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A Review of Benefits and Risks of Outsourcing Building Operation and Maintenance

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Abstract

Over the past few years, there has been a growing trend and high demand for outsourcing as a procurement strategy in the field of building operations and maintenance. Successful outsourcing can bring numerous advantages to organisations, encompassing a wide range of benefits. However, if outsourcing fails, there are substantial risks that organisations may face. The objective of this paper is to analyse the current literature concerning the advantages and disadvantages of outsourcing building operations and maintenance. Additionally, it aims to compile the findings and identify any potential research gaps in the existing body of knowledge. A comprehensive search through a systematic review of the literature was conducted across numerous journals. Key terms derived from the initial literature review are used first to categorise whether the studies address outsourcing benefits, risks, motivations, or issues. The benefits and risks of outsourcing building operations and maintenance construct were then identified using content analysis methodology and an inductive coding technique. Through a methodological and well-organised approach, this paper offers an extensive collection of previously recognised benefits and risks of outsourcing building operations and maintenance. The findings of this paper indicate several expected benefits of outsourcing building operation and maintenance, including cost savings, a focus on core functions, quality improvement, reduced capital expenditure, increased economic efficiency, and greater flexibility. This paper also classifies the risk of outsourcing building operations and maintenance into five risk factors: client risk, vendor risk, contract risk, communication or relationship risk, and general risk. The result reveals that a well-executed outsourcing strategy assists organisations in effectively managing their building operations and maintenance tasks.

Keywords: Outsourcing, benefits, risks, building operation and maintenance

1.0 INTRODUCTION

The practice of outsourcing is defined as the practice of contracting or delegating specific processes, tasks, or functions of a business or organisation to an external third-party provider (Pang et al., 2021; Espino-Rodríguez & Rodríguez-Díaz, 2008). This involves transferring the responsibility for executing and managing these activities to an external entity, which can be located domestically or internationally (Geishecker & Görg, 2008). Over time, outsourcing has gained significant momentum, as the concept of firms operating solely as independent entities has become outdated (Awe et al., 2018). Outsourcing can encompass various areas of business operations, including but not limited to information technology (IT), human resources (HR), facilities Management (FM), finance and accounting, manufacturing, customer service, and logistics (Pang et al., 2021).

The practice of outsourcing building operations has witnessed a significant increase in popularity (Sridarran & Fernando, 2014). Outsourcing building operations and maintenance involves contracting out the management and execution of maintenance activities for buildings to external service providers or contractors. According to Chan (2012), building operation and maintenance activities encompass a range of tasks, such as supervision and monitoring of plant operations and equipment, normal repairs, regular inspections, equipment refurbishment, and rapid response to equipment malfunctions. Additionally, it involves the substitution of equipment, the alteration of systems, and upgrading processes. Ali et al. (2010) highlight that building operation and maintenance management involves a combination of technical and managerial measures aimed at ensuring that the building's facilities and components adhere to acceptable standards and effectively perform their intended functions.

The goal of maintenance is to sustain the proper operation and intended functionality of a physical system (Che-Ghani et al., 2023). It encompasses all essential tasks aimed at preserving buildings, including their finishes and fittings, to enable them to consistently offer similar or nearly identical facilities, amenities, and services as they did upon initial construction (Ihsan & Alshibani, 2018). Consequently, efficient planning and management of building maintenance work are crucial to maximising the productivity of built assets and associated services while also ensuring the sustainability of the building. Organisations opt for outsourcing building maintenance to achieve cost

savings, gain access to specialised expertise, enhance operational efficiency, and concentrate on core business activities (Assaf et al., 2011).

Successful outsourcing can lead organisations to various benefits, whereas a lack of success in outsourcing can expose them to significant risks (Kremic et al., 2006). Numerous studies on outsourcing have extensively explored the advantages, risks, motivators, and decision factors. However, there is a lack of investigation into the relationships, similarities, and differences among the findings presented in this abundant outsourcing literature.

