

## Probing into digitalisation's influence on internal customer satisfaction: An angle from internal customers of shared service organisations

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**Abstract:** This paper aims to investigate the impact of the pandemic on shared services and the influence of digitalization on internal customer satisfaction in shared service organizations. Using a qualitative approach, this paper provides details of interviews conducted with internal customers from several organizations. The findings reveal that COVID-19 impacts shared services and that digitalization is positively related to internal customer satisfaction in shared service centers. One limitation of the study is that it only included interviews with six internal customers, highlighting the need for a wider population to be targeted in future studies. Future studies may instead consist of focus groups or interviews with shared service providers. The outcome of this study will benefit organizations attempting to implement shared services to recognize beforehand the significance of having adequate digital facilities in improving business processes so that customer satisfaction can be achieved. Although digitalization has been researched and proven to be a significant catalyst towards achieving customer satisfaction in industries such as education, banking, and airlines, there is limited evidence and studies of the same in the shared service industry.

**Keywords:** Digitalisation, Internal Customer Satisfaction, Service Quality, Shared Services.

### 1. Introduction

The idea of Shared Service Centres (SSC) originated in the 1970s and has since become a fundamental aspect of both the corporate and governmental sectors [1]. Shared services entail centralising organisational support functions and distributing them among various business units or departments. The objective is to enhance efficiency, cut costs, and streamline operations by consolidating shared functions like human resources, finance, IT, and procurement into a specialised unit. These services can be set up internally or outsourced to a third-party provider [2]. Among shared services' notable functions are human resources and finance [3-5]. However, many other areas are now shared in shared services like procurement, administration, etc.

According to statistics, over 75% of Fortune 500 organisations use SSCs [6]. Approximately 80% of the world's leading 2,000 firms use an SSC model to sustain their operations [7]. Due to intense global competition and a strong commitment to reducing costs associated with the target operation while maintaining high-quality goods and services, the concept of SSCs has emerged [8].

Deloitte's annual surveys have provided evidence of the increasing significance of SSCs by demonstrating that the number of SSC implementations in business has more than quadrupled in the last ten years [9]. For instance, multinational companies have successfully achieved economic scales using SSC. Moreover, with the globalisation of the economy, the rivalry among businesses is becoming fiercer. This necessitates corporations to standardise their processes to maintain their competitiveness. Shared Services are a cost-effective and efficient approach to consolidating some

tasks into a centralised place [10]. As the SS model has been one of the prominent tools for many businesses to cut costs, SSCs have been heavily enhancing their services by undergoing a major transformation due to digitalization. However, rooting back history shows that SSCs have already used some technology. Since the 1990s, SSCs have significantly invested in technology, primarily emphasising automating transactional processes and services [11, 12]. The ultimate goal of these investments is to enhance productivity and decrease operating costs [13]. Nevertheless, the rapid progress of technology in the 21st century has increased the likelihood that even highly specialised and strategic tasks might be affected by recent advancements, such as artificial intelligence (AI) [14-16].

### *1.1. Shared Services in Malaysia*

Malaysia has emerged as a prominent participant in the shared services market in recent years. According to SSON Research & Analytics, the nation has 441 SSCs, ranking it 7th in terms of the number of SSCs. Malaysia's impact is constantly increasing as the number of SSCs rises. There has been an estimated 3% growth in Malaysian centres since 2023 when 428 centres were registered [17]. All the major industries in Malaysia are using SSC to reduce their cost significantly [18-20]. Even small and medium enterprises (SMEs) [19] and the education sector are using SSCs to reduce costs [21].

It is worth noting that since it gained prominence, the model has evidently evolved and progressed and is now recognized in many organisations as Global Business Service (GBS). GBS and shared service centres are used interchangeably these days. GBS are an evolved model of traditional Shared Service Centre (SSC) organizations [22].

Knowing the trends of SSCs and their need, large businesses started to introduce SSCs within the businesses themselves [23]. Following this, many organisations operate their shared services in-house instead of outsourcing them to third parties. When shared service activities are taken up in-house, they are known as or referred to as captive shared services. Captive shared services are often used synonymously and identified as internal in-house SSCs. Thomas [24] however, states that in some cases, shared services and captive centres are viewed as two insourcing options that are different from one another, where many organisations create them to source their IT and BP services. Organizations create shared services and/or captive centres to reduce costs, improve services, and generate revenue dramatically. The function of CSS is streamlining operations by integrating administrative tasks, such as financial management, personnel management, and purchasing, into a centralised entity that is fully owned and controlled by the large businesses themselves [24].

