UNDERSTANDING SHARED SERVICES IN SAP S/4HANA AMS: INSIGHTS FROM INDIAN IT SERVICE PROVIDERS THROUGH A MIXED METHODS STUDY

by

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Dedication

Dedicated to my parents who inspired me to aim for a doctorate.

Dedicated to my wife, Arpita, whose support ensured the thesis reached its conclusion.

Dedicated to my two daughters, Sanvika and Ashvika.

Acknowledgements

This dissertation is the result of an academic journey that would not have been possible without the support and encouragement of many individuals and organizations. I am deeply grateful to my thesis supervisor Dr. Eduard Plavec, PhD for his insightful guidance and invaluable support throughout this research. Their expertise and constructive feedback have been instrumental in shaping this work.

I am profoundly thankful to the practitioners, consultants, and leaders from the SAP AMS community who participated in this study. The time and effort they invested to share their experiences and knowledge was integral to the success of this research. I acknowledge the support of my colleagues and managers at both my employers, whose facilitation and flexibility allowed me to balance the demands of this research with my professional responsibilities.

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A special thanks to my wife, Arpita, for her unwavering support and remarkable patience throughout this three-year journey. Last but not the least, I acknowledge my family friends and well-wishers, whose encouragement and guidance helped me stay focused on my goals. This dissertation stands as a testament to the collective contributions and goodwill of these individuals, to whom I am deeply indebted.

ABSTRACT

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This study explores the shared services model within SAP S/4HANA Application Management Services (AMS), focusing on Indian IT service providers. Leveraging a mixed-methods approach, the research integrates qualitative insights from semi-structured interviews and focus groups with quantitative data from a structured survey. The research objectives include understanding shared services in SAP AMS, examining factors influencing productivity and efficiency and exploring the impact of emerging technologies on shared services models.

The study identifies eight themes in a bid to articulate the shared services model as being practiced in SAP AMS. Key findings highlight the transformation of shared services from cost-centric models to strategic enablers aided by customer, geographic and organisational maturity.

Twelve themes emerge as significant influencers of productivity, including workload balancing, knowledge accessibility, supportive leadership, and AI-driven ITSM tools. Quantitative data corroborates the qualitative insights, revealing trends in workload distribution, consultant preferences, and the impact of mentorship and recognition programs.

The study also uncovers nine themes shaping the future of SAP AMS, emphasizing the transformative role of AI in redefining shared services, enabling predictive insights and personalized support. However, it necessitates the evolution of workforce skills and triggers the emergence of hybrid roles, and automation-resilient skills.

This research contributes to the theoretical and practical understanding of shared services in SAP AMS by offering actionable recommendations for practitioners. The findings aim to guide IT leaders in optimizing shared services for scalability, efficiency, and alignment with emerging trends.

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INTRODUCTION

1.1. Introduction

SAP as an Enterprise Resource Planning (ERP) application is backbone of business operations across enterprises spanning all major industries like manufacturing, banking, life sciences, retail, logistics and supply chain in 190 countries. As of July 2023, 87% of total global commerce was done by organizations using SAP solutions (SAP Global Communications, 2023). SAP is the digital core enabling business operations in 90% of Fortune 500 companies and is world leader in Enterprise Resource Planning (ERP) market (Hancerliogullari Koksalmis & Damar, 2022).

All these organizations who have embedded SAP products into their business operations need to continually operate, maintain, upgrade and secure their SAP applications. Maintaining SAP products and solutions require niche and complex SAP expertise, which is difficult to source and retain, as a result, most of the SAP customers have opted to outsource their SAP annual maintenance support or business operations support to external specialized IT service providers.

The Kearney Global services Location index research report states that global business outsourcing services market in 2023 is US$680 Billion up from US$624 Billion of 2022 and India continues to rank first as the most preferred country for this market of outsourcing (KEARNEY, 2023).

There are several outsourcing models adopted by service providers. Vaxevanou and Konstantopoulos have extensively reviewed literature and identified over 10 outsourcing theories and related models (Vaxevanou & Konstantopoulos, 2014). Some of the service providers have adopted a shared Service model for providing SAP services to customers.

Shared services as a business service refers to the centralization of functions and business processes and rendering them to multiple business units, departments, subsidiaries of organizations and as we will focus on, even to multiple organizations. The services historically included finance human resources procurement accounts payable and lately information technology departments.

SAP shared services is the concept that refers to centralization of SAP support services and delivering them to multiple internal and/or external customers. This could include support and upgrade of existing SAP Systems and factory services to transformation programs.

Our focus in this research is to further the understanding on use of shared services in Indian IT Service provider organizations as a business model to operate their SAP consulting practice and support services which are then sold to multiple external organizations as a paid service. The original contribution of this study to the body of knowledge on shared services will be the primary data collected from the industry practitioners in India and their analysis to further the concept of shared services in IT outsourcing.

1.2 Enterprise Resource Planning (ERP)

ERP is a software package that integrates the entire system of a business and provides a smooth flow of information across the organization (Klaus et al., 2000). It is a configurable software architecture of a central database that integrates the real-time flow of information within and across all the functional areas of the enterprise. ERP is informing the data collected from many sub-sources into a single system (Katuu, 2020).

It has been identified as an effective set of business tools in terms of product development, accounting, inventory, procurement, production, planning, human resource, material management, sales, and marketing. The current age is the age of the fourth industrial revolution, commonly known as Industry 4.0, which needs the integration of personalized and customized connectivity and collaboration of technology and information (Al-Amin, 2023).

ERP Implementation is the process of checking the current pattern of business execution, planning strategy, operation methods, deploying and checking ERP software, data management, change management, user training, and post-maintenance support (Kenge, 2020).

1.2.1 Evolution of ERP

ERP like any other softwares evolved over the time, progressing from limited functions to today's industrial back bone. Let us quickly have a view of the major milestones in the evolution of ERP.

The evolution of Enterprise Resource Planning (ERP) systems has been underpinned by the principle that each new iteration seeks to optimize internal processes within the organizations that implement them. As illustrated in Figure 1, ERP systems have evolved from the first to the fourth generation.

In the 1990s, ERP systems were primarily designed to enable cross-functional and enterprise-wide integration, thereby supporting the standardization of business processes. In the period following the 2000s, the emphasis transitioned from enhancing internal control mechanisms to leveraging real-time data to create value. By 2017, ERP systems had progressed into a third phase, characterized by the shift to cloud-based solutions. The fourth phase is marked by the integration of

advanced digital innovations, including Robotic Process Automation (RPA) and Artificial Intelligence (AI) (Katuu, 2020).

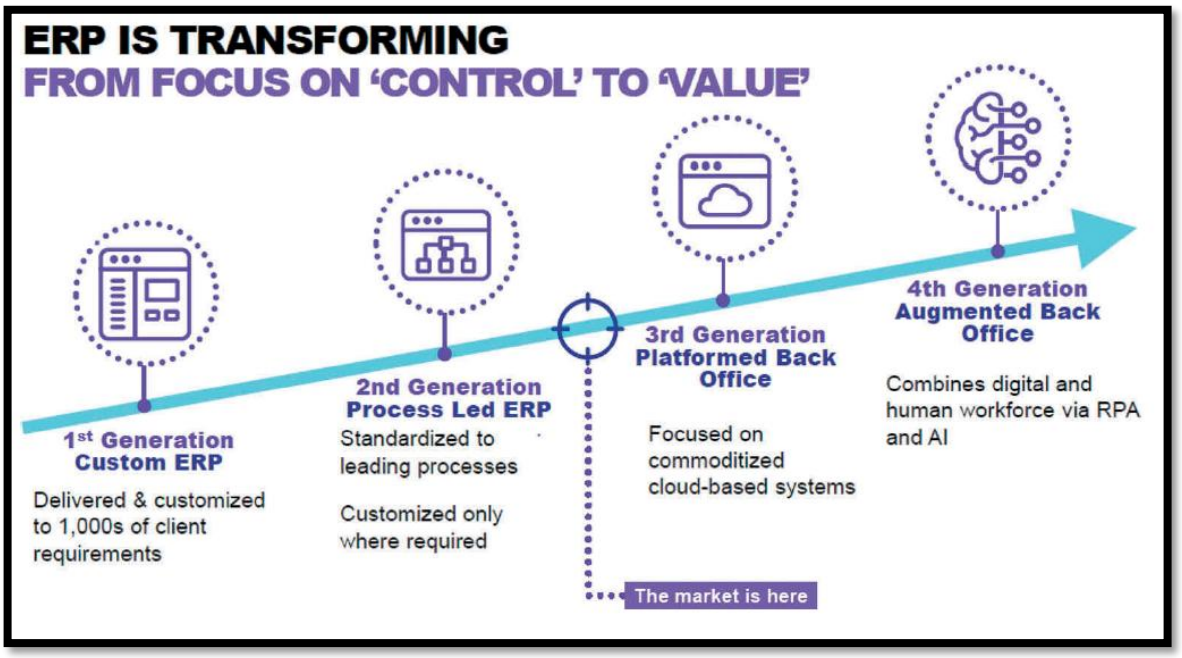

Figure 1 : Evolution of ERPs **(Katuu, 2020)**

The term "Enterprise Resource Planning" (ERP) was introduced in 1990 by Gartner to characterize a new generation of material requirements planning (MRP) systems. It is widely acknowledged among scholars that the precursors to modern ERP systems can be traced back to the systems developed in the 1960s.

SAP, a prominent global leader in ERP solutions, launched its first system in the 1970s. Similarly, PeopleSoft, another notable ERP brand, was established in the 1980s before being acquired by Oracle, a leading ERP provider, in 2005.

The below table outlines the evolution of ERP systems from the 1960s to the 1990s, with each phase, serving as a foundation for subsequent innovations in ERP development.

Table 1: History of ERP from 1960s to 1990s (Katuu, 2020)

System	Year	Purpose	Constraints
Inventory management and control	1960s	1. Identifying inventory requirements 2. Setting targets & replenishment techniques 3. Monitoring item usages	1. Big and clumsy 2. Large technical support staff
MRP, hardware and software developments	1970s	1. Move towards target market strategies 2. Production integration and planning 3. Scheduling production processes	1. Difficult to operate 2. Time-consuming 3. Costly to implement
MRP II	1980s	1. Manufacturing Resource Planning 2. Replace stand-alone systems 3. Sales, inventory, and purchasing transactions 4. Update inventory and accounting information	1. Absence of planning and scheduling functions 2. Running on one platform 3. Requires accurate information
ERP	1990s	1. Enterprise Resource Planning coined by Gartner Group 2. Offers other functions like marketing, finance, HR	1. Major changes needed in processes. 2. Limited Expertise

1.3 SAP

SAP established in 1972 in Germany is now the global standard for enterprise resource planning (ERP) software. SAP, pronounced as individual letters (S-A-P), has more than 105,000 employees worldwide building and supporting more than 100 solutions covering all business functions.

1.3.1 Evolution of SAP

Starting with one customer and a handful of employees, SAP set out on a path that would not only transform the world of information technology, but also forever alter the way companies do business. Next section looks at the journey of SAP's history of 52 years and more than 400,000 customers.

a. The early years: 1972-1980

SAP was founded on April 1, 1972, by five former IBM employees. The company was originally titled in German language as "*System Analyse Programmentwicklung*" which when translated to English stands for *System Analysis Program Development*, Today the company is popularly known as SAP.

In 1979, the company started developing R/2, the second generation of its software. In 1980, SAP's roughly 80 employees moved into their first own office building in Waldorf, Germany, where it continues to be headquartered even today.

b. The SAP R/2 era: 1981-1990

By its 10th anniversary in 1982, SAP has now more than 250 customers in Austria, Germany, and Switzerland. By the end of 1985, more than 250 people work at SAP, increasing to 500 employees by 1987 and ballooning to 1700 by the end of the decade.

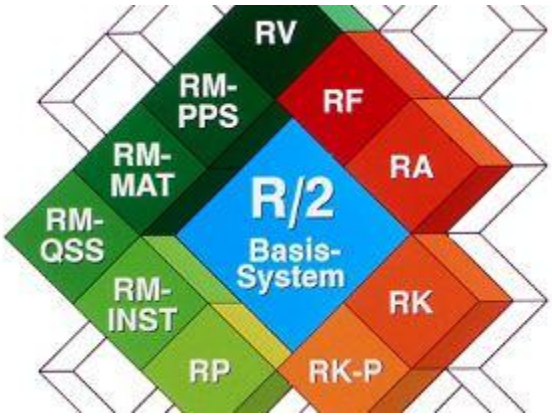

Figure 2 : SAP R/2 System (SAP, 2024)

SAP goes international with its first office in Switzerland in 1984 and then to Austria in 1986 and to France, UK, Netherlands in 1987. SAP AG goes public with IPO in 1988. Work starts on SAP R/3.

c. The SAP R/3 era: 1991-2000

R/3 is launched on SAP's 20th Anniversary. SAP enters China and Latin America, acquiring its 1000th Customer by 1995. Sapphire picks up in 1996 setting record breaking participation.

d. The e-Business era: 2001-2010

SAP launched SAP Business ByDesign, its first on-demand solution for small and midsized enterprises, enhancing its presence in the midmarket. SAP Business One, used by 10,000 customers, contributes around 30% of SAP's €3.1 billion software license revenue.

e. The digital economy: 2011-Present

SAP's acquisition of Ariba marked a strategic move to dominate the business-to-business e-commerce sector. This was followed by the complete migration of the SAP Business Suite to the SAP HANA platform. Additionally, SAP introduced RISE with SAP, a comprehensive solution designed to assist enterprises in their transformation into Intelligent Enterprises.

1.4 SAP Application Management Services (AMS)

SAP Application Management Services (AMS) refer to the wide array of services that help and oversee SAP applications and systems, keeping them running, upgrading them as needed and retiring them at their end of life. These services involve monitoring, maintenance, enhancement, and optimization of SAP landscapes.

AMS providers support several SAP parts, like ERP, CRM, SCM, SAC, SF, Ariba, and other components. AMS provides services to SAP systems hosted at on premises, in the cloud, either private cloud or public cloud, or hybrid environments with a mix of both.

AMS helps companies get the most out of their SAP investments by offering expertise in system maintenance, problem management, continuous improvement and innovation support, handling problems always getting better, and backing new ideas. It lets businesses zero in on what they do best while handing off the complex aspects of managing SAP systems with specialized service providers.

1.4.1 SAP AMS Services

SAP Application Management Services (AMS) are a bundle of services selected as per the needs of the customer and molded by the capabilities of the AMS Service provider. The commonly offered services are listed below, however some providers will be providing added services.

- **Incident Management**:

  Recording, resolution and management of issues, defects, bugs raised by users, or auto generated by monitoring systems within the Service level Agreements (SLA)s.

- **Problem Management**:

  Identification, resolution, and management of repeated incidents leading to permanent fix of root causes, thereby preventing their reoccurrence, and reducing the number of incidents.

- **Monitoring:**

  Proactive regular monitoring of SAP systems to detect system availability and key performance indicators, minimizing downtime and ensuring business continuity. Generating and issuing alerts as per thresholds.

- **Change Management**:

  Implementation of changes and enhancements to SAP systems as per business needs, with proper impact assessment, prioritization, approvals, and testing, while ensuring minimal disruption to business operations.

