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# e-Proceedings NCTS 2022

## NATIONAL CONFERENCE ON TVET FOR UNDERGRADUATE STUDENTS



# E-PROSIDING NATIONAL CONFERENCE ON TVET UNDERGRADUATE STUDENTS 2022

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However, since this book only covers topics related to element costs then readers are encouraged to refer to the contents of other related books to gain a detailed understanding in cost accounting.

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**Published by:**

Politeknik Tuanku Syed Sirajuddin (PTSS)

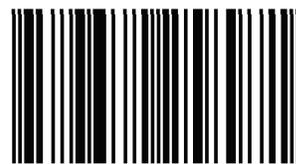
Pauh Putra, 02600 Arau, Perlis

Tel No. : 04-988 6200

Fax No. : 04-988 6300

[www.ptss.edu.my](http://www.ptss.edu.my)

e ISBN 978-967-2258-97-1



9 7 8 9 6 7 2 2 5 8 9 7 1

e-Proceedings NCTS 2022

## FACTORS OF OUTSOURCING IN FACILITIES MANAGEMENT SERVICES IN HEALTHCARE FACILITIES

Mary Kathlyn Anak Vincent<sup>1</sup>, and Nik Zety Akhtar Abdul Aziz<sup>2</sup>

Civil Engineering Department, Polytechnic Sultan Salahuddin Abdul Aziz Shah, Shah Alam, Selangor  
*marykathlyn63@gmail.com*  
*nikzetypsa@gmail.com*

### Abstract

Outsourcing is an important consideration for any organization mainly in a hospital facility. In a more progressive community, hospitals will have to provide modern technology to increase treatment efficiency and provide excellent services to the customers. Various medical research, engineering, and others have produced a vast selection of new treatments and equipment, much of which requires specialized training and facilities for its use. Hospitals thus have become more costly to operate. Therefore, to manage the hospital facility equipment more efficiently, outsourcing is one of the decisions to have a more organized and cost-effective selection. The objective of this research is to analyze factors in decision-making for outsourcing. There are 3 comparisons of hospital buildings to obtain 123 total respondents from different classifications. This research study suggests an improvement in outsourcing strategy for facilities management in hospitals.

**Keywords:** *Outsourcing, Hospital Facility, Technology, Cost-Effective*

### 1. Introduction

A facility is an asset or property built, installed, or established to provide social and economic activities (Xu et al., 2019). A facility is also a building, amenity, place, or piece of equipment for a specialized purpose (Market Business News, 2022.). Meanwhile, the management of facilities such as facilities management is a profession that encompasses multiple disciplines to guarantee functionality, comfort, safety, and efficiency of the built environment by integrating people, place, process, and technology (Xu et al., 2019). In general, Facilities Management (F.M.) is service-based, so it is necessary to focus on the end-user, and the client and ensure communication between both ways of agreed service level and expectation (Bartleby, 2021.). The two types of management operations are strategic and tactical management. Strategic includes consultancy of designers,

accountants, cashiers (and so forth). Tactical management includes managing agents, engineers, catering, security, and I.S. management.

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Meanwhile, operational management deals with the performance of contractors, artisans, and industrial workers and staff. Facilities management deals with all the below disciplines department to accomplish the organisational goal with. The development of information technologies changed the business environment. Companies seeking cost reduction and increased accessibility of their services have started investing in virtual offices in strategically convenient areas. The increase of information and the changing economic structure urged the development of global and incorporated operations (Zitkiene & Dude, 2018). Therefore, the facility management services market has come into a high experience phase, owing to increasing awareness with end-users, though the market will continue to grow progressively. High infrastructure growth has headed to an increased requirement for more specialised vendors who have the skill to operate in both technical and non-technical tasks within a given business (Maintenx, 2018.).

Hospital is a treatment facility used to treat and diagnose patients. For modern hospitals, they can also serve as a place for teaching. In a more progressive community, hospitals will have to provide modern technology to increase treatment efficiency and provide excellent services to the customers. Various medical research, engineering, and others have produced a vast selection of new treatments and equipment, much of which requires specialised training and facilities for its use. Hospitals thus have become more costly to operate. Therefore, to manage the hospital facility equipment more efficiently, outsourcing is one of the decisions to have a more organised and cost-effective selection (Pamela C. Fralick, 2020.). Outsourcing transfers part of the organisational activities to another third party to oversee, manage and make the right decision to perform services to support the business activities. (Man Wah Conny Wang et al., 2020). The need for outsourcing in hospitals is to ensure improvement of the quality and performance of the services. Thus, dividing the functions into a specific area and outsourcing them to service providers is based on their specialities. This will make them focus and produce better results. Other than that, outsourcing is affected by globalisation, technological innovation, competition, and economic changes (Zitkiene & Dude, 2018).