### *1.2. The Pandemic and Shared Service*

Many large businesses were forced to revise their business model to recover the losses incurred during the COVID-19 pandemic [25]. The likelihood of increasing the workforce through hiring seemed like an unrealistic investment while retrenching employees was seen as the sound option that could reduce the expenses of businesses [26]. Shared services have been a viable option for large businesses. The shared service centres are life savers for many large businesses, especially after the COVID-19 pandemic [27]. Leveraging the fact that most shared services centres, after the pandemic, are operating and getting transactions completed via web portals and virtual platforms, many big organisations can survive while implementing shared services. Even before the pandemic, shared services centre employees were already processing shared service transactions remotely. The shared services model has seemingly been evolving from manual to virtual. Deloitte [28] posits that until recently, virtually all interactions with internal support functions were done manually. The ability to securely access corporate ERP systems through web-based tools means that all internal and external customers and suppliers can interact with these support functions electronically. SSON [29] states that most SSCs existing today were not designed for full-time remote working. However, companies already well set up in their digital infrastructure have been much better placed to make the enforced

switch to working from home. Digitalisation, automation and embracing new ways of work are the key enablers of a smooth transition to shared services during these challenging times. Ultimately, it boils down to how prepared a company is to accept and carry out digitalisation activities in their day-to-day operations to kick-start remote working as an option for shared service personnel. Malaysia, in particular, had an overall digital readiness index score of 0.46 out of 2.5 in 2021, which places it in the accelerated stage of digital readiness [30]. The scores may be susceptible due to the lockdowns in Malaysia during the year, prompting most businesses to work remotely. Lockdowns were implemented in 2020 and 2021 and were called Movement Control Orders (MCO) [31]. In retrospect, the pandemic and enforcing strict MCO while stunting businesses inevitably spotlight the importance of digitalisation for businesses. It was observed that after the pandemic, businesses still manoeuvred with limited employees. Some of these organisations that have yet to carry out shared service looked for options to survive better. Alternative solutions were sourced; therefore, shared service was established and implemented in many multinational corporations with digitalisation to accelerate its function further and bring convenience to both service providers and customers. Therefore, this study will contribute to the literature by further exploring digitalisation as a determinant of internal customer satisfaction in the context of shared services

## 2. Significance of the Study

Digitalisation has already become a must-use business practice in the current economic growth. According to Shabani, et al. [32] "digitalisation" translates into the automation of processes to increase efficiency, where the company's focus on digitalisation can claim effectiveness, which influences improving customer engagement. Any businesses that do not use any technology aspect in their functions are considered left out [33]. Literature surveys showed that digitalisation has been adopted across various industries [34–36]. All kinds of economic sectors, such as primary [37, 38]. Secondary [39, 40] and tertiary [41, 42] already in the era of digitalization. The primary focus is on the services sector. During the era of COVID-19, it has been observed that small-scale service providers are utilising digitalisation [43, 44].

The digitalisation trend in the service sector caught the academic world's attention as there is so much to explore. Research has also focused on the customer-centric aspects of digitalization, particularly on how digitalisation may impact customer engagement and satisfaction. For instance, social and mobile technologies foster customer engagement [45–47]. They suggest that digital platforms like websites, mobile apps, and social media create a direct interaction channel between businesses and consumers, which flourishes businesses. This aligns with the concept of digital transformation, as discussed by Siswanti, et al. [48]. In line with this, Liao, et al. [49] findings further showed that the adoption of digitalization leads to an increase in business efficiencies while [50, 51] investigate digitalization capabilities within organisations.

However, a gap exists in understanding digitalisation's effect on customer satisfaction in shared services environments. While other studies like Zouari and Abdelhedi [52] have included digitalisation and compliance as dimensions along with the SERVQUAL model to investigate the effect of these dimensions on customer satisfaction in the banking industry, Chakraborty, et al. [53] have examined digitalisation's impact on passenger satisfaction in the airline industry and Forid, et al. [54] have used digitalization and SERVQUAL model to determine student satisfaction in the education industry. However, none in the shared service domain have been thoroughly examined. In a nutshell, the inclusion of digitalization as a factor in the shared service industry has yet to be researched profoundly from an internal customer satisfaction-centric perspective.