- **Release and Deployment Management**:

  Planning and coordination, release and deployment of changes and bug fixes to production environment to SAP systems, following best practices and minimizing risk.

- **Performance Management**:

Monitoring and optimizing performance related KPIs, including tuning, capacity planning, and load balancing, to ensure optimal system efficiency and user experience.

- **Continuous Improvement**:

  Ongoing identification and implementation of process improvements and optimizations to enhance SAP system functionality, reduce human interaction, automate manual tasks. Improve accuracy and first time right.

- **Compliance and Security Management**:

  Implementing and maintaining measures to ensure SAP systems comply with relevant regulations and standards while maintaining access controls to protect sensitive data.

- **Innovation and Transformation Support**:

  Helping organizations in adopting new SAP technologies, such as SAP S/4HANA, SAP Fiori, SAP Cloud Platform, to drive digital transformation and innovation.

1.4.2 SAP AMS Market Size

The SAP Application Management Services (AMS) market stands out as a noteworthy segment of the wider IT services field. Its growth stems from more businesses using SAP tools and the increasing challenge of running SAP

systems. The market's size depends on things like the growing need for SAP S/4HANA upgrades, cloud use, and the push to keep systems running well and get support.

Experts valued the worldwide SAP AMS market at about $30 billion in 2023. They expect it to grow by 7-10% each year from 2024 to 2030. This growth comes from demand generated by more companies adopting SAP landscapes and large enterprises moving ahead with their digital transformation journey.

North America represents the largest market for SAP Application Management Services (AMS), holding a substantial share of the global market. The growth in this region is primarily driven by the extensive adoption of SAP solutions by large enterprises.

Europe is characterized as a mature market for SAP AMS and its market expansion is largely attributed to progressive adoption of SAP S/4HANA across various sectors.

The Asia pacific expansion is fuelled by rising demand for SAP solutions among small and medium-sized enterprises (SMEs), and the growing presence of global SAP service providers in key countries such as India, China, and Australia.

1.4.3 SAP AMS Providers

The ISG Provider Lens framework categorizes SAP AMS service providers into distinct segments based on their market presence, competitive strengths, and service offerings (ISG, 2024). Below is the 2024 Quadrant published by ISG classifying SAP AMS Providers into leaders, product challengers, market challengers and contenders.

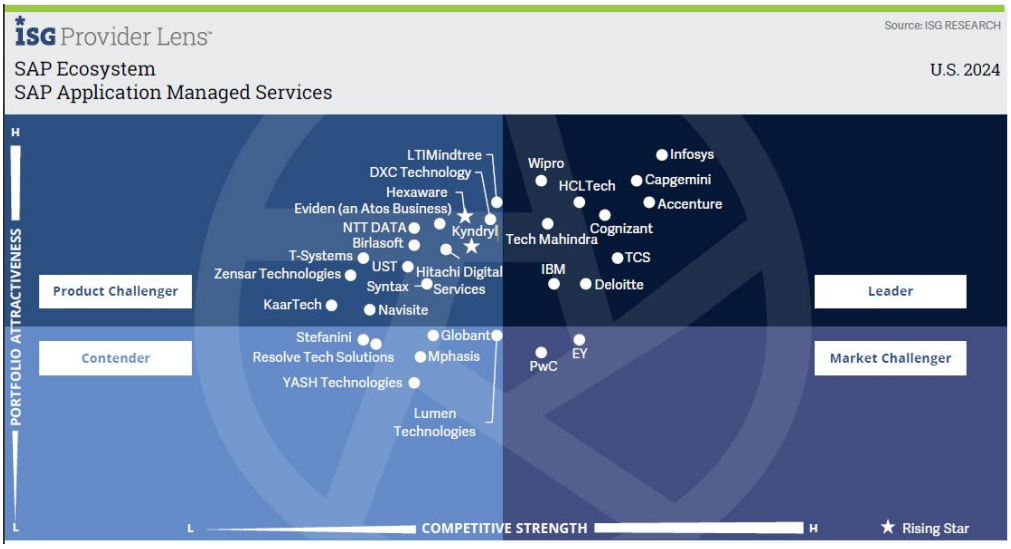

Figure 3 : Quadrant of SAP Application Managed Services 2024 (ISG, 2024)

All the major players mentioned in ISG provider Lens report for SAP Application Managed Services in 2024 are listed in alphabetical order in below table:

Table 2 : List of SAP AMS Providers, Adapted from ISG (ISG, 2024)

Leaders	Product Challengers	Market Challenger	Contender
Accenture	Birla Soft	EY	Globiant

Capgemini	DXC	PWC	Lumen Technologies
Cognizant	Eviden (Atos)		Mphasis
Deloitte	Hitachi		Resolve
HCLTech	Kaar Tech		Stefanini
IBM	LTI Mindtree		Yash Technologies
Infosys	Navisite		
TCS	NTT Data		
Tech Mahindra	Syntax		
Wipro	T-Systems		
	UST		
	Zensar		

1.4.4 SAP AMS Indian Providers

As per Gartner SAP Application Services Reviews and Ratings, the key players in SAP Application Management Services are present in India Geography (Gartner, 2024). In this study, we will focus on the 12 AMS Service providers, ten from the leader's category in the ISG Quadrant and two market challengers.

1.5 Research Problem

99 out of 100 largest companies in the world use SAP products and solutions, 85 of them are SAP S/4HANA customers. SAP is a market share leader in enterprise applications software, enterprise resource management applications,

supply chain management applications, procurement applications software, travel and expense management software, and ERP software (SAP Global Communications, 2023).

Operating, maintaining, securing, and upgrading these SAP products and solutions is a very relevant and important problem for industries across the board. Organizations always want to focus on their core competencies and not be bogged down by administrative tasks of enabling the ecosystem that supports their business operations. Such complex and specialized product knowledge-based support activities are often best entrusted to specialized SAP service providers.

The teaching case by Langerman and Leung about Standard Bank of South Africa burdened with Group IT costs higher than industry benchmarks resorting to outsourcing is an eye opener to the decision challenges faced by CIOs and CFOs across the industry (Langerman & Leung, 2023). This goes to highlight the immense importance of shared services to the industry as a key cost leverage. Shared services are no longer a luxury but a prerequisite to business survival in the competitive world.

Operations support have nonlinear resource requirements. The business cycles lead to increased demand for business support during financial reporting

periods, like month-end, quarter-end, year-end book closing and special events like regulatory audits.

There are also seasonal peak demands as per the end customer cycles. Traditional business environments struggle to meet such known seasonal peaks or lead to unused IT capacity during the regular times. These regular occurrences strengthen the calls for engaging service providers.

There is a huge gap between the supply and demand of trained SAP consulting expertise. The fluidity in the labor market and high demand due to accelerated adoption of digital transformation initiatives fueled by covid19 pandemic is leading to record high attrition in IT industry.

Every year, Indian tech companies lose between 10% and 15% of their workforce. Attrition rates have reached as high as 30% in some industries in just one year (Pallathadka, et al., 2022). Shared services centers although not immune to attrition are a better hedge for business continuity from attrition risks.

In any organization, all lines of business do not have uniform transaction volumes and hence subsequent demand for IT support is not uniform. There are some business processes which have low volumes, or which are highly stable and hence generate lesser support call / incident volumes.

In case of low intensity modules, as part of traditional outsourcing models, having the fixed full time equivalent dedicated support personnel is an excess cost and contributes to inefficiencies. There is need for better models that eliminates waste, reduces inefficiencies, and provides higher utilization of the highly costly niche technical resources.

We could not find any documented studies on the structure of a shared service center for SAP operations in an IT service provider organization. The problems faced by business decisions maker and the key considerations for moving to a shared services model are listed below:

1. The problem of can it be done.
2. The problem of size.
3. The problem of differentiation.
4. The problem of knowledge retention.
5. The problem of fluidity in staffing.
6. The problem of data security.
7. The problem of disruptive technologies.

Industry is in need for answers to above pertinent and relevant problem areas, is in need for studies and enablers that aid them in timely and meaningful decision making. The tacit knowledge available with the industry practitioners need

to be articulated and documented to arrive at a roadmap for solving some of the above problem areas.

1.6 Purpose of Research

The aim of this research is to understand and articulate the concept of shared services organization deployed by service providers in areas of SAP operations and SAP annual maintenance services. The study will strive to understand how these operations differ from other Service provisioning models. The study will also document the challenges faced by service providers in implementing shared services in SAP AMS and operations.

The long-term aim of this study is to contribute to the body of knowledge around the shared services model in ICT industry and specifically around SAP operations. The study aims to be a window to the world on the practices implemented by leading IT organizations in their state-of-the-art shared service centers.

1.7 Significance of the Study

Since it is noticeably clear from the literature review, that use of shared services for SAP support is not very well documented, this study will plan to document the industry practices at the shared services practice teams in SAP AMS areas. The objective is to understand, identify, classify, and document the shared services models / practices, the growth and evolution of shared services practices and clusters in SAP operations.

Particularly, the study has the following sub-objectives:

1. To document the industry knowledge in operations of shared service centers for supporting SAP operations of global customers across geographies, across time zones, across industry verticals.

2. To understand and capture the key characteristics and features of shared services Model as deployed in SAP Operations.

3. To discover areas of improvement or synergies for shared services operators and contribute to a body of best practices for shared services operations.

4. To contribute to identifying and forecasting the emerging trends in SAP shared services and general IT services outsourcing.

The long-term objective of this study will be to add to the body of knowledge and contribute primary data collected from Industry practitioners to enable future research.

CHAPTER II:

REVIEW OF LITERATURE

2.1 Overview

This Literature review will examine the current state of research on SAP shared services. we will look at the definition of shared services, what is included in shared services, classification of various services, checklist of criteria for inducting services into shared services.

We intend to look at various challenges faced by shared services centers, benefits of adopting shared services models, various business models and operating models available to shared service centers.

The Literature review suggests that Shared Services as a concept has been studied and various challenges, success factors and case studies on Shared Services has been published. Our focus in this research is on use of Shared Services in IT organizations as a business model to operate their consulting and support services which are sold to external customers as a paid service.

2.2 Shared Services

Shared Services as a business service refers to the centralization of functions and business processes and rendering them to multiple business units, departments and even subsidiaries of organizations. The services historically included finance

human resources procurement accounts payable and lately information technology departments. SAP Shared Services is the concept that refers to centralization of SAP Support Services and delivering them to multiple internal and/or external customers.

2.2.1 Shared Services Definition

Definitions are critical for the progression of the field and provides a strong foundation for further research in shared services, Definitions are key to understand below points:

- to understand what drives the interest for shared services,
- to derive performance measures related to shared services,
- to design and deploy shared service structure and governance, (Miskon, et al., 2009).

To accurately collect all the literature around shared services it is important to define the search terms in area of shared services, with this objective in mind let us start with defining shared services.

Bergeron in 2002 defined shared services as "*Shared services is a collaborative strategy in which a subset of existing business functions are concentrated into a new semi-autonomous business unit that has a management structure designed to promoted efficiency, value generation, costs savings and improved service for the internal customers of the parent corporation* " (Bergeron, 2002).

Miskin defines shared services as *the internal provisioning of services by a semi-autonomous organizational unit to multiple organisational units involving the consolidation of business functions supported by a sharing arrangement* (Miskon, et al., 2009).

Martin defines shared services as a *collaborative strategy in which a subset of existing functions are concentrated into a new, semi-autonomous organizational unit that has a management structure designed to promote effectiveness, efficiency, value generation, cost savings, and improved service for the internal and/or external customer, like a business competing in the open market*" (Wenderoth, 2013).

The definition accommodating most perspectives on shared services found in IS literature is '*An organizational arrangement whereby multiple organizational units collaborate in the concentration of resources to provide services that support their business activities*" (Fielt, et al., 2014).

Martin has collated various definitions of Shared Services in below table.

Table 3 : SSC Definitions as collated by Martin (Wenderoth, 2013)

Source	**Definition**

Schulman, Dunleavy, Harmer & Lusk, 1999	The concentration of company resources (...), typically spread across the organization, in order to service multiple internal partners at lower cost and with higher service levels, with the common goal of delighting external customers and enhancing corporate value.
Quinn, Cooke, Kris, 2000	Shared Services (...) refers to the practice of (...) organizations deciding to share a common set of services (...).
Kagelmann, 2001	Shared services are an organizational approach for the provision of internal services to more than one organizational unit by means of the common utilization of resources within one organizational unit.
Forst, 2002	Under shared services, a single business unit provides dedicated management of an internal support service across the organization
American Productivity and Quality Centre, 2005	Leading-edge companies are moving away from autonomously run operations to efficient, customer-focused functions known as ‘shared services. Under shared services, scattered operations are pulled together into mega-service centers, which then serve all of the company’s business units around the globe.

Davis, 2005	Shared services provide support services to the subsidiaries of Multinational Enterprises (MNEs) in different regions of the world
Kroll, 2005	Shared services is an activity within the corporation that delivers a range of services that others value, at a cost quality level and speed that are competitive.
Tomkinson, 2007	Shared services are the shared provision by more than one local council of a specified service in which service aims and objectives are mutually shared and for which local people are the end customer.
Wiener, 2009	Financial shared services are independent organizational areas which provide financial services and competencies on a market and customer-oriented basis by means of a professional platform to the operative units of an organization.

2.2.2 Shared Services: Evolution

As evident from the way definitions of Shared services has evolved, we can understand that there is a trend in overall understanding of Shared Services. Let us now attempt to understand and paraphrase historical review of what has been written about shared services across the decades.

2.2.2.1 The Pre -1990s

During literature review, the concept of shared services has been traced back to 1970s. A core banking system (IBIS) was cooperatively implemented by several Swiss banks (Fielt, et al., 2014). In 1980s, Finance area became the function with most Shared Services implementation.

General Electric in 1984 had implemented shared services in financial and accounting function for all their companies. Digital equipment corporation implemented their financial shared services in 1985. By end of 1980s Baxter healthcare and AT Kearny had started their financial and accounting shared services implementation programs (Fielt, et al., 2014).

2.2.2.2 The 1990s

By The 1990s, literature indicates that shared services had started to evolve and branch out to other functional areas like HR Finance, Procurement and IT. Procter and gamble created a Global Business Services Group which was their shared service centre for HR, finance and IT (Fielt, et al., 2014).

2.2.2.3 The 2000s

In the 2000s organizations implemented shared services for managing their it and ERP systems like SAP, PeopleSoft, Oracle. In this decade almost half of the Fortune 500 companies had adopted shared

services primarily in the area of finance followed by human resources and IT (Borman, 2008).

Motives for introducing shared services centers in public administration are discussed by Janssen and Joha. They compare the initial motives for introducing a shared services center with post-implementation benefits. They provide an analytical overview of the governance of shared services in public administration (Janssen & Joha, 2007).

Schulz in 2009 points out that in many cases implementation of SSC is an initial stage of outsourcing. Processes and resources are consolidated company-wide in an SSC as a preparation step for being outsourced to an external service provider later (Schulz, et al., 2009).

Miskin made an attempt to investigate and report the status of literature on Shared Services in Information Services academia. He demonstrates the lack of academic literature on Shared Services in Information Services and went on to identify research propositions. (Miskon, et al., 2009).