The objective of this research is to examine the existing literature concerning the benefits and risks of outsourcing building operations and maintenance and to pinpoint references that can offer valuable guidance for managers and researchers for successful outsourcing implementation. This study also aims to identify gaps and areas that need exploration. This study is arranged as follows; The subsequent section outlines the methodology used in this systematic literature review. This is followed by the benefits and risks of outsourcing building operations and maintenance. The final section provides the conclusions drawn from the study and identifies potential avenues for future research.

■2.0 METHODOLOGY

This study has been undertaken as a systematic literature review and adapts to Finney and Corbett's (2007) guidelines for data collection procedures. The following section presents a comprehensive overview of the procedures employed in this systematic literature review:

2.1 Data Collection Procedure

Carley (1992) suggested eight category-coding steps applied to the actual data collection process of outsourcing building operation and maintenance.

Step 1: Select the level of analysis

In this phase, a choice was made on whether to search for individual words, sets of words, or phrases. According to Berg (2004), the first step in content analysis involves determining the level at which the sample will be chosen and identifying the units of analysis to be counted. For this article, the unit of analysis was whole journal articles. The data collection process for the literature review encompassed a wide-ranging search of numerous journals including Facilities, Sustainability, Property Management, International Journal of Building, International Journal for Housing Science, International Journal of Service Industry Management, Journal of Surveying, Construction and Property, International Journal of Building Pathology and Adoption, International Journal of Information Management, Management Decision, International Journal of Operations and Production Management, Strategic Outsourcing: An International Journal, Strategic Management Journal, IEEE Journals, International Journal of Strategic Property Management, Journal of Facilities Management, Engineering, Construction and Architectural Management, Journal of Corporate Real Estate, Journal of Business Strategy and European Management Journal.

Apart from the previously mentioned journals, the search also encompassed databases like Academic Search Premier, Emerald, IEEEXplore Digital Library, JSTOR, One Petro, ScienceDirect Journal, and Web of Science. These databases collectively host hundreds of journals covering various fields. The selection of articles from the search results was based on the search terms and criteria outlined in Table 1.

Table 1 Search terms in journals and databases

Search: Citation, abstract and title.	
Individual journal searches	**Database searches**
Outsourcing Building Operation and Maintenance	Outsourcing “AND” Building Operation and Maintenance
Outsourcing Benefits	Outsourcing “AND” Benefits
Outsourcing Risk	Outsourcing “AND” Risks
Outsourcing Motivations	Outsourcing “AND” Motivations
Benefits and Risk of Outsourcing Building Implementation	Benefits and Risk “AND” Outsourcing Building Operation and Maintenance
Outsourcing Building Implementation	Outsourcing Building Implementation
Outsourcing Building Operation and Maintenance Implementation	Outsourcing Building Operation and Maintenance “AND” Implementation

The chosen keywords for this search were derived from the keywords provided by authors in related articles identified during a beginning literature review. The primary focus was on outsourcing building operation and maintenance within the facilities management sector, while also incorporating relevant points from other sectors. The search was restricted to peer-reviewed or scholarly journals. The decision to include an article in the compilation depended on the researcher's reading of the abstract and title. Articles were selected for further analysis if they potentially contained data pertinent to the success factors of outsourcing building operations and maintenance.

Step 2: Determine how many step to code for

During this phase of the coding process, one must decide whether to code based on a pre-established set of theories or to opt for a more interactive coding approach. Berg (2004) explains that theoretical classes refer to concepts that arise during data analysis. As previously mentioned, this study incorporates the benefits and risks of outsourcing building operations and maintenance, which are prevalent in the existing literature (Berg, 2004).

Step 3: Determine whether to code for presence or frequency of the concept

In this stage of the coding process, the focus is on coding for the frequency of concepts, which allows for a deeper understanding of the relative importance of the factors.

Step 4: Determine how to differentiate between concepts

This stage requires a decision on whether to code concepts precisely as they appear or to code them in a changed or collapsed form. This phase is commonly known as the phase of term generalisation. In this study, words with the same meaning were classified under the same construct.