Two main objectives were established to investigate the study's purpose, as outlined below thoroughly:

1. To comprehend the effects of the COVID-19 pandemic on shared service centres.
2. To investigate the role of digitalisation in enhancing customer happiness in a shared service context.

### 3. Literature Review

Service Quality refers to the extent to which a service meets or exceeds customer expectations [55]. It encompasses the overall experience and satisfaction derived from the delivery of a service. The studies on service quality are nothing new. There is sufficient scholarly work of more than 30 years in social science studies already rooted in SQ [56]. Many industries, namely the tertiary sector, emphasise service quality. Academic research has already tied together the relationship between SQ and customer satisfaction, discovered many years ago [57-60]. Despite having heaps of scholarly articles on this relationship, exploring the link between SQ and customer satisfaction continues in different fields of study. For example, studies conducted by Dangaiso, et al. [61] examined the SQ in the banking sector. SQ is a major indicator of customer satisfaction [62-64]. Only when customers are satisfied with the SQ of a business will they proceed to be loyal. This is supported by others as well [65-67]. Hence, it shows that SQ is a determinant of satisfaction and loyalty. A study by Zhou, et al. [68] establishes a positive relationship between loyalty and SQ.

Regarding SSCs, prioritising SQ is a major focus for achieving satisfaction and loyalty. The study by Wu, et al. [69] depicted that the employees of SSCs would strive to do their best to provide excellent service to their clients. Chen, et al. [70] claims that the clients of SSCs would want accurate service from them. This is also supported by Avdekins and Savrasovs [71] who indicate that accuracy in shared service transactions would determine whether clients would want to prolong their business with SSCs. In recent years, a strong trend among multi-divisional firms has been to consolidate and standardise these services to optimize resources enterprise-wide to serve this purpose, SSCs are set up as the organisational units within the corporation to provide common support services, functioning as service suppliers to internal customers Richter and Brühl [72] and Paagman [73] in Chen, et al. [70]. Shuib [74] says that anyone in an organisation who consumes services or products provided by other employees in the same organisation is known as an internal customer. Hence, this study will explore the importance of service quality towards obtaining customer satisfaction from the lens of internal customers of the shared service environment.

Internal customer satisfaction refers to internal organisation employees' happiness and unhappiness based on their perceived quality of service and the services received from internal service providers [75]. The issue of internal customer satisfaction has emerged as a matter of concern that demands consideration inside the shared services environment in the era of the 20s [70]. Employee satisfaction and retention are influenced by job enrichment and work-life quality [76] which are crucial in the shared service environment where employees rely heavily on digital platforms to perform their tasks. Ensuring a high quality of work life is essential in maintaining motivation and engagement within captive shared service centres. According to Shuib [74] it is important to investigate and comprehend the idea of internal customers better in the context of organisations. The existing literature on customer orientation mostly emphasises the significance of external consumers while giving less consideration to the function of internal customers or workers inside a company [77-79]. Hence, it is essential to emphasise internal consumers within the framework of shared services. This implies that captive shared services that serve internal customers within an organisation are responsible for upholding good services for employee satisfaction.

In reflecting on the measurement of internal customer satisfaction within SSCs, it is possible to use the established tool of SERVQUAL, which was developed in the early 1980s to measure customer satisfaction [80]. The SERVQUAL model has been widely recognised as a valuable tool for assessing service quality across various industries. SERVQUAL is a complete scale that assesses service quality using five dimensions: tangibility, dependability, responsiveness, assurance, and empathy [81]. These dimensions enable businesses to assess and enhance the quality of their services by concentrating on critical factors essential for client satisfaction [82-84].

Relying on this model, many scholarly works have utilised SERVQUAL to measure customer satisfaction [85-87]. The findings are consistent with others [74, 88, 89].