2.2.2.4 The 2010s

James Mckeen states that Shared Services is differentiated from a decentralized shared delivery model. The decentralized model manages

services locally at the various organizational units. for example, in highly diversified businesses, each business unit locally provisions the IT services. In contrast a centralized service delivery model for IT resources uses standardization to lower the costs (McKeen & Smith, 2011).

Fielt and team in 2014 conducted an analysis of objectives of shared services as reported in IS literature. The number of papers mentioning each category and the number of times each category was mentioned in each paper (coding references) is depicted in figure below.

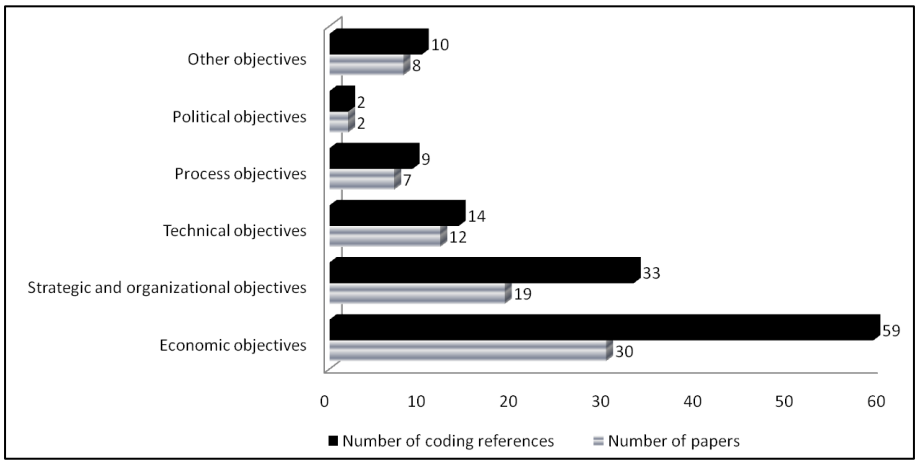

Figure 4 : Categories of Shared Services Objectives (Fielt, et al., 2014)

Five clear categories of objectives can be identified from the literature review, characteristics, and objectives of each category.

1. Economic objectives:

   It is no surprise that economic objectives have been quoted the greatest number of times as the driving factor for Shared Services. Cost

reduction is the main economic objective of Shared Services. Economies of scale and leveraging resources have also been identified as economic objectives (Fielt, et al., 2014).

2. Strategic and organizational objectives:

    In this category professional service delivery was the most cited objective. Other objectives highlighted include customer orientation, synergy and innovation, restructuring, working across geographies (Fielt, et al., 2014).

3. Technical Objectives:

    Access to resources and expertise, use of ERP systems and business/IT alignment are the main technical objectives. Creation of shared services freed up the resources that were earlier fully consumed in maintenance activities (Fielt, et al., 2014).

4. Process Objectives:

    Process improvement is the main process objective. Shared services formed with global governance are a key enabler for process improvements (Fielt, et al., 2014).

5. Political objectives:

Centralisation and decentralisation of control in an organization is one of the political objectives catered by creation of a shared service centre (Fielt, et al., 2014).

2.2.2.5 The 2020s

Afflerbach talks about hybrid virtual teams in Shared Services. He proposes three strategies a) identity constructing, (b) individual and co-created trusting and (c) virtual peer monitoring comprising a total of twenty-two different practices (Afflerbach, 2020).

Lakshmi and team talk about the digital disruption due to technology intervention in Shared Services. Robotic Process Automation (RPA), Artificial Intelligence, Robotic Digital Automation (RDA) or cognitive automation has proven to unlock the potential operational excellence to deliver enhanced customer value. Emerging technologies like blockchain, cloud computing and Big Data Analytics provide an opportunity to revamp business functions and processes.

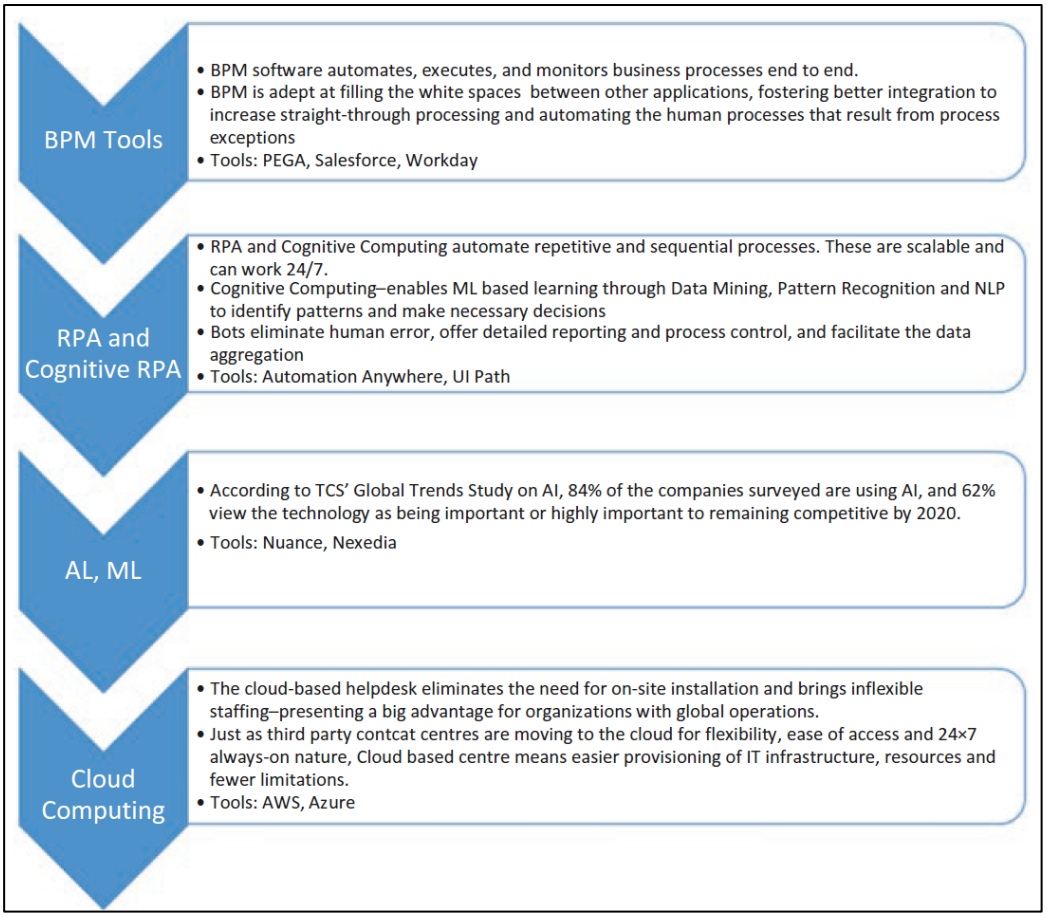

Figure 5 : Technology Intervention in Shared Services (Lakshmi, et al., 2020)

The above figure depicts the various technological interventions in shared services. Harnessing Machine Learning (ML) and Artificial Intelligence (AI) driven analytics powered by demand-based cloud computing would result in improved insights into customer-buying behaviour patterns. This could in turn help the company to set the market trends or react to changing patterns with greater speed and intelligence. Lakshmi and team

conclude that efficiency realization in lifecycle of SSC can be achieved in three stages:

- Stage 1: Achieving economy of scales through operational optimization by centralizing services and processes
- Stage 2: Achieving cost reduction through elimination of unnecessary process steps or automation of steps leading to reduced processing time.
- Stage 3: Driving top line contributing functions to predict and enhance customer journeys, thus enabling seamless customer experience.

Above stages of efficiencies can only be achieved by adoption of digital tools. The success or failure of SSC is dictated by the robust digital framework and supporting environment (Lakshmi, et al., 2020).

2.3 Theories

The following theories have been identified in area of Shared Services organizational design:

Table 4 : Shared Services Theories (Fielt, et al., 2014)

Theory	Application of theory
Resource-Based View (RBV)	Understand, plan, source, organize, and deliver the IT shared services optimally in a shared services model
	As a determinant for the type of IT governance necessary to share services in public administration

Dynamic Capabilities Theory (DCT)	As a determinant for the type of IT governance necessary to share services in public administration
IT Governance Theory (ITG)	Understand the governance structure and mechanisms to share services and accomplish the objectives in public administration
	Position shared services as a structural element in global IT organizations, which needs to work with other structural elements
Resource Dependence Theory (RDT)	Understand the motivation for and the composition of shared services partnerships in local government
Real Options Theory (ROT)	Conceptualize service organizations and their shared services transformation in an uncertain business environment
Transaction Cost Economics (TCE)	Argue for or against the decisions to adopt shared services (versus outsourcing)

2.3.1 Resource based view (RBV)

The tangible and intangible resources like budget, expertise, equipment, and skills are needed for service provisioning. The RBV identifies resources as having the VRIN attributes: valuable, rare, immutable, non-substitutable. The RBV states that organization's resources are

heterogeneously distributed and hence resources can be logically structured and better governed for operational efficiency using Shared Services Center.

RBV describes how organizations can gain competitive advantage by differentiating themselves in their collection of resources and from the inability of other firms to obtain comparable resources (Janssen & Joha, 2007).

2.3.2 Dynamic Capabilities View (DCV)

The DCV describes the organization's ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments. Dynamic capabilities are a set of specific and identifiable processes.

The implementation of shared services requires a governance structure that can adequately cope with the various and changing needs and requirements of the multiple stakeholders within a service network. The DCV takes such a dynamic environment into account and emphasizes the concept of 'resource renewal', in which existing resources are reconfigured into new functional competencies (Janssen & Joha, 2007).

2.3.3 IT Governance Theory:

Governance represents the framework for decision rights and accountabilities to encourage desirable behaviour in the use of resources. Governance is necessary for creating, assembling, and exploiting shared services in a network of public agencies, all having various resources and capabilities. three kinds of governance mechanisms:

(1) decision-making structures: The decision-making structures involve the organizational committees and roles that have decision-making responsibilities.

(2) Alignment processes: Alignment processes are management techniques for securing widespread and effective involvement in governance decisions and their implementation.

(3) Formal communications: Formal communications are establishing working relationship among stakeholders by two-way communication (Janssen & Joha, 2007).

2.3.4 Organization Design Options:

Modrzynski talks about the influence of market strategies on the organizational structure. He goes on to state that though market strategies may be unique to each company, a study by researchers at University of Colorado groups market strategies into 4 categories:

- Prospectors
- Analysers
- Low-cost defenders
- Differentiated defenders (Modrzynski, 2020)

Table 5 : Characteristics of Various Organization Designs (Modrzynski, 2020)

Org Design	The Form	Characteristic
The Independent	I-Form	global company seeks to control and operate the entire process independently.
Holdings	H-Form	Companies running diversified business under one Common corporate umbrella
Unitary	U- Form	centralized decision-making process for large companies
Horizontal Organization	HO-Form	autonomous departments with horizontal information flow
Joined Up Company	J- Form	formally and informally linked departments
Matrix company	MX-form	gradually increasing mutual cooperation and integration among the departments, developed by ABB conglomerate
New or Novelty	N- form	Loose structures where employees are willing to share knowledge for common goals

Some of the forms of company organization models mentioned by Modrzynski are listed in above table. The departmental organization

structure is based on the interaction of horizontal and vertical flow of information and management flows as shown in below figure.

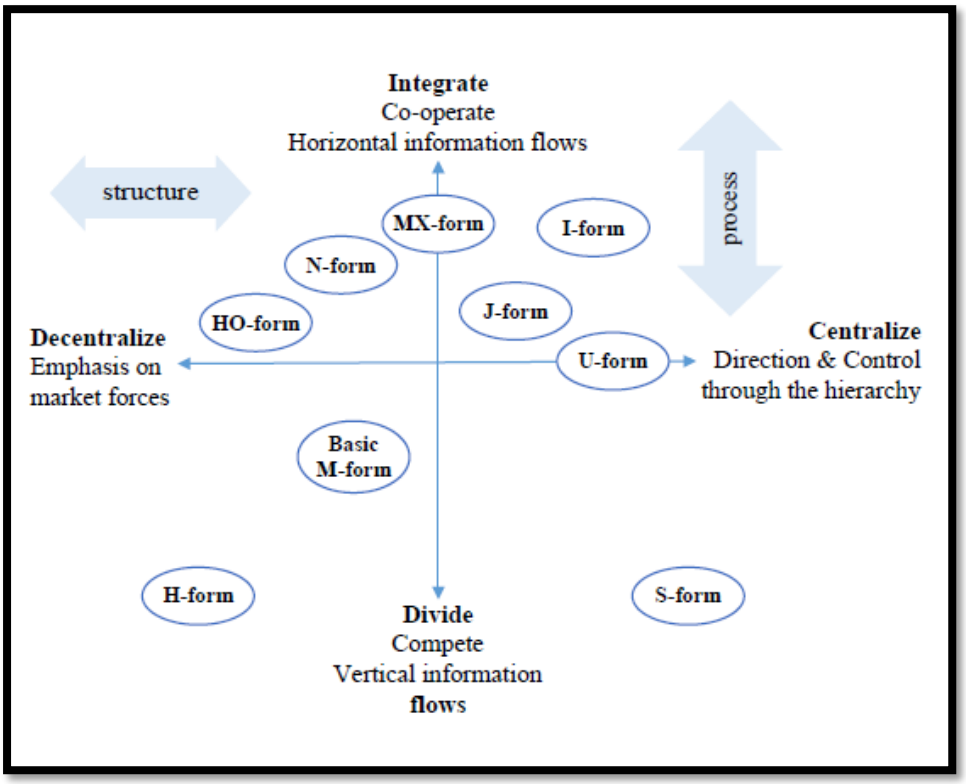

Figure 6 : Organization Design Options: (Modrzynski, 2020)

2.3.5 Government Shared Services Provider Model

Michael summarizes the government shared services provider model using case study of Toronto City's Shared Services. He describes the model where one government agency acts as a lead agency and provides the functional service to other agencies and external clients (Ben, 2020).

2.3.6 Four Phase Model:

Martin talks about the four-phase model for implementing Shared Services. The model provides a logical, systematic, and structured approach towards the implementation of shared services (Wenderoth, 2013).