## 2. Background and Literature Review

In this chapter, the information is gathered from related articles and journals. This paper also discussed the relevant topics and issues. Therefore, the purpose of doing a literature review is to give a broad overview of what the research is about and identify the gap research that can be addressed. Privately owned health care now represents a virtual image in the Malaysian healthcare sector's overall development. These developments point to the emergence of a competitive healthcare enterprise in Malaysia, where private health care will compete with current public health care facilities and increase private enterprise. Private hospitals must preserve their services to meet their objectives and satisfy their clients. Certain facilities in Malaysian private hospitals have been outsourced. As a result, engaging a maintenance staff to keep the facilities provided in private hospitals in good working order is inevitable. Meanwhile, Facilities Management has been defined in various ways, depending on its specific goals and scope. Facilities Management involves people, process, environment, health, and safety, all of which are responsibilities in Facilities Management.

The focus on Facilities Management in the workplace appears to be a generality (Wan Mohd Rani, 2018). Facilities Management's responsibilities, according to some studies, include organizing, managing, and coordinating the operational and strategic management of facilities and buildings. As a result, the practical and proper operation of all its physical features may be ensured, and the creation and maintenance of a safe and productive atmosphere for all occupants. Facilities Management services are provided by a team that can be outsourced and supplied (Man Wah Conny Wang et al., 2020). In (Haugen & Klungseth, 2017) perspective, Facilities Management should be viewed as a "service to an organization" and a discipline different from others, since it focuses on "process and service, as well as the link between facilities and an organization's objectives."

### 2.1 Facilities Management Outsourcing

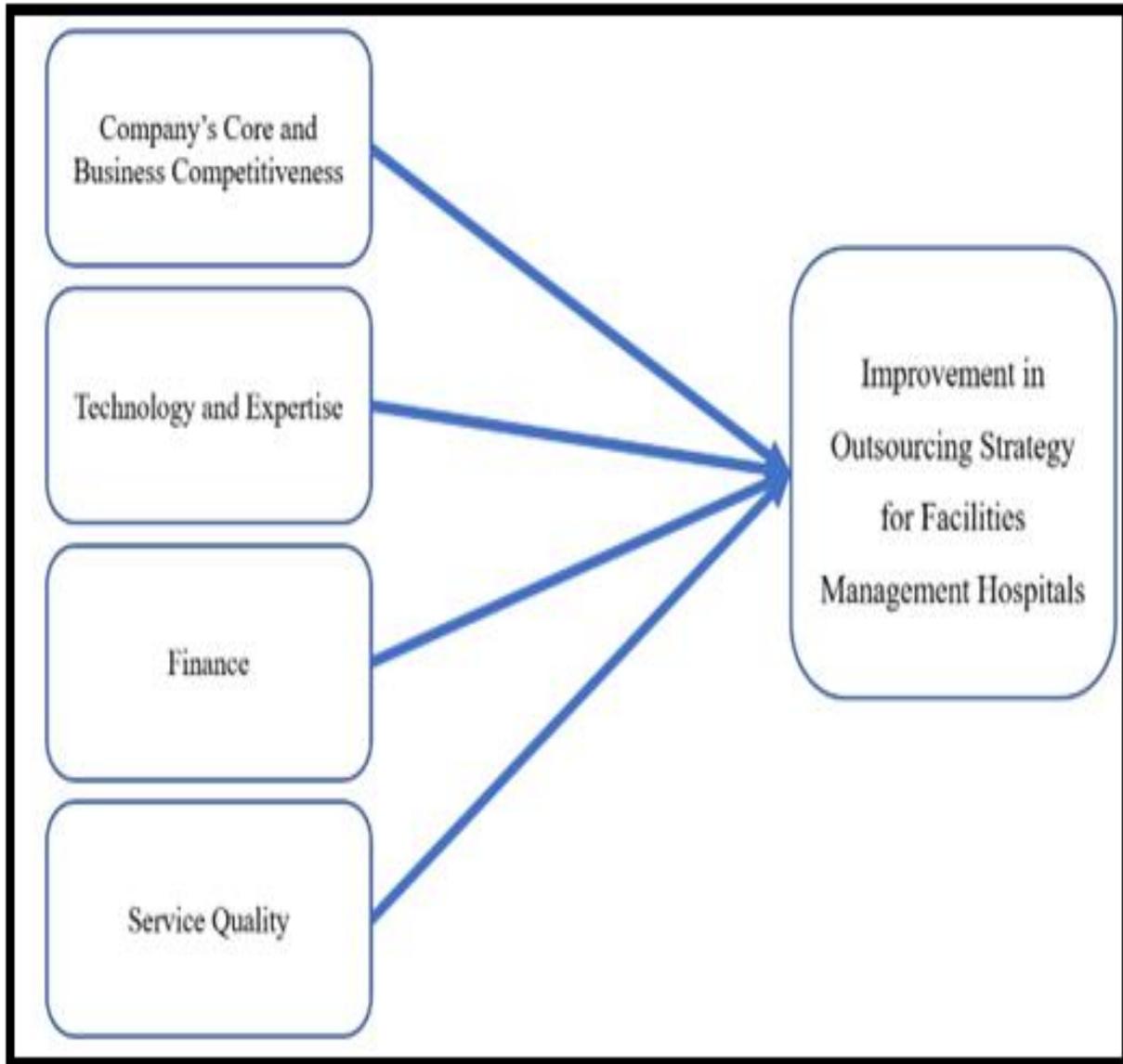
Outsourcing facilities management is a cost-effective method of lowering costs, increasing efficiencies, reducing internal workload constraints, and mitigating hazards. As a result, many firms are selecting to outsource their facilities management needs. Facilities management outsourcing allows a company to concentrate on the core functions of its business while cutting down on time spent on property and facility management. It also eliminates the need to work with individual contractors. If subcontracting the services to a trusted specialist, they will benefit from the business (Bellrock Group, 2020). To put it another way, the duty for managing Facilities Management services is transferring to either expert partners or outsourcing the complete package to a total facilities management business (Ikediashi & Odesola, 2016). Meanwhile, outsourcing means outsourcing support services to an outside contractor for all maintenance work to control and deliver quality and service standards, typically for big projects (Osita et al., 2021). However, Facilities Management services are a cost-effective