Numerous studies have applied the SERVQUAL model in diverse industries such as healthcare [90-92]. Hospitality [93-95]. Banking [96, 97]. And retail [98-100]. For instance, Yesmin, et al. [100] applied SERVQUAL to evaluate service quality in the banking industry, and the findings showed positive outcomes whereby customers were satisfied with the service offered. Other industries, such as transportation, also utilised SERVQUAL to measure service quality [101]

Aside from SERVQUAL, service quality can be measured using various other tools. For example, a study by Nguyen and Linh Vo [102] measures SQ regarding personal contact quality, order fulfilment, information quality and social responsibility. The findings claim that these SQs do have a positive relationship towards satisfaction. Besides that, some studies only utilised SQ as unidimensional without identifying its dimensions [103, 104]. With the rich literature on SQ and especially the tools to measure, the researchers summarized that service quality can be assessed using various tools such as dependability, safety, adaptability, convenience, and empathy. These variables indicate the disparity between consumers' expectations and impressions of the service. This is supported by Prakash [105] who stated that manufacturing, banking, information technology, higher education, and healthcare are major industries that use service quality.

With myriads of options to measure service quality, past literature supports that SERVQUAL remains a common and frequent tool used by service industries. Given that shared service is a model developed to provide support services, it is within the service industry that service quality must be measured aptly.

It is essential to note that a study conducted by Zaki and Lasi [106] attempted to investigate customer satisfaction in shared service companies in Malaysia using the SERVQUAL model. However, the study did not indicate clearly if the shared service companies mentioned used captive shared services and if the study respondents were internal customers. Captive shared services rely on a business model similar to any other shared service centre; hence, the same SERVQUAL model can be used as the determinant for their internal customer satisfaction. However, this model had many theoretical and practical critiques, and many authors attempted to transform this model by adding other dimensions [32]. Without dismissing the emergence of digitalisation, some authors posit the scale and measurement of SERVQUAL to be still quite relevant [107-110].

Even though there is a growing literature on digitalization in other areas and industries, as mentioned previously, there is not much information on how this dimension could contribute to customer satisfaction in shared services. The purpose of this study is to explore this specific gap.

#### 4. Research Methodology

The primary data were gathered through interviews with six internal customers receiving shared services. These participants have backgrounds in receiving shared services and dealing with shared service personnel. To be more precise, the participants in this study are internal customers or employees of the organisations who receive shared services. Dunwoodie, et al. [111] state that interviews allow participants to share their feelings, prejudices, opinions, desires, and attitudes towards different phenomena they experience in the workplace or other organisational contexts. The researchers used semi-structured interviews and thematic analysis to obtain and analyse data. The interview recording makes it easier for the researcher to focus on the content and the verbal prompts. It thus enables the transcriptionist to generate a “verbatim transcript” of the interview [112]. Researchers ensured that the questions were neutral and relevant to the literature read before constructing the research design. For the research study, semi-structured interviews appeared to be the most effective method for eliciting responses. Drawing on Miles and Gilbert [113] researchers utilised semi-structured interviews as they argue that it is flexible as interviewers use the method to ‘address the aspects important to individual participants. As the interviews were conducted in 2024, the fear of getting infected by the variant of Covid-19 is still prevalent, though it has become part of life; researchers gave the participants the chance to choose if they wanted an online or in-person semi-structured interview. This consideration was also significant given that one of the researchers in this



study has some health complications, so this choice was made to cater to all individuals. Two of the six participants chose to do the semi-structured interview in person. These two participants decided to do this because they preferred face-to-face interactions to build rapport and, at the same time, wanted privacy during the interview. Nevertheless, the researchers believe that the virtual interview sessions did not lack privacy and comfort as Brown [114] asserts that the advantage of internet use gives participants the chance to access an interview using their device in the comfort of their home, which ultimately provides familiarity. Qualitative research has been strongly affected by the COVID-19 pandemic, highlighting the possibilities that Voice over Internet Protocol (VoIP) technologies such as Skype, WhatsApp, and Zoom offer to qualitative scholars. Despite this, the researchers assured the participants that their identities would be confidential. To make online interviews effective, researchers employed active listening to make them feel heard and build rapport. Louw, et al. [115] describe active listening as ‘involved listening with purpose’. The main components include language, gestures and prompts to build rapport and elicit detailed responses. Researchers utilised positive body language by nodding and repeating the details that the respondents mentioned.