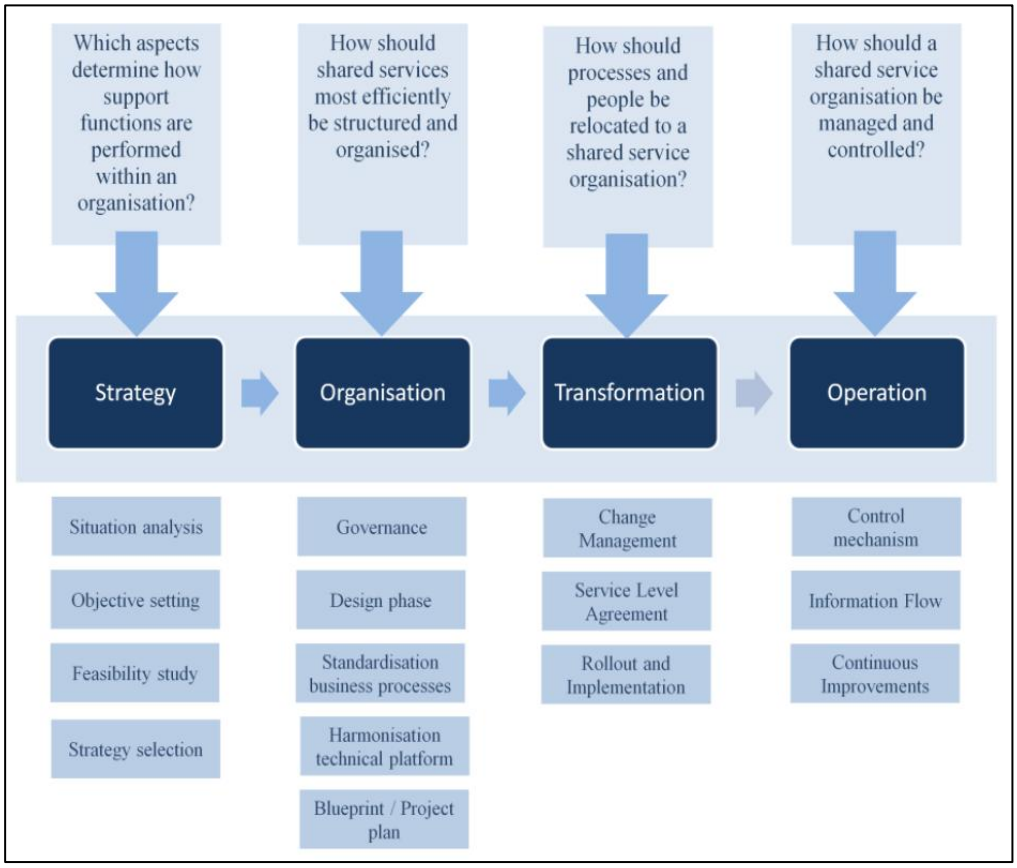

Figure 7 : Four Phase Model: (Wenderoth, 2013)

2.4 Research Gaps / Research Proposition

Study of literature has made it clear that though several aspects pertaining to shared services have been discussed, there are many areas available for future research. Below gaps and research propositions have been called out by various authors.

1. Should organizations invest in technology first when deploying shared services?

2. Are organizations able to improve customer foci by centralizing all the similar activities or business functions in a shared services initiative?

3. How can organizations generate cost effectiveness through shared services initiative?

4. How can organizations avoid duplication of efforts by implementing shared services?

5. What are the benefits of standardization within shared services and how can these be best arranged?

6. Are shared services able to improve an organization's structure through consolidating processes?

7. Are shared services able to assist organizations build a Centre of Excellence to gain access to organizational resources? (Schulz, et al., 2009).

CHAPTER III:

METHODOLOGY

3.1 Research aim

The aim of this research is to understand and articulate the concept of shared services organization deployed by service providers in areas of SAP operations and SAP annual maintenance services. The long-term aim is to understand the models that have been implemented by IT outsourcing service providers for provisioning SAP operations services to multiple external customers from a shared services center.

The study will strive to understand how these operations differ from other Service provisioning models. The study will also document the challenges faced by service providers in implementing shared services in SAP AMS and operations.

The long-term aim of this study is to contribute to the body of knowledge around the shared services model in ICT industry and specifically around SAP operations. The study aims to be a window to the world on the practices implemented by leading IT organizations in their state-of-the-art shared service centers. An attempt will also be made to document the impact of the emerging technologies on SAP AMS.

3.2 Research Purpose and Questions

A research question is a logical statement that progresses from what is known or believed to be true to that which is unknown and requires validation. Articulating a suitable research question is a primary condition for embarking on a successful research project. Well-formulated research questions are believed to lead to quality research (Goldschmidt & Matthews, 2022).

We have applied the RIN. AFE framework to our research questions. The RIN.AFE framework has two criterias: conceptual criterias to guide the robustness of the research questions and the methods criterias to guide choice of methods and their implications, such that they best serve the investigation of the concepts. The conceptual criteria are RIN: R (relevant), I (interesting), and N (novel). The subordinate (but equally important) methods criteria that serve the conceptual ones are AFE: A (appropriate), F (feasible), and E (ethical) (Goldschmidt & Matthews, 2022).

The below research questions regarding shared services model are being selected for the scope of this study:

1. To capture and articulate the current understanding from the practitioners and leaders about shared services model in SAP AMS industry.

2. To gain an insight into the team at shared services center and understand the factors impacting their productivity and efficiency while working in shared services model.

3. To understand the impact of emerging technologies like machine learning and artificial intelligence on SAP AMS and SAP shared services and its future trends.

The research questions of this study are designed with the IT Industry heads, CIOs, CFOs, and Vertical / Segment heads in mind to aid in their decision-making regarding SAP shared services as a delivery model.

3.3 Research Design

A mixed-methods approach is a research methodology that includes philosophical assumptions to provide directions for the collection and analysis of data from multiple sources in a single study. It also offers a logical ground, methodological flexibility, and an in-depth understanding of smaller cases (Dawadi, et al., 2021).

The main attraction of using mixed method research is that data gained through different methods may complement each other, overcoming weaknesses in individual methods (Harris & Brown, 2010).

Our Reasons for combining methods include triangulation for corroboration of findings, complementarity for illustration and clarification of results, expansion to extend the breadth and range of the study, offsetting the weakness of one method with the strength of another (Busetto, et al., 2020).

Data triangulation is used to identify convergence of data obtained through multiple data sources and methods to avoid or minimize error or bias and optimize accuracy in data collection and analysis processes. Methodological triangulation refers to the use of multiple methods, such as participant observation, recording of naturally occurring data, examination of white papers and artifacts and so forth (Roulston & Choi, 2018).

The three most common types of mixed method designs are the convergent parallel design, the explanatory sequential design and the exploratory sequential design.

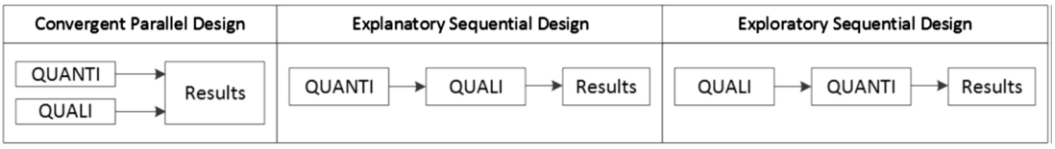

Figure 8 : Three common Mixed Methods Design (Busetto, et al., 2020)

In the convergent parallel design, a qualitative study is conducted in parallel to and independently of a quantitative study, and the results of both studies are compared and combined at the stage of interpretation of results. In the

explanatory sequential design, a quantitative study is carried out first, followed by a qualitative study to help explain the results from the quantitative study. In the exploratory design, the qualitative study is carried out first and its results help informing and building the quantitative study in the next step (Busetto, et al., 2020).

In our study, we will be following exploratory sequential design. This study will be conducted using mixed methods of qualitative interviews and focus groups along with quantitative surveys using structured questionnaires. Each method will be planned in multiple phases to be executed sequentially or concurrently.

3.3.1 Semi Structured Interviews

Interviews are particularly appropriate for exploring sensitive topics, where participants may not want to talk about such issues in a group environment (Gill, et al., 2008) . For shared services research, interviews are most appropriate as little is already known about the shared services practices in ICT environment and detailed insights are required from individual participants who are the shared services practitioners.

Compared to structured or unstructured interviews, the semi structured interview format also allows for the discovery or elaboration of information that is important to participants but may not have previously been thought of as pertinent by the research team (Gill, et al., 2008).

In a semi-structured interview, interviewers begin with a small set of open-ended questions, but spend considerable time probing participant responses, encouraging them to provide detail and clarification (Harris & Brown, 2010).

3.3.2 Focus Groups

Focus groups are an extended way of interview method, more of a group interview, led by a trained moderator. Focus groups are guided group discussions, intended to yield information on a specific topic from a selected population (Gundumogula, 2020). They are also useful in generating a rich understanding of participants' experiences and beliefs. (Gill, et al., 2008).

Focus groups are useful for bringing together homogeneous (to a lesser extent heterogeneous) groups of participants with relevant expertise and experience on a given topic on which they can share detailed information (Busetto, et al., 2020).

This study will be using focus groups with functional and technical consultants of shared services SAP AMS teams to deepen our understanding about the shared services practices.

3.3.3 Questionnaires

A structured questionnaire is used to collect quantitative data and is designed in such a way that it collects intended and specific information related to a problem (Aithal & Aithal, 2020).

The surveys using a structured questionnaire have a specified and clear pattern of questions logically arranged and sequenced. Most of these questions will be close ended so the answers are pre-coded. Close-ended questions use different schemes for the possible answers ranging from checklists to multiple choices and rating scales. They possess many merits as they are easy-to-administer, consistent answers and encompass fewer discrepancies that makes data management easier (Taherdoost, 2022).

The steps required in questionnaire development stage, reliability stage, and questionnaire validation stage are depicted in below figure:

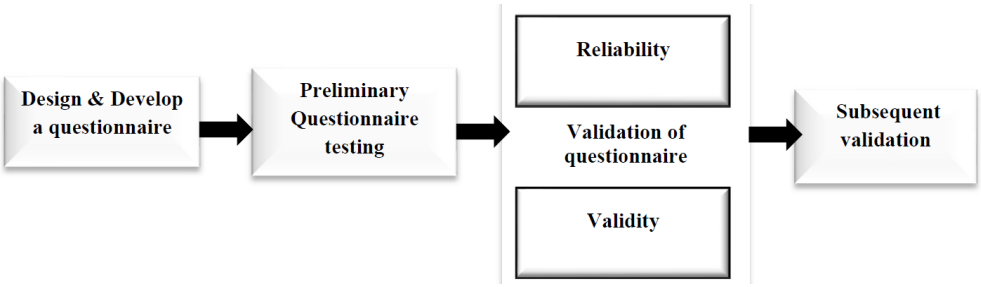

Figure 9 : Questionnaire design Cycle. (Aithal & Aithal, 2020)

A questionnaire survey will be administered to the members who are currently part of or in past have been exposed to the shared service operations.

3.4 Population and Sample

As of July 2023, SAP has 23 certified outsourcing partners in India. Out of these, only 12 partner organizations provide SAP S/4HANA Operations Support to customers regionally and globally (SAP, 2023). We will study the partners employing shared services model to render their SAP services to customers.

This study is primarily aimed at Indian IT Service provider organizations, specifically those providing SAP business process outsourcing services using shared services model to more than one customer organization over at least last 5 years. This is our target population.

The interviews and focus groups will be for smaller samples and senior executives, the questionnaire survey is intended to address the larger population of Junior and mid-level members who are part of the shared service ecosystem.

Saturation refers to the point in data collection when no additional issues or insights are identified and data begin to repeat so that further data collection is redundant, signifying that an adequate sample size is reached (Hennink & Kaiser, 2022). Saturation point not only assures the validity and credibility of information

for the study but saves researchers' time and energy in collecting the same (Mwita, 2022).

Hennick & Kaiser (2022) provide empirically based sample sizes for saturation and their results can be used to demonstrate that 'small' sample sizes are effective for qualitative research and to show why they are effective because they are able to reach saturation.

Qualitative samples that are larger than needed raise ethical issues, such as wasting research funds, overburdening study participants, and leading to wasted data while samples that are too small to reach saturation reduce the validity of study findings (Hennick, et al., 2017).

3.4.1 Samples for Semi structured interviews

Hennick & Kaiser (2022) reviewed 23 studies that empirically assessed saturation, with 80% published since 2014 and have concluded that saturation can be achieved at an average of 12–13 interviews (Hennink & Kaiser, 2022).

In our study, we have targeted a sample size of 25+ participants. As we will see in the subsequent section of participant selection, the interviews will be spread across 4-5 roles with a minimum of four interviewees per

role. This is our A-priori sample and will be further refined based on data saturation achieved.

3.4.2 Samples for focus Groups

Saturation in focus groups may be influenced by factors such as study purpose, type of codes, group stratification, number of groups per stratum, and type and degree of saturation (Mwita, 2022).

Rabie (2004) mentions that number of focus groups needed may only be three or four, however multiple focus groups can be run till saturation is achieved. Hennink and Kaiser (2022) argue that saturation is normally reached between the 4th and 8th focus group session.

This study targets conducting 5 Focus Group Sessions with homogenous and heterogenous participant profiles. The transcripts will be analysed to determine saturation.

3.4.3 Samples for Questionnaires

For questionnaires, we will be using snowball sampling. As per Krejcie & Morgan (1970) for a finite population of 20,000 the sample size needed is 370 and for a population set of 10,00,000 an adequate sample size is 384.

Increasing the response rate can decrease the errors by achieving a higher sample size. However, this factor is not a priority compared to the non-biased samples since biased samples even with high response rates are likely

to affect the findings negatively by adding non-sampling errors (Taherdoost, 2022).

There are no fixed rules for use of sample size for a questionnaire for validation, but it is suggested to use sample size as large as possible to have higher respondents to question ratio (Dawadi, et al., 2021).

This study attempted to obtain a 400+ sample size so as to improve generalisability ensuring that the survey results could be statistically significant and reflective of the broader population of SAP S/4HANA professionals in India.

3.5 Participant Selection

For this qualitative study we will use nonprobability sampling, among them purposive sampling will be used to select the participants. Purposive sampling is an approach for purposefully selecting participants based on meeting certain criteria of interest (Adeoye-Olatunde & Olenik, 2021). The use of purposive sampling increases the chances of a researcher to reach saturation because the subjects obtained through the technique have rich information of the research objective (Mwita, 2022).

3.5.1 Participants for Interviews

The interviews will be directed towards senior industry practitioners associated with India based SAP S/4HANA AMS Service Providers. The

participants will be screened to determine if they have exposure to Shared Service way of working.

The study targeted individuals in various roles within the SAP Practice of various IT service providers. This diversity in roles allowed the research to capture a wide range of perspectives on shared services, from strategic decision-making to operational execution. The participants were selected among the roles as mentioned in the below table.

Table 6 : Interviewee Role codes and Descriptions

Interviewee Role Code	Interviewee Role Description
DH (x)	SAP Delivery Head, x = 1,2,...n
DM (x)	SAP Delivery Manager, x = 1,2,...n
SA (x)	SAP Solution Architect , x = 1,2,...n
PM (x)	SAP Project Manager, x = 1,2,...n
CL (x)	SAP Competency Lead, x = 1,2,...n

The Participants will be identified from the professional network of the researcher, industry associations and referrals. The participants will also be asked to recommend other qualified members who can contribute valuable insights. Professional networking sites like LinkedIn will be

utilized to target specific roles that remain under-represented after the first phase of interviews.

3.5.2 Participants for Focus Groups

The participants of the focus group shall be selected individuals, who are experienced or knowledgeable about SAP shared services and can contribute the information from their past or current experiences of working in such shared services projects.

The optimum size for a focus group is six to eight participants (excluding researchers) but focus groups can work successfully with as few as three and as many as 14 participants. Small groups risk limited discussion occurring, while large groups can be chaotic, hard to manage for the moderator and frustrating for participants who feel they get insufficient opportunities to speak (Gill, et al., 2008).

