ITO [13, 35, 49]. The findings pose a question as to whether the financial benefits of ITO are thus offset by increased costs in other areas? A similar question could be asked for the remaining performance variables which share similar data trends.

Interviews with company M1   Interviewing managers in company M1 provided context that they have recently transitioned to a large-scale ITO model with a single vendor. As part of this model, a high number of internal roles had been reduced. Two interviewees were quoted saying:

> *"The ITO transition has been deemed highly successful by executive level management due to the cost reductions it has achieved, but it is not as well received by staff on the ground, and even our internal customers who are being impacted by reduced quality."* **Company M1.**
> *"The vendors are not located on site, they're pretty much on the other side of the world. They don't have the process, business or local knowledge needed to deliver successful solutions in our environment. You need to be present, hearing and seeing what is happening with our systems."* **Company M1.**

The two respondents also advised that the vendors lacked skillsets in their IT systems, subsequently delaying projects, and increasing costs to try and remedy failures. Because of the role reductions, there is also a smaller amount of local IT talent to support the vendors and

connect with the business. Respondents indicated that those IT staff remaining felt friction with the vendor and were not as likely to help. The experiences of Company M1 resonate with the findings of Hans and Milthas [29], whereby their study on over 300 firms indicated companies had less success with ITO if they reduced their internal IT capacity. The loss of these internal capabilities appears to have also impacted morale, which corresponds with the findings Udo's [48] study.

ITO outcome interviews with company M2   Management from Company M2 was asked why they thought there may be a high number of positive and negative responses for the same performance variable (i.e., respondents witnessing both cost increases and cost reductions). An example response is indicted below:

> *"Our ITO journey could differ vendor-by-vendor, or by project. Sometimes we may achieve cost savings in some projects, but then we could see cost increases in other projects or services."* **Company M2.**

The respondents explained that, in contrast to Company M1, Company M2 multi-source to a multitude of vendors, and Company M2 have achieved cost reductions with some vendors and project initiatives, but have seen cost increases, user dissatisfaction and delivery delays in other workstreams, where vendors have over promised in the contract. The topic of multi-sourcing emerged in research through 1992–2013 [42] and it would appear to be providing Company M2 with some benefits in terms of cost reductions in some projects. However, the questionnaire responses could differ greatly depending on what work and vendors the respondents have been exposed to. Two of the managers in Company M2 also explained that they have had difficulty in their adoption of ITO as they have sometimes been too lenient with contracts, allowing vendors a grace period with SLAs or success criteria, and then receiving pushback when this grace period ends. These actions go firmly against the recommendations of ITO scholars discussed in the literature review, who state that SLAs are a critical contract management aspect, providing a safety net and accountability metric to challenge vendors [25–27, 39, 43]. The responses from these interviews suggested that vendors may be too comfortable with this company and do not have the right contractual incentives to invest in innovation.

Interviews with company T   In their responses, Company T indicated a higher positive response rate than either of the other companies, and seemed to have experienced more success with ITO, apart from the 'Innovation' performance variable. Company T also multi-sources to a variety of vendors, but they predominantly utilise short