Step 5: Develop rules for text coding

It is crucial to devise a set of translation guidelines that can be consistently applied to ensure both coherence and internal validity. For this particular study, the following translation rules were formulated and implemented: In the initial stage of reading all articles, the main focus was on identifying any references associated with the "benefits and risks of outsourcing." The identified concepts were recorded in a bibliographic programme without being assigned to specific categories at this stage. During the second round of article revision, the aim was to identify similarities among concepts and group similar ones together. Each category and concept underwent careful examination and review to determine whether merging or subdividing was necessary and to determine any further categories. After all categories were concluded, the concepts were further examined to determine the appropriate construct terms, which could either be derived from existing coded terms or introduced as entirely new ones.

Step 6: Determine of what to do with 'irrelevant' information

In this step of the coding process, the task involves determining how to deal with 'irrelevant' information found in the text. For this research, the literature compilation focused on gathering all ideas that reflected the benefits and risks of outsourcing building maintenance and operation. Therefore, the content analysis encompassed the entire document, coding only the text that indicated potential advantages and disadvantages. As a result, there were no concerns regarding how to handle irrelevant coded information.

Step 7: Code the text

At this phase, the manual coding process was executed, adhering to all the translation rules pinpointed in Step 5.

Step 8: Analyse the result

In this phase of the coding method, one must decide whether to code based on a pre-established set of theories or to opt for a more interactive coding method. Berg (2004) explains that theoretical classes refer to concepts that arise during data analysis. As mentioned earlier, the benefits and risks of outsourcing building operation and maintenance are included in the emerging classes in this study, as they are present in the existing literature (Berg, 2004).

2.2 Study selection and data extraction

The search yielded 367 studies based on the specified search term. Out of these, 158 studies were eliminated, due to duplication, and an additional 81 records were eliminated, as they did not meet the inclusion standards after reviewing their abstracts. The data from the remaining studies were then extracted and organised into two categories: one for examining the benefits and another for evaluating the risks associated with outsourcing building maintenance and operation. The extracted information was tabulated for further analysis.

■ 3.0 THE RATIONAL FOR OUTSOURCING BUILDING OPERATION AND MAINTENANCE

The reasoning behind outsourcing building operations and maintenance is complex and involves various factors. Engaging external services for maintenance offers several benefits, such as lowering costs, gaining specialised expertise, and enabling a focus on core competencies (Lok et al., 2021). Rahman et al. (2021) note that outsourcing can not only enhance business processes but also lead to increased profitability. During economic downturns, building owners can reduce operation and maintenance costs, contributing to overall

cost-effectiveness (Lai et al., 2008). Additionally, outsourcing operations and maintenance has the potential to optimise resources, enhance performance, and improve service delivery (Ahmed, 2019; Straub, 2007).

Furthermore, outsourcing operation and maintenance services may grant access to innovative and value-adding practices, such as integrated service solutions, thereby contributing to overall organisational value (Wong et al., 2021). This is particularly relevant in the healthcare context, where hospitals can benefit from outsourced maintenance providing technology, knowledge, resources, and innovation (Wong et al., 2021).

The decision to outsource maintenance services is shaped by diverse factors, including the necessity to manage budgets, reduce permanent staff numbers, and adapt to evolving trends in maintenance and operational strategies (Parmar et al., 2023). Additionally, addressing barriers to improving energy efficiency in buildings, such as the lack of knowledge and motivation among operation and maintenance staff, as well as limited financial resources, can be achieved through outsourcing (Yik et al., 2002).

In summary, the rationale for outsourcing building operations and maintenance is justified by the potential for cost reduction, access to specialised expertise and resources, business process enhancement, and the optimisation of maintenance resources. These elements collectively contribute to the overall value and efficiency of building maintenance and operation.