For conducting a digital focus group, Willemsen and others (2023) advise a reduced number of participants due to potential technological issues and potential interruptions. To account for no-shows, cancellations, and dropouts due to technical issues, we recommend having five confirmed participants for the focus group (Willemsen, et al., 2023).

In this study, focus group participants were grouped together in a way that the diversity is maintained with a mix of roles and experiences within each group. This diversity facilitated dynamic discussions where participants could exchange ideas, challenge each other's viewpoints, and collectively explore the research questions.

With diversity being taken care of, we also organized focus groups with homogenous subgroups that had all participants at similar roles across the organizations. This helped us uncover the focused themes relevant to specific aspects of S/4HANA teams.

3.5.3 Participants for Questionnaires

The questionnaire will be targeted to the employees who are actively working or in past have worked for shared service teams in SAP AMS teams of Indian SAP SI organizations. The participants for the questionnaires survey will be the SAP Functional and Technical consultants, who are working or have worked in SAP Support Projects in a shared service model.

3.5.4 Ethical Considerations

All participants in all three methods were provided with background information about the study, clearly stating its purpose, the data usage, the future publication of the aggregated results from the data and the measures in place to protect their confidentiality.

Before collecting the data, and before recording their participation in study, Informed consent was obtained from all participants, explaining them their rights, including the right to be forgotten, the right to the results of the study, the right to know about how their data was stored and used, and the right to withdraw from the study at any point without any consequences.

3.6 Instrumentation

For this study a combination of qualitative and quantitative digital instruments was deemed necessary to capture the full spectrum of insights from diverse stakeholders within the Indian IT service sector.

3.6.1 Preparation for Interviews

The interviews are planned to be conducted mainly over virtual meeting platforms such as Teams meeting, Webex Meetings, Google Meet or Zoom video calls. Some of the interviews will also be attempted in-person, face to face whenever permitted by geographical location of the interviewee and time slot availability. The interviews will be of 30 mins to 45 mins in duration.

For Semi-structured interviews, an interview guide is created with questions aimed at addressing the research objective. The guide is not meant to be read off verbatim in the same order with each interview, rather, it is meant to provide structure and focus to the natural flow of conversation for each unique interview. A semi-structured interview guide often includes main open-

ended questions with follow-up probe questions for the interviewer to refer to throughout the interview (Adeoye-Olatunde & Olenik, 2021).

Pilot interviews will be conducted to test the instrument setup, including the recording and transcription features of the online conference tool. The Interview guide will also be tested for the sequence of the questions and feedback incorporated back to the guide.

There will be a setup in place to record interviewer notes and memos, this will enable the capture of non-verbal cues from the participants. Google drive will be used to store all the recordings and the transcripts generated from the sessions.

3.6.2 Preparation for Focus Groups

The focus groups will be conducted in-person for the groups with all members collocated. For the focus group sessions, where the participants are geographically distant, the session will be conducted virtually. Our target population is well versed with Online conferencing tools as part of their day-to-day work, hence there are no major challenges in conducting the digital focus groups.

To stimulate interaction and engagement, and to be able to rely on non-verbal communication such as facial expressions and raising hands, it is

recommended to encourage participants to keep their cameras on (Willemsen, et al., 2023). However, this should not be mandatory, and participants should be given option to turn off their cameras if it makes them more comfortable or if it is needed due to any bandwidth fluctuations.

The digital focus groups will be enabled by a Whiteboard, for use in brainstorming sessions. Miro board or Microsoft whiteboard will be enabled for the participants based on the platform used. The link to the board and the password will be shared will be used as an enabler for the session, so that participants can enter their ideas on whiteboard under respective.

The onscreen timers will be used to timebox various discussions and activities during the focus group sessions. The participants will also have facility to chat during the focus group sessions. The chat can be used to fix setup issues and allow the participants to interact with interviewer without disturbing the flow of discussion.

3.6.3 Preparation for Questionnaires

The questionnaire will be closed ended questions with multiple choice and Likert scale. The questionnaire length will be of 20 to 40 questions arranged in 3-4 sections. It would be possible to fill up with survey within `10 minutes of time.

After survey development, a pilot survey will be carried out to improve the questionnaire and to verify whether respondents can understand and answer all the questions. After revision and correcting the errors, an actual survey can be conducted to collect the data (Taherdoost, 2016).

3.7 Data Collection Procedures

In our mixed methods study, we have three types of instruments being used: Interviews, Questionnaires and Focus Groups.

3.7.1 Data Collection from Interviews

For Interviews, most of the interactions will happen over a virtual meeting facilitated by online conferencing tools. All the interviews will be recorded, with audio and video as per provisions on the conferencing tools. Some of the Interviews will happen in-person, however same may also be parallelly recorded using the virtual meeting tools.

The interview will be structured into 4 agenda items. At the start of interview, the interviewer will give a brief introduction about the study, our aims and objectives. The second item on agenda will be to inform the participant about confidentiality and anonymization. The interviewer will also inform the participant that all data will be aggregated and anonymized and no confidential information will be published.

During this time, the interviewer will take informed consent of participant for recording and transcribing the conversation. The interviewer will also use this time to build rapport with participants and make them comfortable. The first two items should be completed in the first 10 minutes of the interview so that there is sufficient time for discussion.

Once the participant has settled in and the initial introductions are over, the interviewer will proceed with the open-ended questions from the interview guide. Based on the response from the participant, interviewer will engage in a free-flowing discussion, encouraging the participant to share the insights from their experience. The interviewer will plan to cover all the three research questions in the stipulated 40-45 mins duration.

The fourth agenda item will be taken up in last 10 minutes. The interviewer will summarize the session, remind the participant of the recording consent and confidentiality. If participant opts to be made aware of the progress of the study or the outcomes from the study, the same will be noted and they will be added to a mailing list.

Interviewer will also make notes during the interviews to record the non-verbal cues regarding the body language of the respondent. The demographic

information of the participant will be collected from secondary research using sources like LinkedIn.

Recordings should be transcribed verbatim, and speakers should be identified so that the contributions of each participant are noted (Gill, et al., 2008). Transcript should be checked for accuracy and any confidential information like names of the customer or pricing related information or organization specific trade secrets that may have been said should be removed from the written transcripts to ensure anonymity (Adeoye-Olatunde & Olenik, 2021) .

3.7.2 Data collection from Focus Groups

. All the focus group session will be audio recorded for transcript and analysis purposes. The participants will be informed of the recording and their confidentiality will be assured. The length of the focus group sessions will be from 60 minutes to 90 minutes.

Focus group session will start with an introduction of the objectives of the study. The moderator will then brief on the recording and transcription and take consent of all participants.

The moderator will then start the discussions with open ended questions with one main leading question aligned to each of our research questions. Then based on the discussion, if need be, moderator will step in with follow on questions to drive the conversation and keep it focussed on the subject at hand.

For each of the research question, there will be a 5-minute window for the participants to enter their ideas, themes, keywords on the Whiteboard. A on screen timer will be used to let participants know the time. The discussion will follow on the points in sticky notes entered by all the participants on the Miro Board.

3.7.3 Data collection from Questionnaires

The questionnaires are being developed for self-administered mode of data collection. Our Target population has a high level of education and are suited for self-administered surveys (Taherdoost, 2022).

For Questionnaires, the survey will be hosted over an online Survey platform like Google Forms or JotForm. The online survey platform automatically tracks responses, ensuring that data is collected in real-time. The platform also ensures that participants could save their progress and return to the survey later if needed.

The questionnaires will also have a section where participants can choose how they wish to be contacted in future, if at all. The participants will have an option to indicate if they want to participate in focus group studies. They can also opt to get a copy of results when the study is published.

The questionnaires will be shared with target audience via email and online campaigns. The questionnaires will not ask for any personally identifiable information, only demographics will be collected.

3.7.4 Data Security

For the purpose of this study, a dedicated private cloud storage account has been created. All the primary data collected during the course of this study, will be stored in this private cloud, with access restricted to researcher only.

This will provide a single source of truth and unified data governance including data retention and data disposal. Regular backups of the data will be done, and multiple redundancy will be ensured.

All data files will be tagged, labelled and classified under a proper folder structure. Nomenclature will be followed for all file names and folder names. All the data will be stored with logical separation in their respective

hierarchical named and numbered folder structure. Version Tracking and Version management will be done for the document types, wherever applicable.

The recordings and transcripts of Interviews and focus groups will be initially stored by the online conferencing tool which generated them. The recordings and transcripts will be downloaded to our private cloud. Once the research study is completed, the recordings will be deleted from the online platform.

The questionnaire responses submitted will be stored digitally in the online platform. The data will be downloaded and stored in private cloud. Once the research study is completed, the questionnaire response data will be deleted from the online platform.

Data privacy protection:

The data will be stored in accordance with the relevant privacy protection regulations and ethical standards and institutional guidelines. All the Personally identifiable Information (PII) collected from the participants will be appropriately protected to ensure the confidentiality and align with General Data Protection Regulation (GDPR) where applicable and participant rights will be protected.

To protect participant identities, all personally identifiable information (PII) will be anonymized in the data storage process. All participants will be assigned unique codes / identifiers instead of using their real names and removing any other details that could lead to their identification.

Data Disposal:

The data will be retained only till the logical requirement as part of the research. After the mandatory retention period, the data will be securely deleted. The participants will be informed wherever relevant, about the deletion of their recorded data.

If explicitly requested, a copy of their data can be shared with the participants. This is part of the informed consent shared with participants giving them full transparency of how their data will be handled over time and eventually deleted. All these provisions refer to the data directly generated with the participants.

The documents generated by analysis of the primary data, the insights and the recommendations generated as part of the study remain the intellectual property of the researcher and will be governed differently.

3.8 Data Analysis

In a mixed method study, qualitative and quantitative data sets should be analysed separately using methods suitable to each; then results can be compared to see if any common messages resonate from both sets of data (Harris & Brown, 2010).

3.8.1 Qualitative Data Analysis

The qualitative analysis will be done for the transcripts of Interviews and focus groups. Online Services like fireflies.ai will be used to transcribe the audio and video recordings. It also facilitates identification of each speaker in the transcripts. The transcripts of the interviews will be analysed using softwares like NVIVO or other suitable online services. Coding and Thematic analysis will be done on the transcripts.

The first step in qualitative data analysis is to code the data from transcriptions. This study will be using inductive coding, which is a bottom-up approach to coding. It derives codes entirely from the transcripts (Adeoye-Olatunde & Olenik, 2021).

During the process of coding interview data, researchers may generate additional questions, ideas or comments that should be recorded using analytic memos. These analytic memos can be stored separately or within the

codebook. These memos can be coded and used to bring further meaning and perspective to the data (Adeoye-Olatunde & Olenik, 2021). Thematic analysis refers to the process of combining codes to summarize findings in a coherent and meaningful way. Qualitative Study results will be presented as themes with supporting data such as participant quotes.

3.8.2 Quantitative Data Analysis

The data collected via questionnaires will be analysed using excel, SPSS, MS office tools etc. Parametric and non-parametric tests will be used as per ordinality or normality of the data. Descriptive Statistical tools will be used for bivariate corelations and frequency descriptions (Dawadi, et al., 2021).

3.9 Research Design Limitations

In any research study, it is crucial to acknowledge the limitations in research design to maintain the study's integrity and provide context for the interpretation of the results. Below are some of the limitations identified for this study.

3.9.1 Limitations due to Context-Specific Findings

The study focuses exclusively on Indian IT service providers delivering SAP S/4HANA AMS in a shared services model. The target population is from Tier-1 organisations of India with established shared services models,

omitting insights from less mature or smaller organizations operating in niche areas, so results are limited in generalisation.

3.9.2 Limitations due to Mixed Methods Approach

The nuanced insights available from the interviews and focus groups may contrast with corelations among variables in survey results. Integrating these diverse results may generate contradictory results and could limit development of actionable recommendation.

In our study, the views of the junior members reflected in survey results may be divergent from the views of the senior managers and leaders covered in interviews and focus groups.

3.9.3 Limitations due to Resources and Time

The multiple methods of data collection by itself require extended time frame. There are also waiting periods in each phase for most of methods. Also the researcher has to oscilliate between different mindsets needed for each of the data collection and data analysis.

In our study, we have long wait times for the availability of intervieews, similiarly for getting all the working professionals together for

a focus groups session. The quanititative survey also had to be launched multiple times to obtain a coverage of 400+ respondents.

3.9.4 Limitations due to instruments

Interviews are succible to Interviwer bias, reflected in the verbal and non verbal cues of the interviewer. Participants are biased by their experiences and notions of social acceptability.

The virtual nature of focus groups limited the ability to capture non-verbal cues and manage group dynamics effectively. Focus group discussions tend to get dominated by more vocal members.

The questionnaire design had to balance ease of use and brevity with the scope of research topics. Self-selection bias also impacts the results from the quantitative survey.

3.10 Conclusion

The research methodology adopted for this study was designed and reviewed to meet the requirements for the research aims and objectives. Our mixed method approach was to combine qualitative data collected via semi structured interviews and focus groups along with quantitative data from questionnaire surveys.

The insights from the key stakeholders are gathered using semi-structured interviews to uncover the key themes regarding our main research questions. We then expand the sample and use focus groups discussions with selected individuals from a broader population. The insights from these sessions build upon the key themes from the interviews. Finally we tap into our widest audience with a questionnaire survey generating quantifiable data sets to reinforce some of the trends identified earlier.

While this study has the limitations such as a niche audience with context specific insights and limited generalisability, the triangulation of data from multiple sources, lend credibility to its findings. The saturation principles used further strengthen the reliability of the findings. To summarise, the study builds on a robust foundation for the results and discussions presented in upcoming chapters.

CHAPTER IV:

RESULTS

4.1. Introduction to Results Chapter

This chapter presents the results and findings of the mixed method study on S/4 HANA AMS in Indian IT industry. The results will be presented for each research question integrating insights from both qualitative and quantitive approaches.

For each research question, the results from the qualitative studies will be presented as themes derived from thematic analysis of the transcripts of semi structured interviews and focus groups. The quantitative survey findings will supplement the themes to provide additional context and enrich the qualitative findings.

For each theme, a concise definition is provided to explain the core idea of the theme. This is followed by key ideas of the theme and direct quotes from the transcripts of the interviews and focus groups. To provide the contextual background of the findings, the next section will showcase the demographic overview of the participants across all three methods.

4.2. Demographics

The main demographics collected were gender, years of experience and the age groups. This study is based out of India and in IT industry remote working and offsite working is prevalent, so location within India is not relevant.

4.2.1. Participants of semi structured interview

The Interviews were conducted for 26 participants across six categories based on their functional roles. The interviewes collectively contributed 496 years of SAP experience with an average tenure of 18 Years (Mean =18.5, standard deviation = 5.1).

The most experienced interviewee currently serving as delivery center head had 38 years of experience. The least experienced intervieewees of our study were a couple of project managers each with 13 years of experience. The table below depicts the distribution of the participants across their experience and role cateogries.

Table 7 : Frequency of Interviewees by years of experience and role

Count of Participants	Experience Range			
Role	**23+ Years**	**18-22 Years**	**13-17 Years**	**Total**
Delivery Head	4			4
Director		4		4
Delivery Manager		2	2	4
Solution Architect		2	3	5

Competency Lead		3	2	5
Project Manager			4	4
Total	**4**	**11**	**11**	**26**

All the participants identified themselves as male or female. The interviewees were 38% female (n = 10) and were distributed across the role categories is illustrated in the graph below. The delivery heads had the lowest female representation at 25% (n =1) while Delivery managers and project managers each had 50% female representation (n =2) .