Responses Illustrating the Perception of Value Delivered by ITO
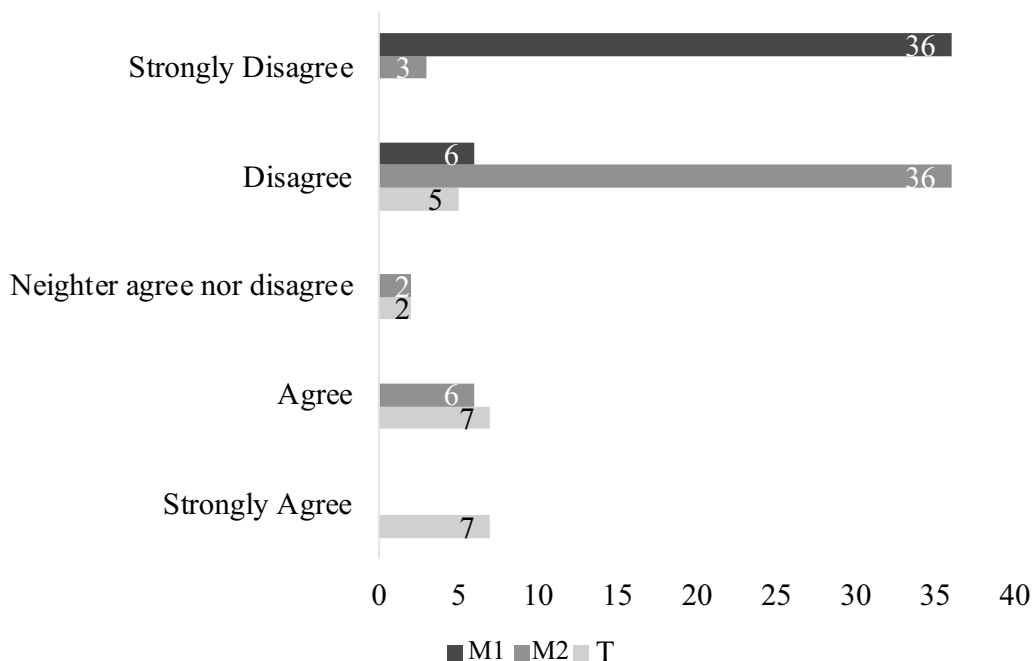
Fig. 4 Perception of value delivered to organisation by ITO, by industry

and temporary contracts. One manager was quoted as saying:

> *"In previous organisations I've seen failures with long contracts, poor contract or SLA management, vendor dependency and lack of IT skillsets. Here at [Company T] we use contracts as short as 3–6 months, to get the project delivered and then move on to the next piece of work."* **Company T**.

Interestingly, the method of utilising short contracts wasn't referenced much in existing literature but was made as a suggestion by Hoecht and Trott [31] to help in reducing external dependency.

The author also learned that Company T maintains a large internal IT presence who work with and challenge the vendor, but also maintain IT skillsets and knowledge on industry trends. A Director at Company T suggested that they do not always see enough innovation from vendors and that is because they often use cheaper resources who focus on delivering exactly what is requested, rather than seeking new ways of doing things. The managers both suggested this is one of their largest dissatisfactions with ITO, and thus they look to their own internal staff to drive innovation. These responses further support the claims made by scholars referenced in the literature review that internal IT capability is an important

complimentary aspect to successful ITO (Hans and Mithas, 2013; [44]).

Value delivered by ITO to organisations

Respondents were next asked to what extent they agree that ITO delivers value for their organisation. The responses are presented in Fig. 4.

Figure 4 shows that Company M1 perceives ITO as delivering no value to their organisation and to be unsuccessful in achieving their organisation's objectives. This is unsurprising based on the interview responses provided. However, whilst some in Company M2 do perceive ITO to deliver some value to their organisation, a large majority see it as delivering no value and as being unsuccessful in delivering their organisation's objectives. Company T, on the other hand, seems to suggest ITO is delivering some form of value to their organisation, and the majority (by a small percentage) perceive ITO to be successful in achieving their organisational objectives.

Interviews were once again leveraged to understand these responses. No further questions were asked to Company M1 since the responses provided previously can also be used to explain the responses to this question. However, data from Company M2 suggested they had experienced a mix of positive and negative outcomes with ITO, so the interviewees from their company were

asked to clarify why they thought respondents from their organisation would mainly conclude ITO to be unsuccessful in delivering organisational objectives. The interviewees concluded that whilst some positives have been found in ITO, they have also been somewhat cancelled out by some of the negatives around cost increases, service performance quality issues, and a lack of expected vendor skillsets. One of the managers explained that they are operating in an extremely competitive industry, and that the lack of innovation delivered by ITO vendors results in having to spend more money investing in talent to drive innovation internally, for fear of being overtaken by competitors or losing skilled employees to other companies. One of the managers concluded that ITO changes were needed, and was quoted saying:

> *"We're looking right now at how to remedy and improve in this ITO space. We're looking to benchmark across industry to see how others are doing it, and to learn and develop better vendor governance processes."* **Company M2.**

Company T interviewees responded that they believe shorter contracts and multi-sourcing, complemented with internal IT talent to manage vendors and knowledge, had developed a strong ITO model for them. A Director from Company T acknowledged, however, that those who responded that ITO was unsuccessful in achieving organisational objectives may have been frustrated with the lack of ideas and suggestions brought by vendors, and the lack of innovation offered. This highlights that even though Company T has experienced some successes with ITO, they are still experiencing the negative consequences of ITO as noted by scholars [13, 22, 28, 48, 49], with these findings furthermore reinforcing the lack of innovation being witnessed by organisations pursuing ITO.

ITO and innovation

Finally, participants were asked to what extent they agreed with the statement: *"IT outsourcing speeds up innovation for my organisation"*, (Fig. 5).

As already eluded in the interview responses, most respondents concluded that ITO does not speed up innovation for their organisation. Thus, no further questions were asked.

Discussion
Re-addressing the research questions
The research questions and hypotheses were answered with the following findings:

**RQ 1**   There was a large perception of ITO failure across the organisations.

H 1   This hypothesis was confirmed to be accurate.

Findings (F):

- *F1*—Innovation is the largest negative ITO outcome experienced by organisations.
- *F2*—Vendors not having the expected expertise or technical skillsets is the second largest negative outcome.
- *F3*—It is not as simple as labelling ITO as either successful or unsuccessful, and some performance variables can be equally positively and negatively experienced by organisations.
- *F4*—Job displacement can lead to decreased communication between vendor and client, potentially resulting in decreased ITO success.
- *F5*—As evidenced in Company M1, executive level management and senior managers can have different perceptions of success. Executive management may be more interested in cost reductions, whereby lower management may be more interested in client delivery, morale, and issues 'on the ground'.
- *F6*—Contract issues can reduce time for focusing on core business activities, caused by vendor management. This can influence perceptions of ITO failure.
- *F7*—Grace periods for contract and SLA delivery can negatively impact organisations when trying to properly implement, which negatively influences perceptions of ITO failure.
- *F8*—ITO project failures can increase organisational costs for redoing work.

Answer to RQ   Historic ITO issues such as degradation of services [39], lack of IT skillsets [28, 29], decreased morale [48] and loss of internal IT capabilities [28, 29, 48] are still experienced in modern organisations. Initially, the data presented in this paper would appear extremely negative if just relying on the quantitative data, which suggests that ITO is perceived as a failure in two of the organisations studied. However, the use of qualitative interviews has helped to identify that there is still value in ITO, and that it can still deliver benefits. Moreover, the mismanagement of ITO contracts and expectation setting in ITO is one of the key problem areas for organisations. By utilising methods such as well-structured contracts [25–27, 29, 43], contractual SLAs without grace periods [25–27], and combining them with methods employed by Company T, such as shorter project timeframes [31], multi-sourcing to reduce reliance on one vendor, and complimentary internal IT skills [28, 29, 48], then the organisations may further reap the rewards of ITO.