solution to ensure that your facility requirements are met. Hence, your facility management concerns are handled by a third party (Cubitt James, 2020).

## 2.2 Outsourcing in Healthcare Facilities

Today, the outsourcing market is primarily driven by the healthcare systems, health insurance, and pharmaceutical industries. Healthcare practitioners are under pressure to provide a wide range of services to an ever-growing number of patients in an increasingly fast-paced world. These businesses have begun to use the outsourcing model to improve and focus on their core competencies while lowering operating and maintenance expenses. Working on behalf of other sectors, the healthcare industry, particularly hospitals and health systems, is turning to outsource or hiring another firm or provider to run some areas of the business to gain efficiency and save money on administrative expenses. This will move the attention away from cost concerns and toward care quality and efficiency. Furthermore, for healthcare providers, outsourcing is about more than just lowering administrative expenses. Healthcare outsourcing should be able to meet the demands of such advances with new health plans. This entails broadening outsourcing's scope beyond basic and routine front-office activities to include health management and patient engagement (Richardson & Mosman Wrench, 2020). According to (Prachi, 2019), healthcare is one of the most important sectors, with the goal of effectively treating every patient. The industry focuses on increasing workforce productivity to provide positive outcomes for patients. Customer happiness, or, to put it another way, patient comfort, is extremely important for a healthcare company since it not only produces goodwill for the company but also secures its recognition among rivals. When a firm outsources a business service, it receives assistance from a competent partner, which is the most effective option for the company to reduce its burden and focus on key operations.

### 2.3 Research Conceptual Framework



**Figure 1: Conceptual Framework**

Figure 1 above shows a conceptual framework for factors of outsourcing in facilities management services in healthcare facilities. There are company's core and business competitiveness, technology and expertise, finance and service quality. These factors can contribute to the improvement in outsourcing strategy for facilities management hospitals.