■ 4.0 EXPECTED BENEFITS OF OUTSOURCING BUILDING OPERATION AND MAINTENANCE

4.1 Cost Saving

Outsourcing is widely recognised for its potential to significantly reduce operational costs, making it a highly valued strategy among organisations. By outsourcing building operations and maintenance, companies can achieve substantial cost savings through various avenues. Firstly, it eliminates the need for maintaining an in-house maintenance team, which includes expenses related to salaries, benefits, training, and the retention of skilled personnel. Additionally, it removes the necessity of investing in expensive equipment and infrastructure, as these responsibilities are transferred to the service provider. Service providers, due to economies of scale, can often offer more competitive pricing. They service multiple clients, allowing them to purchase materials and equipment in bulk, thus reducing costs. Their specialised expertise and efficient processes further contribute to the overall cost savings. These savings can be reinvested into core business areas, enhancing the organisation's competitiveness and driving growth (Espino-Rodríguez & Ramírez-Fierro, 2018; Jiang et al., 2006; Rahman et al., 2021).

4.2 Focus on Core Activities

Outsourcing allows organisations to concentrate on their main business functions and strategic objectives by relieving them of non-core activities. By outsourcing building operations and maintenance, organisations can redirect their resources—both human and financial—towards activities that directly contribute to their core competencies and strategic goals. This enables organisations to focus on their primary business activities and allocate more time and resources to strategic initiatives and revenue-generating activities. As a result, companies can enhance their value proposition and achieve a greater strategic focus. This strategic redirection allows for improved operational efficiency and better alignment with the organisation's long-term goals (Lok et al., 2021; Pratap, 2014; Sztorc, 2018).

4.3 Quality Improvement

Outsourcing to specialised service providers can significantly improve the quality of building maintenance. These providers bring with them specialised knowledge, tools, and resources that ensure high-quality maintenance services. Their expertise ensures that buildings are well maintained, which can lead to improved building performance, reduced downtime, and enhanced occupant satisfaction. Outsourcing contracts often include specific performance metrics and quality standards, ensuring accountability and high service levels. Additionally, external providers can handle sensitive issues with greater confidentiality and objectivity, potentially addressing problems that internal staff might overlook (Cooke, 2005; Mujasi & Nkosi, 2019).

4.4 Reduced Capital Expenditure

Outsourcing can reduce the need for capital expenditures on building maintenance. Organisations can outsource underperforming departments, reducing visibility and overhead costs. Service providers can introduce and manage technology improvements more efficiently and cost-effectively than in-house teams. This allows organisations to leverage new technologies and improvements without the burden of direct investment, further reducing capital expenditures and enhancing operational efficiency (Bacea & Borza, 2015).

4.5 Increase Efficiency

Operation and maintenance service providers are often highly specialised in their field, operating with a high degree of efficiency. They have streamlined processes and systems in place that enhance productivity and reduce downtime. By leveraging their expertise and advanced technologies, these providers can deliver maintenance services more efficiently. This results in improved productivity, as tasks are completed more quickly and effectively, and reduced downtime, as issues are resolved promptly and competently (Elhoushy et al., 2020; Suweero et al., 2017).

4.6 Greater Flexibility

Outsourcing building operations and maintenance provides organisations with flexibility in managing their maintenance services. Organisations can easily scale maintenance services up or down based on their needs without making significant internal adjustments. This flexibility allows organisations to respond quickly to changes in demand or operational requirements, ensuring that their maintenance needs are always met efficiently and effectively (Suweero et al., 2017; Sztorc, 2018).

4.7 Access to Specialised Expertise

Outsourcing allows organisations to leverage the specialised knowledge and skills of maintenance service providers who have extensive experience in managing and maintaining buildings. This results in higher-quality maintenance services and improved operational efficiency. Additionally, outsourcing reduces risks and liabilities, as these specialists ensure compliance with relevant legislation and offer access to best practices and leading industry standards. This ensures that maintenance operations are conducted safely, efficiently, and following all necessary regulations (Mujasi & Nkosi, 2019; Kaveh Pishghadam & Esmaeeli, 2023).