To steer the interview with some adequate guidance, Morris [116] offers suggestions to conduct the interviews with shorter questions first and longer ones afterwards so that a bond and rapport could be built between interviewers and respondents. As shared service organisations are growing rapidly in Malaysia, it is hard to compile the exact number of internal customers receiving the services; hence, garnering a definite population becomes difficult, prompting researchers to employ snowball sampling, as it is undertaken when a qualified participant shares an invitation with similar participants. Generally, snowball sampling is effective in unobserved populations, and some studies have used it to engage with the ‘hard to reach’ among urban elites [117]. Snowball sampling is economical, efficient and effective in various studies. Researchers started through snowball sampling with a convenient sample of six respondents. Table 1 below displays the study instrument, highlighting the participants' objectives, questions, and background. It must be noted that all participants are from organisations that have implemented captive or in-house shared services.

**Table 1.**  
Instrument of the study.

Objectives	Interview Questions	Participants	Number
To investigate the impact of the COVID-19 pandemic on shared services centres	What is the impact of the COVID-19 pandemic on shared service centres?	Internal customer from one of the biggest FMCG & F&B industry Internal customer Utility company in Malaysia	1
To investigate how digitalisation could contribute to customer satisfaction in shared services	To what extent does digitalisation help improve customer satisfaction in a shared service environment?	Internal customer Chemical Company Internal customer Logistics company Internal customer of a multinational bank Internal customer Oilfield services and equipment	1
			1
			1
			1
			1

## 5. Results

The findings from the six respondents are organised thematically and presented while bearing in mind the two research questions (RQ) that were established for this study.

RQ1: What is the impact of the COVID-19 pandemic on shared service centres?

### *Respondent 1*

*Before Covid, working in the office was the norm. Requiring services from shared services via digital platforms required some familiarity and adjustments because the platforms were not capitalised to their fullest*

*extent, and some customers were inexperienced. After COVID-19, working from home created a necessity to use digital platforms to their full potential, which then, in turn, spurred further enhancement of digital systems. As a result, platforms were strengthened for better service to accommodate employees working from home and provide them flexibility. This made customers rely on the shared service virtual platforms such as the web portals.*

#### *Respondent 2*

*The pandemic recognised shared services as a model that works well even during a massive virus outbreak. Shared services enable organisations to survive and sustain themselves by operating virtually. Overall, the pandemic's impact magnified the importance of implementing shared services.*

#### *Respondent 3*

*The GBS required some adjustments but could provide service according to business as usual because it operated via digital platforms even before the pandemic. The only exception would be that the systems and technologies were strengthened a lot more during Covid 19 to cater to employees who were predominantly working from home from 2020 to 2022. Some negative impacts of the pandemic, however, included retrenchment of employees.*

#### *Respondent 4*

*Shared service organisations are thriving better than ever due to the impact of Covid 19. The prominence and importance of shared services to businesses have increased in value. I am grateful for the digital transactions that shared service centres provide as they favour working from home during the pandemic and align with many employees' preferences for working from home.*

#### *Respondent 5*

*I feel that the pandemic has impacted shared services in both negative and positive ways. The pandemic has caused shared services to upgrade and improve digital systems for better lead time, which ensures that customers' requests are completed within a stipulated time. However, the pandemic has also diminished the human factor and emotions, making face-to-face interaction difficult if a problem is solved with a shared service provider beyond a virtual platform. The pandemic also contributed to the downsizing of staff in shared services.*

#### *Respondent 6*

*Although COVID-19 has brought many disruptions and manic events to the world, I feel that shared service centres have had the least impact. Operations of the shared service centres were running the same as employee requests via online web portals, which were being executed and completed as usual. Perhaps the only difference would be that shared service personnel would have to transition from working in the office to full-time working from home during the pandemic.*

The details above indicate that the COVID-19 pandemic has impacted the shared service centres. The first respondent summarised that Covid 19 impacted the centre by warranting the significance of digitalisation, spurring further enhancements of digital systems and inducing customers to rely on virtual platforms. The second respondent mentioned the pandemic's impact on shared services to give it due recognition and magnify its importance. The third respondent states that though some minimum adjustments were made in shared service, the business ran as usual without much impact from the pandemic. The respondent also added that some systems and technology enhancements were made during this period, and retrenchment of employees took place as well. The fourth respondent asserts that COVID-19 has led shared service centres to thrive, increase their value and importance, and initiate work from home. The fifth respondent believes the pandemic has negatively impacted the shared service centre by diminishing human emotion and causing staff downsizing. However, the respondent also mentioned that digital systems were upgraded for better lead time in the shared service centre. The last respondent claimed that the pandemic did not greatly impact the

shared service as business was operating as usual due to online requests and transactions. Respondent also pointed out that the most glaring impact could be that the pandemic resulted in the transition of personnel working in the office to working from home. Except for respondent number five, everyone else provided a positive take on the impact of the pandemic on the shared service centre. The fifth respondent displayed a very negative impression of the impact of the pandemic on shared service as the environment because, as pointed out during the interview sessions, the surrounding work environment of the respondent was in disarray.