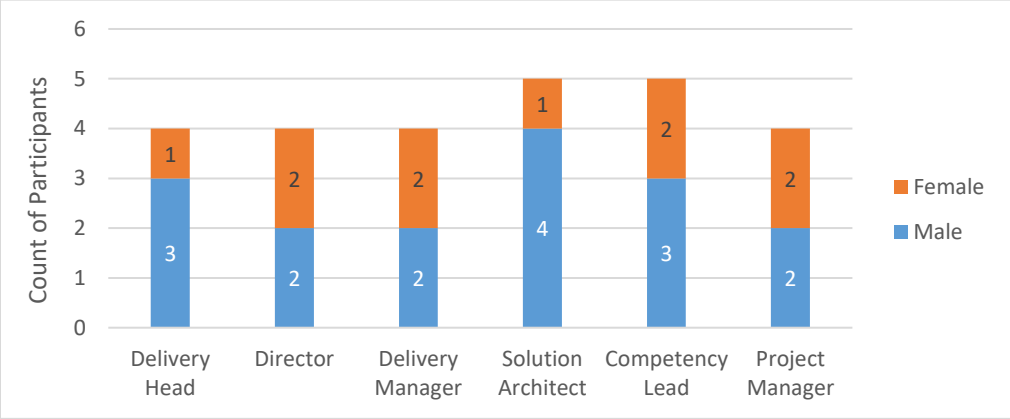

Figure 10 : Gender and Role-Wise Distribution of Interview Participants.

The findings of our study indicate that, among the twelve SAP Application Management Services providers in India under examination, at least one participant had previously served in each of these organizations. Notably, one of the participants was associated with four of these providers over the span of her 21-year career.

4.2.2. Participants of focus group discussions.

A total of six focus groups were conducted encompassing 33 participants. The largest focus group consisted of seven members while the smallest cohort contained 5 participants. The overall female participants stood at 39% (n =13) with their representation in each focus group varying from 25% in the solution architect's cohort to 50% in the group of technical consultants. The below table depicts the gender wise distribution of focus group participants across the focus group sessions as identified by their roles.

Table 8 : Gender wise Distribution of Focus group Participants

Count of Participants	Gender		
Focus Groups	**Female**	**Male**	**Total**
Solution Architect	1	3	4
Technical Consultant	3	3	6
Functional Consultant	3	4	7
Team Lead	2	4	6
Project Manager	2	3	5
Techno - Functional Consultant	2	3	5
Total	**13**	**20**	**33**

The average experience of the focus group participants was around 11 years (Mean = 11.18, standard deviation = 3.03). The senior most participant had 19 years of experience, while the youngest members had accumulated eight years of SAP experience. The figure below illustrates the experience distribution of focus group participants across their roles.

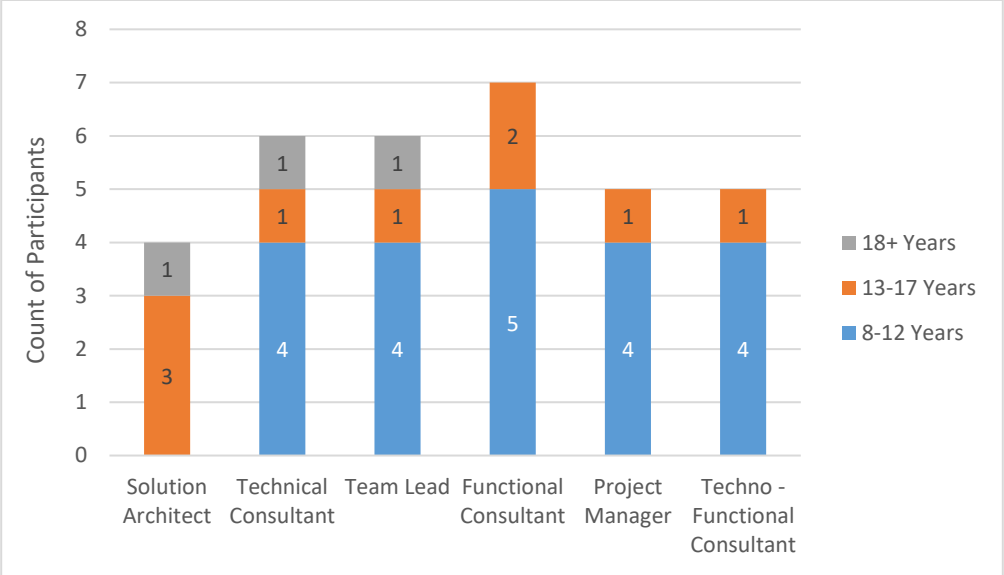

Figure 11 : Experience and Role-Wise Distribution of Focus Group Participants.

All the twelve SAP AMS companies within the scope of the study were represented by focus group participants with almost 50% of them having been employed at 2 or more of these organisations.

4.2.3. Participants of Survey Questionnaire:

A total of 403 participants responded to the survey questionnaire, out of which 391 responses were found to be valid and meeting our three qualifying criteria. The qualifying questions were sap experience, shared service experience and SAP support project experience.

Out of 391 valid respondents, 43% (n=168) were female, rest 57% (n=223) were male participants. The female participants were distributed across the

experience groups with the lowest ratio of 25% in the 18+ experience range, going up to 50% of the sample in 8-12- and 13-17-years groups. The figure below depicts the gender and experience wise distribution of survey participants.

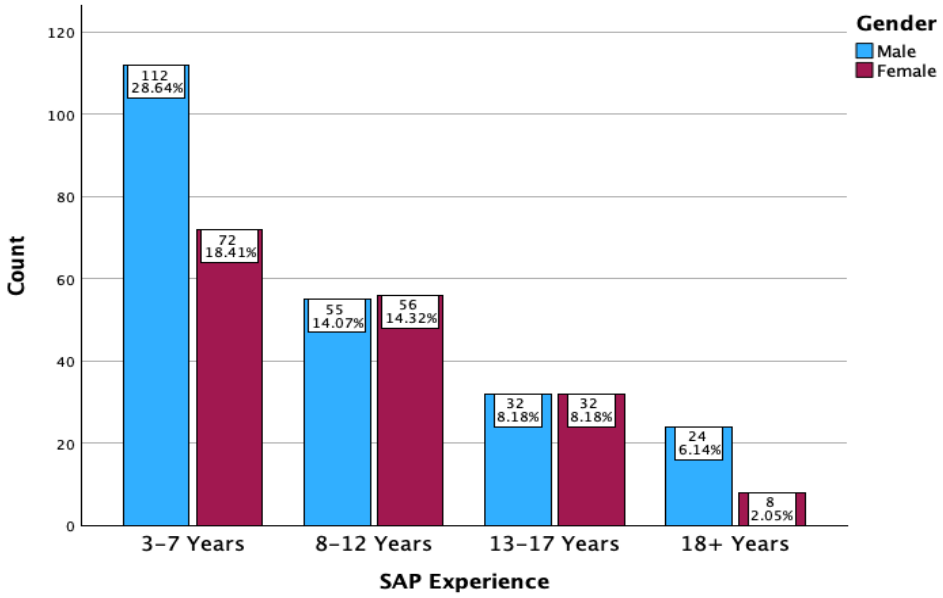

Figure 12 : Gender and Experience wise distribution of Survey Participants.

Out of 391 respondents, 47% (n=184) of them were in 3-7 Years experience range followed by 28% (n=111) representation of 8-12 Years experienced shared services members. Out of 391 respondents, 90% (n=351) of them had worked as SAP functional or technical consultants at some point in their career.

4.3. Results for Research Question One: Understanding and perceptions about Shared Services in S/4HANA AMS.

From the six focus group sessions and 26 Interviews, below 8 themes have been identified that throw a light on Industry practitioners perceptions about shared services models in SAP S/4HANA AMS operations.

Figure 13 : Themes in Understanding Shared Services in SAP AMS

The insights from the questionnaire survey expanded the themes of navigating resistance from experience, resume diversity due to multi client exposure and CoE based expertise consolidation.

4.3.1. Theme-1: From Cost Optimization to Strategic Partnership: Tracing the evolution of SAP AMS

4.3.1.1. Definition :

This theme tracks the introduction of Shared Services in SAP AMS and its evolution from cost efficiency narrative to a strategic value delivery model.

4.3.1.2. Key Findings :

PM2 and DM3 point out that shared services started in SAP AMS as a way of cost optimisation and improved resource realisation. DM2 recollects the early introductions of Shared services models in SAP AMS. CL2 remembers that multiple projects of the same customer were the early adopters of resource sharing and partial allocation.

In focus group session #1, participant FC2 highlights the evolving nature of shared services in SAP AMS, that it is now able to provide expert services to handle the increased complexity in application and business processes and meet industry demands. SA2 and DH2 talk about the transition of shared services from reactive incident management to a strategic & proactive role.

In focus group session #2, participant PM3 articulates the stages of shared service models one of their customers went through. He was quoted saying that "*We started with 'staff augmentation,' moved to 'resource centralization,' and now we're at the 'strategic business enabler' stage.*"

4.3.2. Theme-2: Evolving Client Perspectives: From Dedicated Models to Shared Services

4.3.2.1. Definition :

This theme examines how customer organizations progress in their attitudes toward shared services, moving from initial unfamiliarity resulting in reliance on dedicated support models to a more informed and cooperative posture reaping benefits of efficiency and synergy in shared services.

4.3.2.2. Key Findings :

DM2 talks about customer attitudes to shared services models, she was quoted saying : "*Clients have mixed reactions...some prefer FTE-based dedicated models*." DH3 cautions that success of shared services models is influenced by perceptions and interest of stakeholders, she continues that "*Shared services …depends on the willingness and interest of all stakeholders*."

In Focus Group Session#3, particpants SA1 and SA3 discuss the acceptance of shared services models by customers. They point out that often clients goals and their openess to innovation and change determines shared services penetration.

4.3.3. Theme-3: Geographical Shifts in Shared Services: Balancing Cost, Talent, and Business Continuity

4.3.3.1. Definition :

This theme discusses the adoption of shared services across the geographic borders fuelled by the shortages of skilled SAP consultants and large enterprises demanding continous coverage.

4.3.3.2. Key Findings :

DH2 points out that "*Countries like India, China, Romania... losing their cost advantage... a company near my location will provide services at similar costs*." He was reffering to diminishing differntiation based on geographic cost arbitrage.

DH1 also talks about traditional geographical cost advantages being taken away by technological advances, he was quoted saying "*Offshoring cost advantages are diminishing with AI, as nearshore providers gain competitiveness."*

In focus group session #3, solution architects discuss the follow-the-sun model. One of the summarising quotes from the discussion is "*The follow-the-sun model is gaining popularity, where teams in different time zones provide continuous support.*" In focus group session #6, consultants

highlight the problem of skill shortages across SAP spectrum challenging cost effective sustainable operations, and probable solutions including geographic diversification.

4.3.4. Theme-4 : Aligning Organizational Maturity with Shared Services Efficiency

4.3.4.1. Definition :

This theme examines the contribution of organisational maturity towards sucessful adoption of Shared Services model.

4.3.4.2. Key findings :

Streamlined organisational strucuture with clear roles and responsibilities is important in a matrix model of Shared Services.

DIR1 explains that shared services adoption depends on assessing and aligning the organization's maturity with team capabilities. "*What is their current maturity as well, yeah, in terms of where are they standing today?"* DIR3 points out that "*Not all organisations have been able to succesfully replicate shared services in SAP AMS*." She elaborates that organisational maturity impacts shared services success.

In focus group session#2, participant PM4 highlights that standardization impacts productivity positively "*The standardized processes help reduce redundant tasks and make our work more streamlined*"

4.3.5. Theme-5: Navigating Resistance: Overcoming Reluctance in Shared Services Adoption

4.3.5.1. Definition :

This theme relates to practitioners feedback that IT teams are having significant resistance to adopting shared services models in SAP S/4HANA AMS Operations.

4.3.5.2. Key Findings :

The resistance to change among employees and stakeholders stemmed from comfort with existing processes and uncertainty about the new model's benefits.

PM1 talks about the preference among consutlants "*Experienced professionals... prefer working on dedicated projects…. Younger professionals... comfortable with the dynamic environment*." SA3 is of the opinion that junior SAP consultants are more inclined to work in shared services model.

DM1 expressed dissatisfaction with shared services, citing issues like employee demotivation and overwork due to confusion over priority. CL3 cautions that resistance due to operational challenges of multi-customer environments is common among SAP teams.

4.3.5.3. Quantitative Insights :

The survey results show that out of 391 respondents, 8% (n=32) stated no preference between dedicated and shared services model. Out of the remaining 359 respondents, the preference for shared services was highest at 65% (n=104) for consultants with 3-7 Years experience.

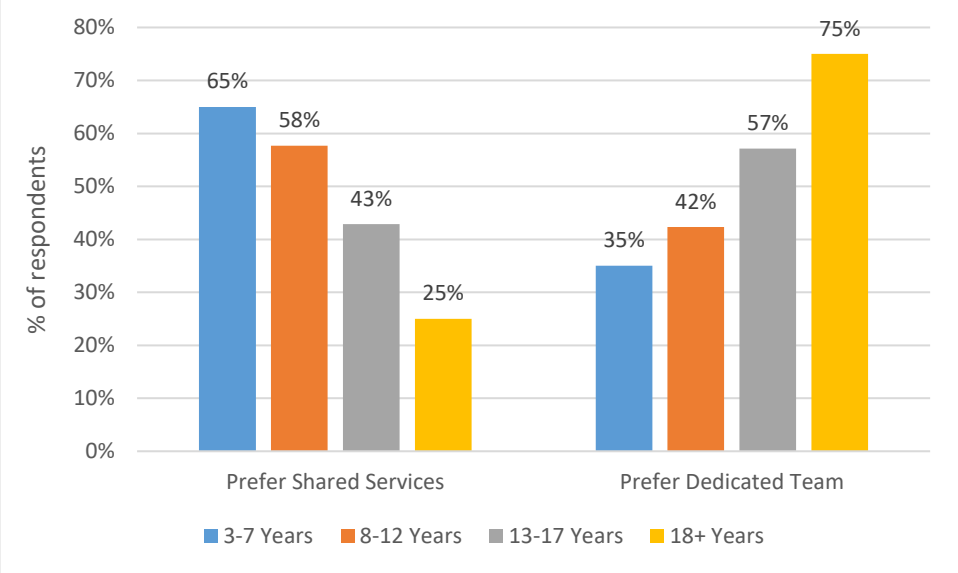

Figure 14 : Preference for Shared Services across Experience Groups

The preference for shared services dipped as the number of years of experience increased reaching the lowest level of 25% for experience group of 18+ Years. The preference for dedicated teams is seen increasing with number of years of experience, starting from 35% for 3-7 Years group reaching up to 75% for the cohort of 18+ Years.

4.3.6. Theme-6: Balancing Customization and Standardization: Addressing Unique Demands in Shared Services Model

4.3.6.1. Definition :

This theme discusses the aspect of absorbing customer specific process requirements in the standardised way of working at Shared Services models.