4.8 Access to Advanced Technology

Outsourcing building operations and maintenance can provide organisations with access to advanced technologies and tools that may be too costly for them to acquire and maintain in-house. Service providers can leverage these technologies to enhance maintenance processes, data management, and reporting. Access to advanced technology is a significant driving force behind outsourcing, as it allows organisations to improve technical services and gain quick access to new technologies. By outsourcing, organisations can reduce transaction times, handle tasks more efficiently, and stay ahead in the competitive landscape by utilising the latest technological advancements (Lacity & Hirschheim, 1995; Suweero et al., 2017).

Overall, organisations consider these diverse factors when making outsourcing decisions, weighing the potential benefits against the specific needs and circumstances of their operations. Table 2 summarises the lists of references for the expected benefits of outsourcing building maintenance and operations from 2000 to now.

Table 2 Expected benefits of outsourcing building operation and maintenance

Expected benefits	References
Cost saving	Espino-Rodríguez and Ramírez-Fierro (2018), Gilley et al. (2004), Gordon and Zimmerman (2007), Harland et al. (2005), Jiang et al. (2006), Lacity et al. (2010), Lok et al. (2018), Rahman et al. (2021)
Focus on the core function	Asatiani et al. (2019), Elhoushy et al. (2020), Espino-Rodríguez and Ramírez-Fierro (2018), Lacity et al. (2010), Lok et al. (2021), Pratap (2014), Suweero et al. (2017), Sztorc (2018), Vetráková et al. (2013), Young (2007)
Quality improvement	Baytok et al. (2013), Espino-Rodríguez and Ramírez-Fierro (2018), Suweero et al. (2017), Lacity et al. (2017)
Reduced capital expenditure	Bailey et al. (2002), Baytok et al. (2013), Gilley et al. (2004), Gordon and Zimmerman (2007), Lamminmaki (2011), Sharma et al. (2015)
Increase efficiency	Elhoushy et al. (2020), Hsu (2011), Lamminmaki, (2011), Matopoulos et al. (2007), Sharma et al. (2015), Suweero et al. (2017)
Greater flexibility	Baytok et al. (2013), Espino-Rodríguez and Ramírez-Fierro (2018), Harland et al. (2005), Kakabadse and Kakabadse (2003), Sharma et al. (2015), Suweero et al. (2017), Sztorc (2018)
Access to specialised expertise	Hsu (2011), Kakabadse & Kakabadse (2000; 2003), Kaveh Pishghadam and Esmaeeli (2023), Mujasi and Nkosi (2019)
Access to advanced technology	Suweero et al. (2017)

■ 5.0 POTENTIAL RISK OF OUTSOURCING BUILDING OPERATION AND MAINTENANCE

Outsourcing risk pertains to the uncertainties and unfavourable consequences that can influence the outcome of an outsourcing partnership between a company and its vendors. These uncertainties and potential negative outcomes can significantly affect the overall success or failure of the outsourcing arrangement (Ikediashi & Ogunlana, 2015). Managing these risks effectively is crucial, as they involve various factors that are difficult to predict. Fan et al. (2012) classify seven risk factors related to IT outsourcing. These risk factors encompass undividable technological aspects, lack of strong management, cultural compatibility, instability in requirements, uncertainty regarding legal obligations, technological intricacies, and coordination challenges between the client and the vendor. Besides, Ikediashi et al. (2012) highlighted risks within facilities management (FM) outsourcing, emphasising various factors such as high vendor labour rates, labour-related charges, lack of vendor responsibility for asset performance, problems with billing, excessive management burdens, disadvantageous contract conditions, service or asset breakdowns, subpar performance from service providers, financial shortcomings, cultural clashes, and labour-related risks.

Atkin and Brooks (2009) conducted research from the facilities management (FM) perspective to identify risks faced by organisations in their pursuit of efficient FM. These risks can impede efforts to achieve value for money and encompass factors such as inadequate client

function resources or inexperience, insufficient implementation planning and allocation of responsibilities, mishandling of transfer of actions, challenges with supplier and contract manager relationships, conflicts of interest in handling in-house tenders, undecided functions and obligations, possible loss of control over FM function and access to documents and knowledge, and lack of standardised FM contracts or sufficient contract conditions. These studies shed light on the various risks associated with outsourcing and offer valuable insights into the specific factors that require effective consideration and management to mitigate potential adverse impacts on outsourcing relationships (Atkin & Brooks, 2009). The severity of a risk factor depends on its significance and the level of monitoring required. Extensive literature exists on outsourcing risk, covering different aspects of this topic.