### 2.3.1 Company's Core and Business Competitiveness

Due to long-term aims, the outsourcing strategy criterion allows the organization to acquire more significant advantages. Strategic concerns influencing outsourcing decisions include focusing on the core activity, releasing resources for the main action, improving adaptability vs change, risk-sharing, and legal oversight. Because strategy incentives allow the organization to focus on critical competencies and activities, the main drivers of outsourcing have shifted from economic to strategic challenges (Summers & Visser, 2021). However, strategic outsourcing is enhancing strategic planning, building strategic relationships with contractors, complying with legislation controlling outsourcing activities, and boosting adaptability in adapting to shifting market dynamics (Suweero et al., 2017). Strategic in other perspective will lowering risks in constantly changing markets and in the context of rapidly growing technology; an outsourcing strategy transfers risks from technological change and R&D spending outside the corporation, therefore shortening production cycles and making customer reaction faster and more flexible (Michela & Carlotta Meo Colombo, 2011).

### 2.3.2 Technology and Expertise

It appears that expanding the organization's capacity to use technical skills and expertise and managers considering fresh ideas are essential factors for outsourcing. However, access to vital technology is one of the primary motivations for outsourcing. As a result of outsourcing, the company may acquire new skills and information and expand its competence in sustaining high-level technology (Kavosi et al., 2018). However, based on (Suweero et al., 2017) technological factors is the collection of tools, skills, methods, and processes used to achieve objectives are referred to as technological factors. Obtaining flexibility with changing technology, initiating innovative ideas and technology, increasing efficiency for competitive advantage, resolving advanced technologies, requirement analysis uncertainties, filling a need for specialist knowledge, gaining experience or technological expertise, and replicating competition are some of these. According to (Lok et al., 2018), globalization and the increasing relevance of information technology are causing advanced FM technology to evolve quickly. Clients and service suppliers must be technologically up to date. Both parties will need to improve their abilities or competences because of this. Their cooperative outsourcing client ties may be maintained by utilizing talents and resources effectively among the stakeholders.

### 2.3.3 Finance

According to most surveys, the primary motivation for outsourcing tasks is to save money for the company. To achieve cost savings, businesses require a competitive strategy. The most common reason for outsourcing is to save money on labor, materials, and other resources. When the estimated expenses of outsourcing a task are less than performing

it in-house, the job is outsourced. In other words, if the cost of an activity in an organization rises beyond the estimated cost of outsourcing, the possibility of outsourcing increases as well (Kavosi et al., 2018). Economic considerations are used to improve a company's capacity to earn profits. Close monitoring of economic issues such as saving, reducing labor and operating costs, converting fixed costs to variable cost and improving cash flow (Suweero et al., 2017). However, according to (Summers & Visser, 2021) economic decision components' importance has been thoroughly documented. Cost reduction was identified as the primary goal of outsourcing in logistics management study, with the qualification that the total cost of ownership was only relevant when the job to be outsourced was of low strategic value. Cost reduction has frequently been mentioned as a consideration in the decision to outsource maintenance.

### 2.3.4 Service Quality

Quality enhancement is one of the main objectives of most outsourcing projects. In this sense, health outsourcing operations aim to improve quality and service productivity by concentrating on critical activities and patients. Monitoring the quality of outsourced services is one of the variables determining the success and efficiency of outsourcing strategies. As a result, monitoring and control techniques must be considered to ensure outsourced services' maintenance and improvement. Increasing the quality of services may improve credibility and reputation in the organization, lower expenses, and more customer satisfaction. FM healthcare is described as the management of health facilities, which are sites that offer healthcare. Hospitals, clinics, outpatient care centers, specialty care centers, birthing facilities, and mental care centers are among them. The development of multiple health facilities has increased the burden on healthcare because each institution must ensure that its service delivery is competitive and that it can resist the present market trend. Choosing excellent healthcare services is critical for achieving health equity and improving the quality of a healthy life, which is everyone's necessity (Pakrudin et al., 2017). According to (Tim Crosby, 2015), quality isn't only about the product or the service. Quality may also refer to the entire process of developing products and services. Not just audits and monitoring, but all aspects of outsourcing are subject to quality issues. Product recalls or substantial outsourcing risks might occur from a lack of quality at any step in the outsourcing process. Outsourcing might wind up being more expensive than in-house production or service owing to a lack of proper research and proper controls, resulting in high failure rates, late delivery, poor service, and low customer satisfaction.