4.3.6.2. Key Findings :

Customization requests posed challenges, as customer-specific demands erode the standardized approach of shared services. DM4 points out that "*Every Customer's asks and demands and requirements are different*."

PM3 points out that highly specific, customized demands from individual customer organizations often arise due to legacy processes. CL5 also touched upon the topic of proprietary business workflows, and unique

industry requirements that have historically shaped the organization's IT landscape.

In Focus group session #1, participant FC2 highlights that "*basic premise of Shared Service is that you offer a standardised service to all the customers…. one single process oriented way of incident resolution….will fail if every customer has unique requests.*"

In Focus group session #4, participant TL1 calls out the delicate balance between standardisation leading to efficiency and customisation for meeting client expectations, "*Clients usually expect very customized support, but a shared services setup needs a certain level of standardization to be efficient*."

4.3.7. Theme-7 : Leveraging Multi-Client Exposure: Elevating Consultant Marketability in Shared Services

4.3.7.1. Definition:

Shared Service model in SAP AMS allows the consultants to gather comparatively better business knowledge than a dedicated project consultant, due to their access to multiple customers across varied industries and domains.

4.3.7.2. Key findings :

Consultants working for multiple customers generally come across as more confident and are able to cross leverage the best practices followed in one project to the other project.

DH3 highlights the multi industry exposure stating that "*Consultants gain wider experience working in a shared services model, increasing their knowledge and marketability*."

DIR2 stated that working in shared services model allows consultants to have multiple clients experience included in their resume for same duration of time , he opinioned that "*Shared services provide resume diversity, which is a key selling point for new entrants*."

In focus group session #5, developers discussed the penetration of best practices across the shared customers served by the team. This increased efficiency and provided consistent quality of services.

4.3.7.3. Quantitative Insights:

Among the 391 survey respondents, a significant majority, 82% (n=319) agreed (either Strongly agree or Agree) to the statement that working in shared services enhances their professional profile with multiple

exposure. The graph below depicts the percentage of respondents in each experience group.

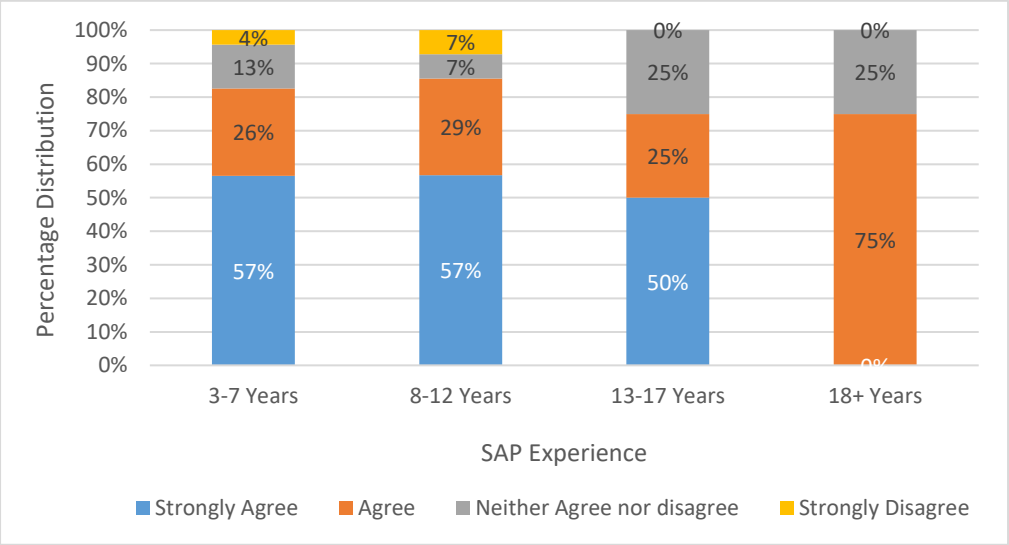

Figure 15 : SAP Experience wise Resume Diversity perception.

Notably, the agreement level remained consistently high across different experience groups, exceeding 75% among professionals with SAP experience ranging from 3–7 years to over 18 years. This finding highlights the widespread recognition of the career-enhancing benefits offered by shared services across varying levels of expertise.

4.3.8. Theme-8: Consolidating Expertise: The Rise of CoEs in Shared Services

4.3.8.1. Definition :

This theme explores the evolution of center of excellences in SAP AMS shared services from being single point of contact for niche requests to catalysts for adoption of new technology.

4.3.8.2. Key Findings :

CL1 highlights the reduction in time-to-value due to CoE, She states that "*SAP CoEs reduce 20-30% time taken in new initiatives adoption as they work in product-centric mode.*"

DH4 states that CoEs have streamlined the PoCs for Customers, he was quoted saying that " *Our CoEs drive PoCs .. for customers… so there is a structured approach and consistency in articulation, also leads to reduced work and lesser lead time for setup.".*

In focus group session-2, participant PM4 indicates a trend toward specialization and proactive value addition, *"Clients now want specific expertise at their support centers. We're seeing more shared service hubs functioning as 'Centers of Excellence."*

4.3.8.3. Quantitative Insights:

Among the 391 respondents, the overwhelming majority of 89.8% (n= 351) have agreed or strongly agreed to positive impact of CoE on faster

PoCs and Innovation adoption. The table below shows the descriptive statistics for impact of CoE on innovation adoption.

Table 9 : Distribution of Respondents' Agreement Levels on Impact of CoE on faster innovation adoption.

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Agree	184	47.1	47.1	47.1
Agree	167	42.7	42.7	89.8
Neither Agree nor Disagree	40	10.2	10.2	100.0
Total	391	100.0	100.0	

These findings underscore the critical role of CoEs in driving technological advancements and fostering innovation in SAP S/4HANA AMS environments.

This concludes the qualitiatve and quantitative findings for the eight themes of research question-1. In the next section, the findings for the research question-2 will be presented.

4.4. Results for Research Question Two: Factors affecting productivity and efficiency.

The second research question of our study regarding the productivity and efficiency team members generated 12 themes from the thematic analysis of Interviews and focus groups.

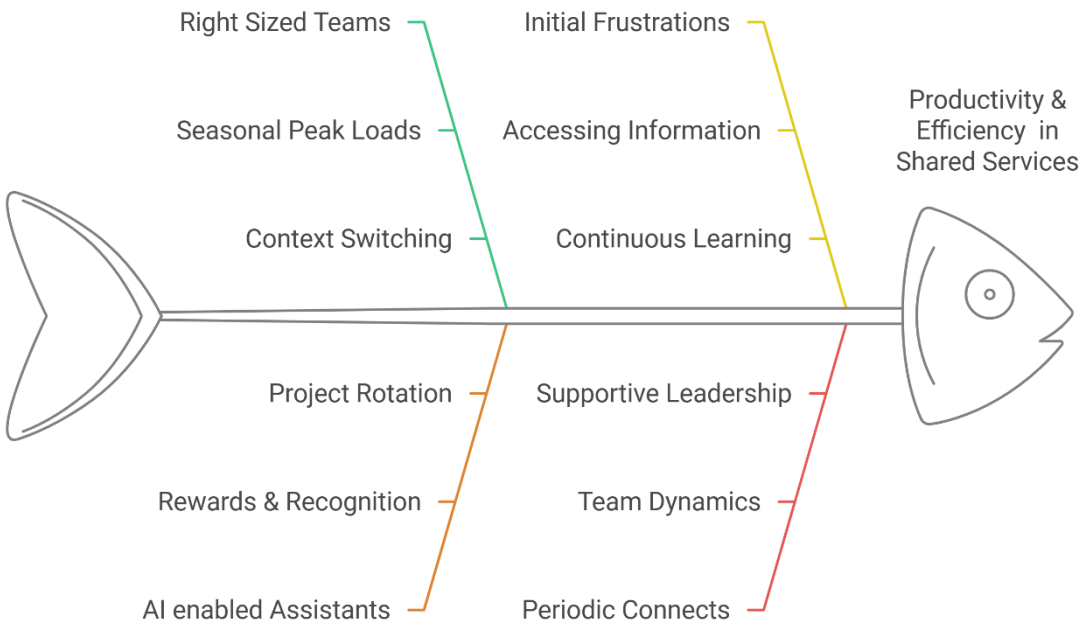

Figure 16 : Themes impacting productivity and efficiency in shared services.

Quantitative results also expand the themes of context switching, knowledge repository, supportive leadership, rewards and recognition, project rotation, periodic connects and mentorship programs.

4.4.1. Theme-1: Balancing Workload and Efficiency: The Role of Team Size in Shared Services

4.4.1.1. Definition :

This theme examines the struggle in AMS Shared service teams to balance workloads as task prioritization varies with incident severity across the customers.

4.4.1.2. Key Findings :

DH3 shares that "*Shared services model can work if there are adequate resources to handle varying requirements at the same time*." DIR2 reinforces the need for right sized teams to maintain the delivery quality and productivity in shared services.

In focus group session #1, functional consultants discuss the limited flexibility due to SLA driven task prioritisation. One of the summarising quotes from the discussion : "*Teams rarely have the freedom to prioritize tasks based on what they feel is most impactful; everything is guided by SLAs and KPIs*."

In focus group session#2, participant PM2 points the impact of being perpetually available for multiple clients "*In shared services, the team often feels like they're always 'on demand,' which can limit their satisfaction and focus*."

4.4.2. Theme-2: Seasonal Surges and Simultaneous Demands: Navigating Productivity Challenges

4.4.2.1. Definition :

This theme discusses the topic of prioirtisaiton conflicts when consultants supporting multiple customers in Shared Services, get same priority requests from two or more customers during same time period.

4.4.2.2. Key Findings :

In focus group session # 3, Solution architects identify workload stress as a significant factor impacting team productivity and satisfaction. One of the summarising quotes from the discussions is as follows : "*Meeting different SLAs across clients requires teams to be very agile. If there's a surge in requests, it can get overwhelming and lead to burnout.*"

PM2 states that "*Month ends bring large requirements from multiple customers, making it a tedious period for consultants to manage workloads*." DH3 also highlights seasonal peaks, he states that "*During periods like month-ends, there is a large influx of requirements, which could be overwhelming without adequate resources.*"

DM2 touches upon the confusion in prioritising the tasks from different customers, she states that "*And also there is a lot of confusion on you know which activity needs to be prioritized*."

DH1 also points out the need for prioritisation of incidents as everything cannot be handled all at once, he continues : "*If there are too many requirements coming at the same time, consultants may not be able to address all of them*."

4.4.3. Theme-3: Multi-Client Complexity: Managing Context Shifts in Shared Services Models

4.4.3.1. Definition :

This theme examines the operational complexities in shared services due to shifting frequently between the multiple projects assigned to teams.

4.4.3.2. Key Findings :

In focus group session #4, Module leads discuss the frequent context-switching in a shared services model. One of the summarising quotes is as follows : "*The variety of clients and systems we handle in shared services... requires a lot of switching between different processes and mindsets, which can affect productivity.*"

CL4 states that team needs to be provided sufficient time to adjust to various requirements coming from the multiple customers.

In focus group session #2, PM4 identifies task-switching as a productivity and satisfaction challenge for shared services teams. "*In shared services, we're constantly working across multiple clients, so there's a lot of task-switching. While it keeps things dynamic, it can also be mentally exhausting*."

4.4.3.3. Quantitative Insights:

Among the 391 respondents, 57% (n =223) concur to the statement that frequent context switching results in reduced productivity. Only a minority of 12.2% disagreed with the above notion, below table depicts the frequency distribution of participants responses.

Table 10 : Distribution of Respondents' Agreement Levels on Negative impact of Context Switching on Productivity

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Agree	119	30.4	30.4	30.4
Agree	104	26.6	26.6	57.0
Neither Agree nor Disagree	120	30.7	30.7	87.7
Disagree	40	10.2	10.2	98.0
Strongly Disagree	8	2.0	2.0	100.0
Total	391	100.0	100.0	

4.4.4. Theme-4: Navigating the Transition to Shared Services: Addressing Initial Frustrations in Multi-Customer Support

4.4.4.1. Definition :

This theme discusses the challenges faced by associates and consultants who are new to shared model of working.

4.4.4.2. Key Findings :

Consultants with no prior experience to the shared services way of working, which involves supporting multiple customers and frequent context switching might find themselves frustrated in the early phases.

DH4 points out that inexperience and lack of process familiarity hinder team efficiency. "*There could be some consultants who have lesser experience or lesser process knowledge... they might be frustrated with this kind of working model initially*."

DH2 explains that fresh graduates face challenges adapting to shared services, affecting their initial productivity. PM3 also talks about the work life balance concerns of the new practitioners : *"New entrants often question the workload balance in shared services."*

SA1 emphasies that clear communication and tailored onboarding are crucial for improving team alignment and morale. He states that "*Unless*

and until you sit and explain in…, one-on-one meeting and let them understand the benefits of having to work in shared service model."

4.4.5. Theme-5: Knowledge Accessibility and Retrieval: Catalysts for Efficiency in Shared Services

4.4.5.1. Definition :

This theme refers to the ease at which the SAP consultant can access the relevant information needed to perform the activities assigned to him / her, be it resolving a incident / bug fix or provisioning a service request or scoping and developing a change request.

4.4.5.2. Key Findings :

Discussions show that the desired knowledge bank highly improves the efficiency of the team. PM1 states that "*Access to knowledge repositories... reduces redundancy and the time spent searching for information*." This quote also points out to time taken to find relevant piece of information from the pile of documents.

CL2 emphasises on the role of centralised knowledge repositories, she goes on to state that "*Knowledge repositories... ensure that information is accessible to all team members*."

In focus group session #5, partcipant TC3 highlights the role of accessible knowledge bases in improving productivity and reducing time spent on problem-solving. "*Productivity depends a lot on the knowledge base and resources we have. it makes work faster*."

4.4.5.3. Quantitative Insights:

The quantitive results reinforce importance of knowledge repository with 98% (n=383) of survey respondents agreeing to the impact of accessible knowledge on the efficiency of shared services teams. The results were uniform across genders and experience levels.

4.4.6. Theme-6: AI-Driven ITSM Assistants: Revolutionizing Productivity in Shared Services

4.4.6.1. Definition :

This theme explore the impact of automation tools on efficiency of team handling incidents and service requests.

4.4.6.2. Key Findings :

Result show that advanced ITSM assistants will be available which will improve the efficiency of the team. SA3 points out that a lot of automation tools are available to consultants to diagonise, reproduce and

resolve the reported incident. He continues that "*Automation and AI have reduced turnaround time in resolving issues*."

DIR4 stated that automation will handle routine queries and issues, She was quoted saying : *"We can anticipate up to a 30% reduction in the need for Level 2 support staff."* SA4 predicts that 20% to 30% efforts of AMS teams will be reduced by AI enabled features in ITSM Tools.

In focus group session#6, participant TF3 predicts that AI will enable smaller teams to handle larger-scale operations effectively. "*AI and ML could decentralize shared services... smaller teams managing bigger client portfolios*."

4.4.6.3. Quantitative Insights:

Among the 391 respondents, none has disagreed to the statement that AI will reduce the efforts in incident management and a overwhelming majority of 83.6% (n=327) agree to the above notion.