Responses Illustrating ITO's Impact on Innovation Speed
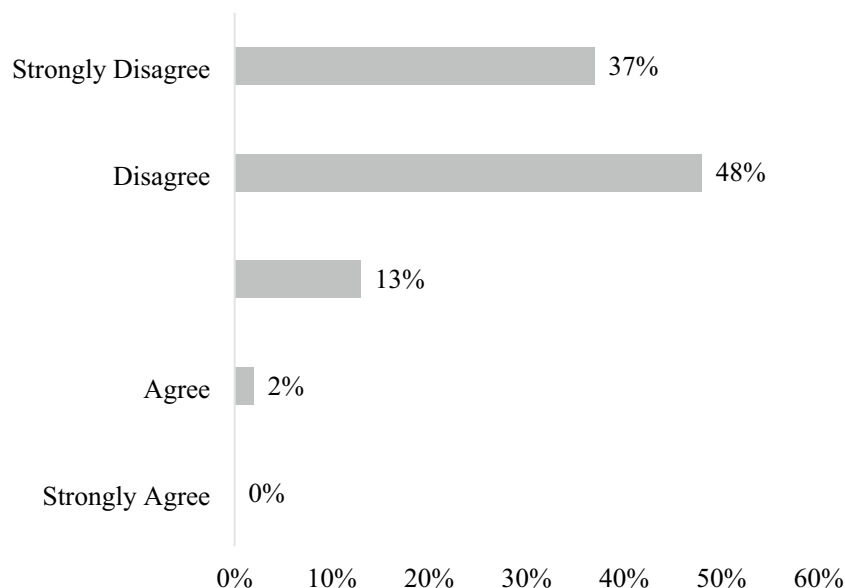
Fig. 5 Perception of ITO impact on innovation speed

RQ 2 ITO was found to have a negative impact on an organisation's ability to innovate.

H 2 This hypothesis was confirmed to be partially accurate in that a mix of internal IT capability helped to drive more innovation than companies without it, but it was found that even with internal capabilities organisations do not always reap the rewards of innovation.

Findings:

- *F9*—Length of ITO contracts can lead to suppliers becoming comfortable, and not being incentivised to innovate.
- *F10*—Internal IT skillsets compliment innovation in ITO. A lack of internal IT skillsets hinders innovation and increase vendor reliance.
- *F11*—Vendors often employ cheaper resources who have a delivery mindset vs an innovative, how can we do things differently or better mindset.

Answer to RQ The data suggest that ITO slows down innovation. As evidenced in Company T, organisations are having to rely on internal IT capabilities to stay updated with trends and deliver innovation. Similar to RQ1, a recommendation to the organisations in this paper would be to continue to maintain a balance of internal IT skillsets alongside vendors [28, 29, 48], and to explicitly state expectations and requirements in the contract, and set up regular governance processes [2, 29, 39] to measure the innovation being delivered by the vendor.

RQ 3 Industry would appear to play a part in whether ITO is successful or unsuccessful, due to the specific scenarios and business needs of the industry.

H 3 This hypothesis was confirmed not to be valid as perceptions of ITO success or failure were found to differ across industry.

Findings:

- *F12*—Industry can have some impact ITO success or failure. A clear example in this study is that of the manufacturing industry, which due to the nature of its business may require onsite vendor presence. However, it could be argued that if Company M1 maintained a stronger IT presence internally, they may have been able to support knowledge transition to the vendor, explain nuanced scenarios, and support with local needs.
- *F13*—A further finding suggests that industry is not the only variable which can impact ITO success. Instead, how ITO is implemented and governed could also influence success or failure. For example,

Company M2 experienced a mix of success and failure, where Company T had a higher rate of successful experiences with the performance variables. The findings suggest that single vs multi-sourcing, contract length, contract adherence, internal IT talent, and local job morale could all impact success or failure.

Answer to RQ The findings of this research contrast with hypothesis three of this paper and suggest that ITO success or failure can differ across industry. However, in support of the hypothesis, it would also appear that the internal IT capabilities and ITO governance and contractual processes can influence success or failure.