RQ2: To what extent does digitalisation help improve internal customer satisfaction in a shared service environment?

*Respondent 1*

*To ensure customer satisfaction, digital tools and platforms are used, such as web portals and apps, where customers can request services instantly. The web portal helps customers communicate their requests to the shared services, and their requests are completed within a few days.*

*Respondent 2*

*Digitalisation has greatly improved customer satisfaction as it brings a new dimension, especially in engagement, speed of response and traceability. Employees can trace communication trails with shared service personnel. This visibility is important between customers and service providers. Moreover, the shared service web portals are easily accessible for customers to request services.*

*Respondent 3*

*In our company, digitalisation helps enhance customer satisfaction in shared services by optimising internal operations. Digital tools such as robotic process automation assist in repetitive tasks, cutting lead time and improving efficiency in data entry and processing invoices. The digital platforms help internal and external customers to access services through self-service portals and mobile apps, which doesn't require meeting shared service employees face to face.*

*Respondent 4*

*Digitalisation has proven that shared service centres can deliver the same services regardless of where they are. Digitalisation has made it possible for seamless requests and transactions on web portals and apps in the shared service environment, and these platforms allow for connectivity and speed of transactions, which contributes to the satisfaction of internal customers. However, the key to long-lasting customer satisfaction is digitalisation, interaction, and customer engagement. The human factor is still vital through customer engagements; hence, monthly and quarterly engagement meetings with the heads of business units are held to improve services.*

*Respondent 5*

*From my perspective, I feel that digitalisation does not help; it only causes more frustration. I have always believed only in human touch and emotion. By implementing digitalisation, I do not encounter much visibility to my enquiries when dealing with shared service centres. The current technological tools, such as the App, are not designed to be user-friendly.*

*Respondent 6*

*Digitalisation supports the shared service activities significantly while improving the customer experience, as customers may request service via online platforms like web portals instead of meeting the shared service providers face to face. During the pandemic, when working from home was the norm, service requests through online platforms like the web portal helped in terms of speed and convenience.*

Based on the information from the respondents on the second research question, Respondents 1 and 2 support the idea that digitalisation does help with internal customer satisfaction in a shared



service environment by making it easily accessible for customers to request services via digital platforms. Respondent 2 also states that digitalisation improves customer engagement, increases delivery speed, and ensures transaction traceability, directly contributing to satisfaction. For respondent 3, digitalisation contributes to customer satisfaction by optimising internal processes and cutting down lead time in shared service centres. Respondent 4 has similar inputs to Respondent 2 on how digitalisation allows for engagement and speeds up transactions. In addition, Respondent 4 also feels that with digitalisation, shared service centres can deliver the same service from whichever remote location they are at. Respondent 5 seems to differ in response to other respondents by saying that digitalisation fails to provide satisfaction but instead brings a lot of frustration and disruptions to service. The respondent feels that the current technology for the shared service centre is not designed to be user-friendly and, therefore, is unable to satisfy customers. Respondent believes that human touch and emotion are crucial for customer satisfaction in the shared service environment. Lastly, Respondent 6 asserts that digitalisation does support shared service activities significantly while improving the customer experience through speed and convenience.

## 6. Analysis and Discussion

The paper investigates two important discoveries about shared service centres, particularly during the COVID-19 pandemic. The two findings are as follows: Firstly, although subtle and mild, COVID-19 did impact shared service centres. Secondly, digitalisation greatly contributes to internal customer satisfaction in the shared service environment.