Ikediashi & Ogunlana (2015) categorised outsourcing risks into five significant groups: client risks, vendor risks, contract risks, relationship risks, and general risks. Client-related risks refer to the potential adverse consequences that may occur due to the excessive influence exerted by the client in the outsourcing transaction. Nonetheless, within this category, three key factors carried considerable weight: clients lacking experience in outsourcing procedures, interruptions in the supply of services, and unclear delineation of responsibilities and objectives. There are five variables under client risk, such as inexpert clients, disturbances to the resources of services, uncertain accountabilities and targets, high organisation costs, and disproportionate monitoring of performance. Vendor risks are associated with the resourceful behaviour displayed by outsourcing vendors. This category comprises nine variables such as financial failure of the chosen contractor, low quality of services, vendor not meeting performance expectations, service failure in critical services, lack of sufficient vendor responsibility, the potential for becoming overly dependent on providers, and the potential for providers to act opportunistically and at unreasonably high vendor rates. Besides, contractual risks arise due to deficiencies in outsourcing contracts that have the potential to lead to re-negotiations or even the complete termination of the agreement. There are eleven variables under contract risk, such as labour call-out fees, no standard for measuring quality, an unclear definition of service scope, no standardised contract forms, poor implementation of planning policies, reduced strategic flexibility, outsourcing of core activities, irregularities in contract awarding, decreased employee morale, disadvantageous contract terms, and inadequate risk allocation. Relationship risks stem from the existence of strained connections between clients and vendors. In an outsourcing relationship, there is an underlying assumption that the outcomes will be mutually advantageous, the involved parties will treat each other fairly and justly, and they will rely on each other by exchanging rewards. This category comprises four variables, such as weak vendor-client relationships, clashes of interest, breaches of confidentiality, and misuse of commitments and obligations. The last risk is general risk. The risks falling within this category are labelled as generic since they can be linked to any of the other five categories. This group consists of four risk variables: issues with security requirements, apprehension about the unknown, concerns regarding reputational risks, and issues with third-party liabilities.

Instead of extensively examining each expected risk individually, the most substantial outsourcing risks, which are also relevant to maintenance outsourcing, have been composed and summarised in Table 3 with a list of references. Table 3 highlights several potential risks to be cautious about, such as the possibility of losing control of resources or core competence, experiencing higher costs, quality issues, and challenges in communication and coordination. Moreover, the literature points out that outsourcing may affect the organisation by making it more dependent on external providers, causing issues with data security and confidentiality, decreasing organisational flexibility, and issues with employee morale.

Table 3 Expected risk of outsourcing building operation and maintenance

Expected risk	References
Loss of control/core competence	Ding (2023), El Fadil and St-Pierre (2016), Hoecht and Trott (2006), Ikediashi (2012), Kakabadse and Kakabadse (2000), Kremic et al. (2006), Latif et al. (2017), Ngwenyama and Sullivan (2007), Osuizugbo et al. (2020)
Quality issues	Atkin and Brooks (2009), Ding (2023), Elmuti and Kathawala (2000), Jimmy et al. (2012), Khan et al. (2022), Osuizugbo et al. (2020), Yun et al. (2009)
Communication and coordination challenges	Ahmed (2020), Atkin and Brooks (2009), El Fadil and St-Pierre (2016), Ikediashi et al. (2012), Jimmy et al. (2012), Khan et al. (2022), Latif et al. (2017), Maelah et al. (2010), Osuizugbo et al. (2020)
Dependency on external providers	El Fadil and St-Pierren (2016), Jimmy et al. (2012), Kremic et al. (2006), Osuizugbo et al. (2020)
Data security and confidentiality	Aron et al. (2005), Atkin and Brooks (2009), Ding (2023), Gonzalez et al. (2005), Goo et al. (2004), Hoecht and Trott (2006), Khan et al. (2022), Latif et al. (2017), Osuizugbo et al. (2020)
Cost overruns	Ikediashi et al. (2012), Jimmy et al. (2012), Khan et al. (2022), Kremic et al. (2006), Latif et al. (2017), Marttonen and Kärri (2012), Osuizugbo et al. (2020), Tajdini and Nazari (2012), Yun et al. (2009)
Decrease flexibility	Ahmed (2020), El Fadil and St-Pierre (2016), Ikediashi (2012), Jimmy et al. (2012), Latif et al. (2017), Marttonen and Kärri (2012), Osuizugbo et al. (2020), Sheng and Baharum (2015),
Poor morale/employee issues	Atkin and Brooks (2009), Ahmed (2020), Ikediashi et al. (2012), Khan et al. (2022), Kremic et al. (2006), Latif et al. (2017), Osuizugbo et al. (2020), Sheng and Baharum (2015)