Recommendations to support organisations in adopting ITO

To support organisations in adopting ITO, this paper cross-examined the literature review, questionnaire, and interview responses, to suggest several recommendations for ITO best practice. This paper recommends organisations should:

1. Work with their purchasing departments to conduct market assessments, determining the vendors with the most experience and skills in their industry and ITO scope. As part of this, organisations may look to benchmark with competitors and similar companies in their industry in terms of best practices and experiences with ITO.
2. Confirm vendor skillsets before engaging in an ITO agreement, and clearly state any innovation expectations in initial engagements and contracts. Contracts should then be well-structured, with regular review points, and with all innovation and other expectations clearly defined. Organisations may find it beneficial to include financial incentives for innovation, to encourage vendor delivery.
3. Implement SLAs as soon as the contract starts, without allowing grace periods, to drive service expectations from day one.
4. Consider, where possible, working towards shorter project timeframes with ITO vendors, to encourage consistent performance, and discourage complacency.
5. Consider multi-sourcing to reduce reliance on a single vendor.
6. Develop and maintain internal IT skills to compliment ITO, and to manage and ensure knowledge transfer is conducted. Organisations should ensure this knowledge is present in the organisation before ITO agreements launch, to ensure smooth transition to vendors.
7. Focus on helping employees understand the value in their ITO agreements, clearly articulating how it enables the employees, and the company, to succeed.
8. Implement regular governance processes to monitor vendor performance.

Contributions, limitations and suggestions for future research

This paper has contributed to existing literature gaps and provided strong empirical evidence to a topic area which has lacked field research. The paper highlighted a modern driving force for ITO (innovation) which was not found in historic literature. This demonstrates that ITO expectations have evolved since initial conception, suggesting further research may be needed to revisit historic findings or beliefs. A new conceptual model has been developed, contributing to the lack of models examining ITO outcomes on organisational success or failure. The development and testing of this model now pave the way for reuse and broader research by scholars in the ITO space in the future.

However, whilst this paper has made numerous research contributions, it also suffered from several limitations. The final response sample from Company T was around half of the sample sizes of both Company M1 and Company M2, potentially challenging the reliability of these data. Due to its smaller sample size, it could be argued that the trends presented may not be widely reflective of the organisation, and the results may have been different with a larger sample size. Equally, the generalisability of this paper to broader contexts or companies is uncertain given the small sample size. Another limitation was the number of interview participants. Only eight participants were interviewed. In a larger study, it would be beneficial to interview all the questionnaire respondents to gain further insights into their experiences with ITO and the challenges in the area. It would also be useful to interview more participants across different organisational levels, to ascertain whether ITO perceptions of success and failure differ across managerial levels in the same organisation. Research could aim to understand how to bridge the gap between middle and executive management.

In terms of timeframe validity, this study was limited in its cross-sectional approach. Future studies may benefit from longitudinal approaches, monitoring the evolution of ITO success depending on different stimuli and environmental factors. For future research, it is also suggested that scholars broaden this study and consider multiple organisations across multiple industries with a larger sample size, to test generalisability of findings. By conducting this study across a larger sample audience within several industries, it will further ensure the validity of the findings and could lead to new discoveries about ITO success rates, or challenges, and pave the way for new recommendations to enable organisational success. Another area of interest would be to assess if there is any correlation between ITO success and failure based on the vendor's location.

Conclusion

This paper introduced the wide-reaching topic of ITO and the expected future growth rate as global IT spend increases. The background of ITO was introduced, starting with its initiation in the 1950s, its popularity gain in 1989, and its continuous growth and development worldwide through the 1990s and 2000s. Following this, the literature review presented an overview of the driving forces and benefits expected through ITO, alongside a comprehensive timeline of all the research themes covered in the ITO topic since its conception, identifying the concerning trend that ITO research has decreased year-by-year since 2015, and identifying four major research gaps:

1. A lack of studies focusing on the ITO outcomes experienced by organisations, and if ITO is perceived as successful or unsuccessful today.
2. A lack of ITO studies from the UK.
3. How ITO influences innovation for an organisation.
4. If an organisation's industry impacts ITO success or failure.

To cater for the research gaps, this paper identified eight performance variables from the literature and developed a new conceptual model to assess ITO success or failure in organisations. Through triangulated research, this paper found that ITO continues to present challenges to organisations through degraded services, loss of internal IT capability and morale, and reduced innovation. To overcome such challenges, this paper has presented eight recommendations to support organisations in adopting ITO, including market research on vendor skillsets and experience, the establishment of well-structured contracts, adherence to

SLAs without grace periods, shorter project durations, multi-sourcing strategies, bolstering internal IT capabilities, helping employees to understand ITO value, and rigorous governance.