### 6.1. COVID-19 Did Have an Impact on Shared Service Centres.

Given the detailed data analysis that was done, it is important to convey the findings that reveal that there are indeed several impacts of COVID-19 on the shared service centres. More than one respondent has indicated that COVID-19 necessitates or warrants digitalisation and digital platforms in shared service centres. In this digital age, data and technology are becoming increasingly indispensable in shared service centres [118]. It is becoming evident that digital systems cannot be separated from shared service centres, especially during a pandemic. Furthermore, the discovery that digitalisation helps to sustain shared service centres during a tough time is supported by Jaumotte, et al. [119] who claim that digitalization induced by the pandemic has been described as a positive outcome from the manic pandemic, which boosts sustained productivity. Aside from this, the analysis also revealed that at least 3 respondents felt that Covid 19 gave rise to further enhancements of technology in shared service. The Pandemic emphasised the importance of technology modernization, digital labour, and automation. Additionally, many technologies that companies have been trying to implement for years are suddenly being utilized and leveraged [120]. Besides this, the data analysis also indicated that at least 2 respondents in the interview felt that Covid 19 magnified the importance of shared service and gave it proper recognition. Today, as many businesses are operating remotely, an effective shared services model is more important than ever because several benefits of this model have surfaced during Covid 19 that give shared services its recognition. Such advantages are in technology, agility and improved business insights. COVID-19's volatile, uncertain, complex, and ambiguous nature gave rise to shared service models that support and assume a more significant role today for businesses [121]. The study also discovered that COVID-19 affirms the need for working from home. As reported by Deloitte [120] due to the impact of COVID-19, 80% of respondents in the shared service environment reported the expansion of WFH capabilities as a crucial change expected in the future. In support of this, some businesses have described their staff's content as the flexibility that WFH has presented. Many are hopeful that WFH or a virtual way of work will be a constant norm. Data analysis also noted that 2 respondents believed that COVID-19 may have impacted shared service centres negatively due to downsizing or retrenchments. This discovery aligns with Husin, et al. [122] who states that the number of retrenchments has alarmingly increased due to the COVID-19 pandemic. Most businesses were closed and did not operate for more than six months. Most

organizations have decided to retrench their employees to minimise the cost and loss caused by the pandemic. Wang, et al. [123] add that the pandemic has caused much anxiety, cancellations, unemployment, income cutbacks, social distancing, and health and safety issues in the sharing economy, which has impacted sharing economy platforms, consumers, and service providers engaging in activities.

Lastly, despite most respondents reporting that COVID-19 has impacted the shared service centres, at least 2 respondents indicated that businesses in shared service centres were running as normal during the coronavirus pandemic with minimal impact on their operations. 20 percent of organisations said their shared services delivered “business-as-usual” performance during the crisis Deloitte [120]. SSON [124] reported that the COVID-19 pandemic barely impacted shared services centres as this model is surviving with digitalisation and effective crisis plans.

In summary, the findings of the first research question gathered six themes. They necessitate digital platforms in shared service centres, enhancements of technology in shared services, the magnified importance of shared services, the need for work from home, retrenchments, and business as usual.

## 6.2. Digitalisation Does Influence Customer Satisfaction in Shared Services

The extent to which customer satisfaction in the shared service centre depends on digitalisation is a key objective of this research. Findings unveil that all respondents, except for one, agree that, to a certain extent, digitalisation influences internal customer satisfaction in shared services. Three respondents agreed that the speed at which digitalisation brings about helps influence customer satisfaction. According to Carpenter [125] organisations implementing shared services can cut down on unnecessary activities and welcome digitalisation for process acceleration. Many companies that have adopted shared services with notable use of digitalisation, such as robotic process automation, have accomplished varied business results. Some of these include positive impacts like cost savings and increased service delivery speed [126]. This correlates to another important discovery from the analysis that suggests digitalisation reduces the lead time of transactions. According to Choi, et al. [127] digitalisation is an impetus to reduce the time to receive a service, indirectly bringing customers convenience [127]. As a result, internal customers receiving the services quicker will be delighted. It is significant to note that when the time to complete an assignment or transaction is reduced, it also brings down costs that contribute to the betterment of the organisation as a whole [128]. Apart from this, the analysis of the interview responses also indicates that three respondents believe that digitalisation helps customers feel happy because it provides easy access to information, service requests and storage. Krzan and Kajba [129] corroborate this by stating that employees can access the information needed to perform their tasks or to provide a complete service from any place at any time. Satisfaction of customers is elevated with digitalisation because many business activities and operations are carried out faster, and information is at their fingertips, at any place or time [129]. Besides this, it was discovered that two respondents claimed that the engagement factor in digitalisation may lead to customer satisfaction. Using digital technologies, employees gain various opportunities such as remote working, brief swaps of information, communication speed, and connectivity with workmates. On top of that, it is also important to note that some employees' personal feelings regarding the benefits of digital technologies revolve around engagement Nikolić [130]. Harrigan, et al. [131] and Abror, et al. [132] assert that customer engagement leads to customer satisfaction. The study's data analysis also showed that digitalisation improved the efficiency of internal processes in the shared service centre. Chandok, et al. [133] their research discovered that almost 20 percent of shared-services organisations have invested in streamlining internal operations through analytics. Shared-services organisations have a central role to play in this digital environment. These groups exist to streamline internal processes' management and assist in quickly and efficiently delivering software and services to customers. Respondents of this study also mentioned that digitalisation would improve customer satisfaction with the advent of traceability and