5.1 Loss of Control/Core Competence

Outsourcing building operations and maintenance can lead to a significant loss of control over these functions. When tasks are handed over to an external provider, the organisation may no longer have direct oversight or the ability to quickly intervene in operations. This can result in a reduction in the organisation's core competencies, as employees may not be involved in the day-to-day processes, leading to a diminished understanding and expertise in maintaining their infrastructure. Over time, this could affect the organisation's ability to

innovate or respond to internal challenges effectively (Ding, 2023; El Fadil & St-Pierre, 2016; Hoecht & Trott, 2006; Ikediashi, 2012; Kakabadse & Kakabadse, 2000; Kremic et al., 2006; Latif et al., 2017; Ngwenyama & Sullivan, 2007; Osuizugbo et al., 2020).

5.2 Quality Issues

Quality issues are a common risk associated with outsourcing. The service quality might not meet the organisation's expectations due to various factors such as inadequate vendor capabilities, insufficient oversight, or differences in quality standards. This risk can be exacerbated if the external provider prioritises cost savings over quality, leading to substandard maintenance and operation outcomes. Poor quality in building maintenance can result in increased wear and tear, frequent breakdowns, and an overall reduced lifespan of building systems and components (Ding, 2023; Jimmy et al., 2012; Khan et al., 2022; Osuizugbo et al., 2020).

5.3 Communication and Coordination Challenges

Effective communication and coordination are crucial in outsourcing arrangements to ensure that both the client and the service provider are aligned. Challenges in these areas can lead to misunderstandings, misaligned objectives, and delays in response times. These issues can stem from cultural differences, language barriers, or simply differing communication styles and processes. Poor coordination can result in missed maintenance schedules, delayed repairs, and overall inefficiencies in building operations (Ahmed, 2020; El Fadil & St-Pierre, 2016; Jimmy et al., 2012; Khan et al., 2022).

5.4 Dependency on External Providers

Outsourcing can lead to an over-reliance on external service providers. This dependency can be risky if the vendor fails to deliver the required services, increases their prices, or faces operational difficulties themselves. Such reliance can also make it challenging for the organisation to switch providers or bring the services back in-house without significant disruption and cost. This risk highlights the importance of having contingency plans and maintaining some level of internal capability (El Fadil & St-Pierre, 2016; Jimmy et al., 2012; Osuizugbo et al., 2020).

5.5 Data Security and Confidentiality

Outsourcing building operations can expose the organisation to data security and confidentiality risks. Sensitive information related to building infrastructure, security systems, and operational protocols might be accessed by external providers. If the vendor lacks robust data security measures, this information could be compromised, leading to potential security breaches, unauthorised access, and data theft. Ensuring that the outsourcing contract includes stringent data protection clauses is essential to mitigate this risk (Ding, 2023; Khan et al., 2022; Latif et al., 2017; Osuizugbo et al., 2020).