Appendix
A. Survey tool
What is your age?

Under 18		18–24	25–34	35–44	45–54	55–64	65 +

What is your gender identity?

Female		Male	Transgender	Not listed	Prefer not to say

What is your length of work experience?

1–4 years		5–9 years	10–14 years	15–19 years	20+ years

In your experience, what impact does IT outsourcing have on an organisation's ability to innovate?

Positive impact		Negative impact	No opinion/not sure

Considering your experience with IT outsourcing in your organisation, do you consider IT outsourcing to generally be successful, or unsuccessful in achieving your organisation's objectives?

Successful		Unsuccessful	No opinion/not sure

In your opinion, which of the below factors would represent a successful IT outsourcing outcome for your organisation? Select all that apply.

IT cost reductions
Service performance improvements
Employee/user satisfaction with outsourced service
Ability for your organisation to focus time and efforts on core business strategy
New access to vendor technical skillsets and IT expertise
Fast service delivery
Flexibility
Technology innovation
None of the above

In your opinion, which of the below factors would represent an unsuccessful IT outsourcing outcome for your organisation? Select all that apply.

IT cost increases

Dissatisfaction with performance levels of outsourced service

Employee/users dissatisfaction with outsourced service

Being unable to focus on core business strategy

Vendors not having expected skillsets or IT expertise

Vendor service delivery speeds not as expected

Vendors not as flexible as expected

Vendors not delivering innovation to the organisation

None of the above

Which of the below outcomes have you witnessed when outsourcing IT in your organisation? Select all that apply.

IT cost reductions	IT cost increases
Service performance improvements	Dissatisfaction with performance levels of outsourced service
Employee/user satisfaction with outsourced service	Employee/user dissatisfaction with outsourced service
Ability for your organisation to focus time and efforts on core business strategy	Being unable to focus on core business strategy
New access to vendor technical skillsets and IT expertise	Vendors not having expected skillsets or IT expertise
Fast service delivery	Vendor service delivery speeds not as expected
Flexibility	Vendors not as flexible as expected
Technology innovation	Vendors not delivering innovation to the organisation
None of the above	

To what extent do you agree with the below statements? "IT outsourcing delivers value for my organisation"

Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree

To what extent do you agree with the below statements? "IT outsourcing speeds up innovation for my organisation"

Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree

B. Semi-structured interview prompts

- What are the core success factors that you pursue in ITO? What's your definition of success?
- Why do you think your organisation does not rank 'service performance improvements' and 'user satisfaction' as highly in ITO success factors?
- Survey results for your organisation suggest that employees are not interested in using ITO to free up their time, enabling them to focus on their core business deliverables. What factors do you think are influencing these responses?
- Do you think vendor flexibility is a key success factor in an ITO contract?
- Your organisation does not seem to be sufficiently satisfied with the innovation or vendor expertise delivered by ITO. What factors do you think are influencing this? What are your own thoughts based on your experience with ITO?
- Your organisation appears to have a mixed experience with ITO, with a split of employees experiencing benefits, and others not experiencing benefits. What factors do you think are influencing this? Can you tell me more about your ITO contractual set up and landscape?
- Do you use the same ITO vendors for different projects/services? Do you see differing performance and benefits depending on your ITO arrangement? What factors would influence any differences?
- When using ITO, what internal staffing models do you implement? Do you fully outsource a project/service? Do you have any hybrid internal/external arrangements?
- Your organisation seems to suggest ITO is unsuccessful in delivering organisational objectives. Would you agree with that viewpoint? What factors do you think are influencing this? Do you have any intervention plans to try and turn this viewpoint around?

Declarations

Ethics approval and consent to participate
Not applicable.

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