visibility of transactions and shared service processes. Modern technologies and dynamic working environments persuade businesses to surrender to customers' demands and want transparency. This transparency can only be achieved by implementing digital platforms [134]. With digital systems in shared services, customers want transparency in tracking their transactions. Transaction request and service completion via the current shared service digital portals ensures online traceability.

Traceability is the capacity of information to be tracked and traced. By integrating traceability, organisations can increase transparency and visibility as a critical input, making consumers feel more satisfied [134].

Findings also indicate that two respondents believe digitalisation enables the same service to be delivered regardless of location. Digitalisation goes hand in hand with virtualisation, i.e., using software to emulate business and communication processes. It allows processes to be accessed wherever a suitable internet connection is available [121]. Many businesses have a conventional mindset and have been accustomed to believing that physical proximity is crucial for completing complex processes within an organisation. The 2020 pandemic may have changed this notion. Thankfully, extremely complex processes in shared service could be done successfully despite remote working [120].

The findings of this study indicate that digitalisation plays a critical role in shaping internal customer satisfaction in shared service environments. However, future studies should explore integrating sustainable business practices, such as Green Human Resource Management (GHRM), which has been shown to enhance organisational performance and sustainability [135]. Since SSCS aim to optimise operational efficiency through digitalisation, incorporating sustainability-focused HRM strategies can further improve employee retention, engagement, and overall service quality. Combining digital innovation and sustainable management practices could optimize service delivery while improving employee experiences, ultimately leading to a more resilient and adaptable shared service model.

Finally, the results also establish that one respondent rejects any positive connection between digitalisation and customer satisfaction. The respondent believes digitalisation lacks emotion and human touch and may lead to dissatisfaction. This is in line with Vuchkovski, et al. [136] who affirm that the virtual environment causes one to lose emotional and visual communication and, therefore, can never go on par with the boon of having physical encounters with people and indulging in verbal communication [136]. The human factor is still regarded as essential in the context of shared services, and without it, it may lead to dissatisfaction among internal customers.

In essence, the findings for the second research question generated seven themes: speed, easy access, fostering engagement, optimising internal process, traceability and visibility, enabling service to be accessed and requested from anywhere, and lack of human emotion and touch.

## 7. Conclusion

This study is crucial for shared service research, especially in measuring customer satisfaction and engagement. The outcome of this study divulges that COVID-19 warrants continued digitalisation usage in the shared service environment for a long-sustainable business. The pandemic, though horrendous, has somehow thrown light on shared services thriving performances which are helmed by digital prowess. Apart from that, the study's findings also point to a strong influence of digitalisation on customer satisfaction in shared service. This may help future research studies examine customer satisfaction and service quality progression in the literature, especially in shared services or GBS. Chavez, et al. [137] mentioned that COVID-19 might create opportunities for new dimensions of theoretical advancement and additional empirical investigation. Many studies are being conducted with the pandemic in mind because the impact of this catastrophic event has ushered in new thought processes and ideas. In short, the pandemic may have brought many comforting prospects in subsequent research, not limited only to the shared service domain but to other areas as well.

One limitation of this study is the small sample size (six participants), which may restrict the generalizability of the findings. However, theoretical saturation rather than numerical adequacy in qualitative research often determines sample sufficiency [138]. In this study, saturation was achieved when no new themes emerged from additional interviews, suggesting that the insights collected were comprehensive for addressing the research objectives. Future research could incorporate a larger sample or mixed methods approaches to enhance the study's applicability across different shared service organisations.

### Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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