5.6 Cost Overruns

Although outsourcing is often pursued to reduce costs, it can sometimes lead to cost overruns. These can occur due to underestimated project scopes, changes in service requirements, hidden fees, or inefficiencies in the service provider's operations. Additionally, any disruptions or issues that require urgent resolution might incur additional charges, further increasing costs. It is crucial to have a well-defined contract with clear cost expectations and contingency provisions to manage this risk (Khan et al., 2022; Latif et al., 2017; Osuizugbo et al., 2020).

5.7 Decrease Flexibility

Outsourcing can reduce an organisation's flexibility to make quick changes or respond to unexpected situations. The terms and conditions of the outsourcing contract can limit the organisation's ability to adapt its maintenance and operation strategies as needed. This rigidity can be problematic when dealing with emergencies, evolving business needs, or implementing new technologies. Ensuring that the contract allows for some level of flexibility and regular review can help mitigate this risk (Latif et al., 2017; Osuizugbo et al., 2020; Sheng & Baharum, 2015).

5.8 Poor Morale/Employee Issues

Outsourcing can negatively impact the morale of existing employees. Workers might feel threatened by the presence of external service providers, leading to job insecurity, reduced motivation, and decreased productivity. This can result in a loss of valuable institutional knowledge and expertise as employees may choose to leave the organisation. Managing this risk involves transparent communication, ensuring job security where possible, and integrating internal and external teams effectively (Ahmed, 2020; Khan et al., 2022; Latif et al., 2017; Sheng & Baharum, 2015).

6.0 CONCLUSION

This paper has systematically reviewed the benefits and risks of outsourcing building operations and maintenance. The findings showed that the motivation for outsourcing building operations and maintenance can be classified into six main categories: strategic, management, technological, economic, quality, and functional. Additionally, this paper has explored the benefits of outsourcing building operations and maintenance, such as cost savings, a focus on core functions, quality improvement, reduced capital expenditure, increased efficiency and flexibility, access to specialised expertise, and advanced technology. Besides, the study also emphasised the potential risks of outsourcing building operations and maintenance, including loss of control over resources or core competence, experiencing higher costs, quality issues, challenges in communication and coordination, dependency on external providers, issues in data security and confidentiality, decreased organisational flexibility, and issues with employee morale. The risk of outsourcing building operations and maintenance can be categorised into five areas: client risks, vendor risks, contract risks, relationship risks, and general risks.

This study will aid the organisation in recognising opportunities, addressing challenges, and considering crucial factors related to building operations and maintenance outsourcing. Within the existing literature, there is an abundance of information concerning outsourcing building operations and maintenance, yet it remains untapped in terms of its potential for providing better decision support. The objective of this study is to bridge this gap by organising and presenting the available information in a structured format, thereby empowering organisations to make well-informed choices regarding building operations and maintenance outsourcing.

Future research should focus on the long-term impacts of cost savings achieved through outsourcing building operations and maintenance, examining how these savings contribute to financial health and reinvestment strategies over time. Studies should also explore the direct and indirect effects on core business performance, particularly how resource reallocation enhances business growth and innovation. Additionally, developing comprehensive metrics for quality improvement and efficiency gains will be crucial in understanding the tangible benefits of outsourcing. Research should also investigate the role of specialised expertise and advanced technologies provided by service providers, how outsourcing contributes to organisational flexibility and scalability, and the mechanisms of innovation and continuous improvement facilitated by external partners.

Besides, to comprehensively understand the risks associated with outsourcing building operations and maintenance, future research should examine strategies to mitigate the loss of control and core competencies, ensuring organisations maintain critical oversight. Investigating quality assurance mechanisms and the impact of communication and coordination challenges on service delivery is essential. Studies should also focus on the dependency on external providers, data security and confidentiality risks, and potential cost overruns. Additionally, research should explore how outsourcing affects organisational flexibility, employee morale, regulatory compliance, and the management of vendor relationships, providing frameworks for effective risk management and contingency planning.

By considering factors like performance metrics, contractual issues, and the impact on organisational capabilities, entities can make informed decisions regarding the outsourcing of building operations and maintenance services.

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