### 3. Method of Data Collection and Analysis

Data analysis is a process utilized for gathering, modeling, and analyzing large amounts of data to develop effective and efficient decisions. Thus, there are various methods and strategies used for performing this type of analysis. All these different data analysis approaches are essentially based on two major areas of research: quantitative methods and qualitative methods (Bernardita, 2021). Therefore, this research utilizes both

qualitative (interviews) and quantitative approaches (questionnaires). Also, this study's methodology will involve private healthcare sectors and employees ranging from upper management to lower management. In the analysis, percentages, means, and frequencies will be developed. And after interviews are conducted and the questions are distributed, all the results will be written, and the information obtained will be generated as results obtained.

One of the most significant components of a study is the research questions, the conceptual framework, and the suitable procedures for collecting and validating the study's data. These research questions serve as a valuable guide for carrying out research.

### 3.1 Sampling and Data Collection

Results and determination of the sample size were based on Krejcie and Morgan's (1970) table. Population of this study refers to the scope of the study which is 3 different hospitals buildings with total sample size of 180(n).

No	Location	Company	Total Population (N)
1	Sultan Ahmad Shah Medical Centre, Kuantan Pahang	A	30
2	Hospital Pulau Pinang	B	62
3	Hospital Selayang, Kuala Lumpur	C	87

**Table 1: Total Population**

### 4. Results and Finding

	Items	Percentage(%)
<b>Gender</b>	Male	87
	Female	12
<b>Age</b>	18-24 Years	24
	25-39 Years	75
<b>Departments</b>	Civil	44
	Mechanical	35
	Electrical	20

**Table 2: Respondent Demographic Profile**

The table above in figure 4.1 is the percentage of technical staff in 3 hospitals. Where the percentage of male is higher than female. Thus, the age of 25-39 years old have higher percentage than others.

#### 4.1 Findings

Objective: To analyse factors in decision making for outsourcing. The data collection instrument used in this study was a questionnaire specifically to achieve the objective of the study. Each item using 5 Likert scales namely (5) Strongly Agree, (4) Agree, (3) Not sure, (2) Disagree and (1) Strongly Disagree.

No	Item	Average
1	Outsourcing can reduce risk in facilities management services. (Penyumberan luar boleh membantu pemindahan risiko dalam pengurusan fasiliti)	4.60
2	Outsourcing helps improves adaptability in a competitive market. (Penyumberan luar membantu meningkatkan kebolehsuaian dalam pasaran yang kompetitif)	4.54
3	Outsourcing could help enhance and maintain relationships between suppliers in long term. (Penyumberan luar boleh membantu meningkatkan dan mengekalkan hubungan antara pembekal dalam jangka panjang)	4.55
4	Outsourcing contributes to improving technology and gaining access to skilled resources. (Penyumberan luar menyumbang kepada peningkatan teknologi dan mendapatkan akses kepada sumber mahir)	4.62
5	Outsourcing could obtain flexibility with technology advancement. (Penyumberan luar boleh memperoleh fleksibiliti dengan kemajuan teknologi)	4.61
6	Outsourcing expertise has a positive impact on the quality of work conducted. (Kepakaran penyumberan luar memberi kesan positif terhadap kualiti kerja yang dijalankan)	4.37
7	Technology and expertise could improve facilities to enhance operational efficiencies. (Teknologi dan kepakaran boleh menambah baik kemudahan untuk meningkatkan kecekapan operasi)	4.59

**Table 3: Factors in decision making for outsourcing**

## 5. Discussion

Based on table 3 above, the highest decision factors in outsourcing is more on technology which is the average of 4.62. Because, by improving technology the organization will gain access and skilled resources to support their business. Thus, providing the best and effective work quality. However, the least decision factor in outsourcing is the positive impact given by the expertise on the quality of work conducted which is the average of 4.37. Somehow, the work done by vendors are not up to expectation therefore, the work conducted doesn't give positive impact to the organization.

## 6. Conclusion

Outsourcing is an important consideration for any organization. Quality, price, and other considerations all play a role in this selection. Customers are also involved in the decision-making process. As the globe becomes increasingly international, low-cost countries may see their costs rise. Many businesses rely on outsourcing to increase productivity and profitability. Many outsourcing firms may be located all around the globe. Therefore, outsourcing plays a vital role in achieving the company goals and objective by focusing on the core business. Thus, outsourcing contribute to the growth of the organization depending on what they outsource.

## 7. Acknowledgement

The authors would like to thank the hospitals and its organizations for guiding throughout the completion and allowing to conduct this research and study.

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