Table 11 : Distribution of Respondents' Agreement Levels on Effort Reduction by AI

Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Agree	104	26.6	26.6	26.6
Agree	223	57.0	57.0	83.6

Neither Agree nor Disagree	64	16.4	16.4	100.0
Total	391	100.0	100.0	

The above table shows the descriptive statistics for the future trend of AI led effort redction. The respondents who support AI led effort reduction are harmoniously spread across genders and experience groups.

4.4.7. Theme-7 : Continuous Learning: The Role of Upskilling and Cross-Skilling in Shared Services

4.4.7.1. Definition:

This theme talks about importance of continous learning programs to maintain the efficiency of the teams maintaining the ever evolving SAP Systems.

4.4.7.2. Key Findings:

DH3 recommends that organisations should invest in learning platforms and sponsor training programs. He was quoted saying that "*Self-learning platforms and training programs help consultants upskill to meet evolving requirements*."

SA2 states that continuous learning is essential fosters a culture of collaboration and innovation. CL2 correletes efficiency with knowedge

sharing, he states that "*Effective knowledge sharing practices lead to exponential learning curves and higher efficiency*." DIR1 points to the fact that "*Cross-skilling sessions...train employees across multiple functionalities, which suits the shared services model*." thereby improving efficency of the team.

In focus group session #4, participant TL6 emphasizes that Cross training improves team engagement and satisfaction. "*Cross-training and skill development programs... show team members that there's room for growth and that they're not just confined to routine support work.*"

4.4.8. Theme-8 : Recognizing Excellence: The Role of Rewards in Enhancing Team Productivity

4.4.8.1. Definiton :

This theme examines the impacts of rewards on team satisfaction and morale, thereby improving efficiency.

4.4.8.2. Key Findings:

CL5 points to the need for individual recognition to boost satisfaction in the shared services model. She was quoted saying : "*Team members sometimes feel like they're just part of a big machine, which can affect satisfaction levels over time.*"

DIR3 reflects upon the role of recognition in boosting morale and job satisfaction.*"Recognition is another big one. In shared services, our work can feel invisible... even small acknowledgments help in feeling valued."*

In focus group session #2, project managers discuss the positive impact of acknowledgment and rewards on team satisfaction and productivity. One of the summarising quotes from the discussion is as follows : "*Recognition programs that reward high performers or successful SLA adherence really help in boosting morale and motivation."*

4.4.8.3. Quantitative Insights:

Among the 391 respondents, an overwhelming 92% (n=359) identified rewards and recognition as a factor for improving team morale and boosting efficiency. The results were uniform across genders and experience.

4.4.9. Theme-9 : Dynamic Assignments: Elevating Team Performance Through Strategic Rotation

4.4.9.1. Definition:

This theme examines the practice of resource rotation across shared services projects and its impact on employee satisfaction and overall productivity.

4.4.9.2. Key Findings :

By rotating SAP Functional and Technical consultants across different projects, geographies, roles, industries and customers, organisations can achieve higher productivity and efficiency.

CL1 explains that switching projects can maintain interest and productivity for consultants, she states that "*Switching between projects...like a break and keeps me engaged*". DM1 echoes the sentiment in his quote : "*After six months or eight months of support, his work will be monotonous."*

SA1 opines that once the new learning stops, the project seems to get monotonous for the consultants. PM2 recommends rotation after being in same account for more than 2 years, she states that "*Rolling off consultants after two years... prevents stagnation."*

4.4.9.3. Quantitative Insights:

Among the 391 respondents, 61% (n=240), recommended timely project rotation as a measure to prevent stagnation and improve efficiency. However, the preference for dynamic assignments is seen waning with increasing experience, while 78% of associates in 3-7 year group supported timely project rotation, this dropped down to 30% in the senior most cohort of 18+ year experience.

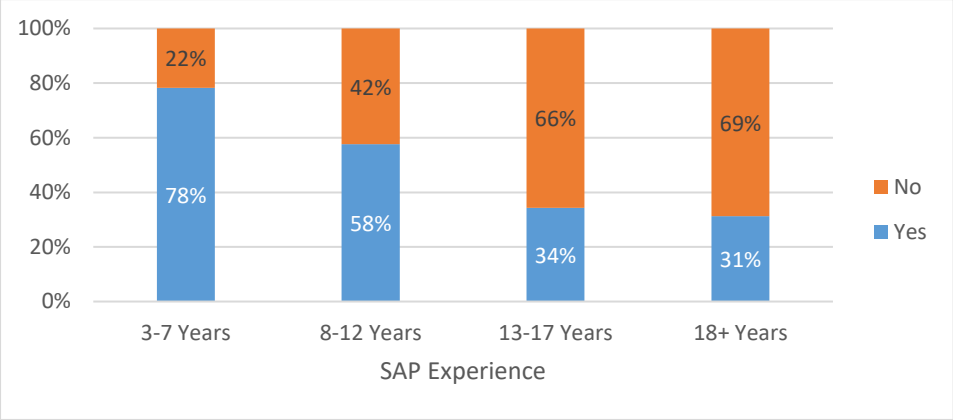

Figure 17 : SAP Experience wise distribution of Project Rotation preference.

These findings suggest that while early-career professionals perceive project rotation as a valuable opportunity for skill diversification and career growth, senior professionals prioritize stability and deep domain expertise over frequent transitions.

4.4.10. Theme-10 : Supportive Leadership: Enhancing Team Morale and Productivity in Shared Services

4.4.10.1. Definition :

This theme revolves around the influence of leadership on collaboration and team morale resulting in increased productivity.

4.4.10.2. Key findings :

DH1 highlights that empathetic leadership helps alleviate stress from metric-focused evaluations. "*Having a supportive manager makes a difference... those who focus only on metrics can make things stressful*."

DM1 strongly believes that strong leadership fosters collaboration within diverse shared service teams. DIR4 states that "*Leadership plays a significant role... ensure that team members feel valued and supported*."

In focus group session # 5, consultants disucuss the role of team culture and leadership in mitigating stress. One of the quotes : "*Team cohesion and supportive leadership foster collaboration, helping manage high-pressure environments more effectively*."

4.4.10.3. Quantitative Insights:

Among the 391 respondents, 61.13% (n= 239) selected emphatetic leadership as a boosting factor for increasing productivity of the members.

Notably, Two-thirds of female members, 66.67% (n = 112) acknowledged the role of supportive leadership in improving efficiency of the team.

4.4.11. Theme-11: Collaborative Cultures: Driving Productivity Through Team Dynamics and Support

4.4.11.1. Definition :

This theme examines the impact of team dynamics and collaborative working environment on productivity.

4.4.11.2. Key findings :

Culturally diverse and /or multi country teams and /or siloed units can struggle with adopting unified proceeses of shared services model hindering their productivity.

PM4 discusses the importance of team dynamics and mutual support in the quote : "*A collaborative culture where people are willing to help each other... makes a huge difference*." DH2 points out that effective team collaboration is so powerful that it can mitigate some challenges like "*The team collaboration can offset the absence of robust documentation."*

In focus group session#6, consultants emphasize the value of team consistency for collaboration and efficiency in shared services. One of the

quotes from the discussion : "*Team dynamics also matter... Stable teams would boost efficiency as we'd know how to play to each other's strengths.*"

4.4.12. Theme-12 : Periodic Connects and Mentoring: Driving Team Success & Enhancing Team Productivity

4.4.12.1. Definition :

This theme discusses the influence of skip level connects and periodic check-ins with team members by leads and managers on team motivation.

4.4.12.2. Key Findings :

DH2 points out that senior members influence productivty , he goes on to state that "*Mature team members should act as mentors for less experienced teams to ensure overall productivity*." CL3 explains that targeted mentoring can improve productivity quoting "*Category two teams, with partial knowledge, need mentoring to channel their energy and avoid inefficiencies*."

DM4 highlights that mentorship can enhance team relationships and satisfaction, indirectly boosting productivity. "*Mentorship programs help build stronger relationships within the team and give everyone a sense of ownership*."

In focus group session #3, participant ML4 advocates for proactive measures to monitor and maintain team satisfaction levels. "*Periodic health checks on team morale and satisfaction help identify issues early and take corrective action*."

4.4.12.3. Quantitative Insights:

Among the 391 respondents, 63% (n=247) opted for either periodic skip level connects or formal mentorship programs to enhance team satisfaction and improve productivity. The females indicated a preference for formal mentorship programs (57%) over skip level connects with leadership (38%).

This concludes the findings of twelve themes identified for the research question two which was about the factors impacting productivity and efficiency of shared services in SAP AMS.

4.5 Research Question Three: Impact of emerging technologies and future trends

Third objective of our study is to understand the new and emerging technologies relevant to SAP S/4HANA AMS and how they are shaping up the future of Shared services delivery . Thematic analysis of Interviews and focus

groups reveal 9 major themes that will shape up the future of shared Services projects.

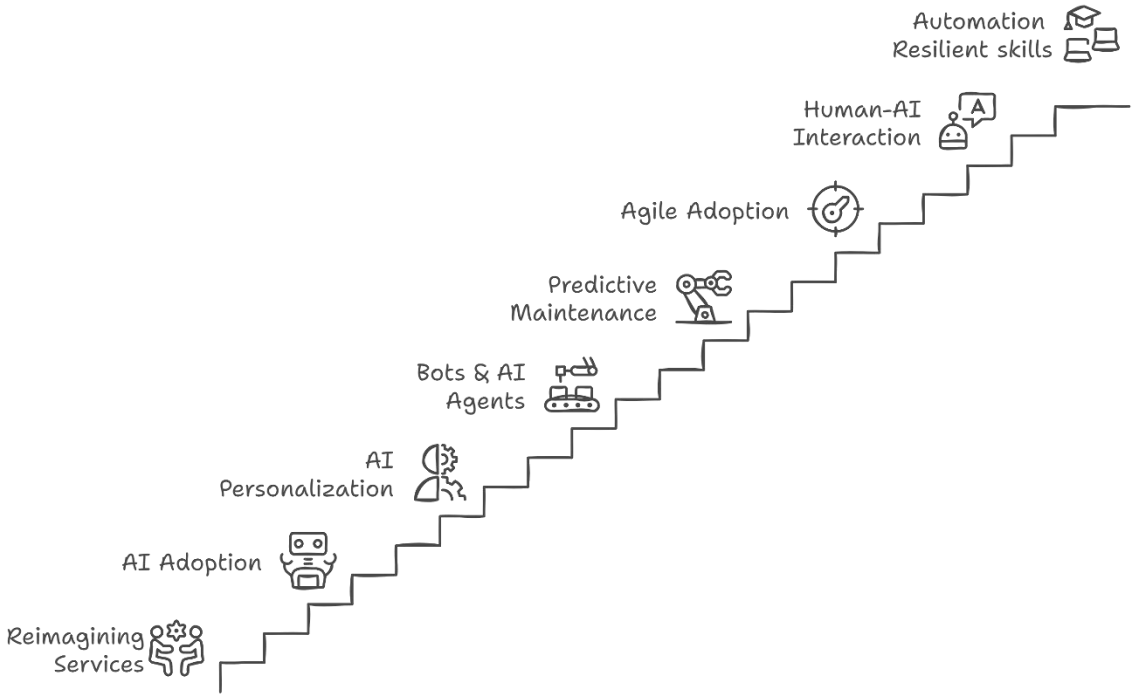

Figure 18 : Themes in Future trends in SAP Shared Services.

The findings from quantitative survey corelate to the themes of reimaging shared services with business outcomes based KPI, inevitable AI adoption, AI enabled personalisation, predictive maintainence, agile adoption, job role evolution and automation resilient skills.

4.5.1. Theme – 1 : Reimagining Shared Services: Towards Business Value and Customer Experience

4.5.1.1. Definition :

This theme talks about the new delivery models in shared services which are now possible due to the advent of technology especially like machine learning, predictive analytics and artificial intelligence.

4.5.1.2. Key Findings :

DIR1 points out that teams adopt specialization for certain domain areas or business processess. He shared his opinion as "*I've seen some teams that focus solely on specific industries or SAP modules...*" SA1 highlights the shifting of trends towards value delivery and customer satisfaction .

DH2 emphasises on business outcomes, he states that "*AMS contracts are more outcome-based now... clients want SLAs tied to business outcomes*."PM3 also echoed this sentiment in his statement that "*Shared services will eventually shift from being a support function to becoming more insights-driven, focusing on delivering value."*

In focus group session #3, solution architects discuss the strategic direction of shared services, that it is moving from reactive shared services to a value-driven model, and eventually, it'll become more experience-focused.

4.5.2. Theme – 2 : Inevitable AI Adoption : The Unavoidable Paradigm Shift in SAP AMS

4.5.2.1. Definition :

This theme talks about the probability of AI driven impact in SAP AMS, the customer demand for such services and the competitive landscape in industry.

4.5.2.2. Key Findings :

DH1 points out the unavoidable nature of AI adoption in SAP AMS, in the quote: "*AI ML-based solutions... this is already becoming inevitable to a great extent…"*. DM3 shared his insight that customers are increasingly interested in adopting AI to optimize costs in AMS.

DIR2 echoes the same sentiment that customer demand for AI/ML solutions will compel IT vendors to adopt them . He states that "*Customers are increasingly demanding AI/ML-based solutions, making them inevitable in IT service proposals."*

SA2 hightlights that SAP AMS providers are forced to take a strategic approach to AI due to market competition, DH4 further states that "*If my IT shared services are not complemented by AI ML... then I'm definitely a loser in the game."*

4.5.2.3. Quantitative Insights :

Among the 391 respondents, 55.75% (n=218) predicted that AI adoption will be inevitable in the future of SAP AMS. The trend of AI adoption gained favor with increasing experience, with 43% of respondents in the 3–7 years experience group identifying AI as a future trend, rising significantly to 71% among the senior-most cohort with over 18 years of experience.

Additionally, gender differences were observed, with 71% of female respondents perceiving AI adoption as a future trend, compared to only 44% of male respondents.

4.5.3. Theme – 3 : Personalized AMS Delivery: User-Centric Services powered by AI Insights

4.5.3.1. Definition :

This theme states that within the standardised, process driven structure of shared services, AI can enable personalised support to the business user.

4.5.3.2. Key Findings :

PM2 predicts that AI enabled AMS will allow delivery of personalised services for each business user . CL1 was quoted saying : "*There's also the potential for increased personalisation of services. AI can help tailor solutions to specific client needs more effectively.*"

SA3 discusses AI-driven personalization in the quote : "*AI can provide more personalized recommendations based on user behavior."* SA4 says that organisations should monetise this personalisation opportunity.

In focus group session #3, solution architects discussed the AI driven personalisation and new revenue streams around insights. One of the summarising quotes is : "*With AI, shared services could provide personalized support experiences for each client, aligning more closely with their business needs."*

4.5.3.3. Quantitative Insights :

Among the 391 respondents, 55.24% (n=216) identified AI enabled personalised support as a future trend for SAP AMS. The analysis revealed no notable differences in opinions across genders, indicating a consistent acknowledgment of the potential of AI-driven personalization to enhance user experiences in SAP AMS across all demographic groups.

4.5.4. Theme – 4 : Intelligent Bots and Autonomous Agents: Reimagining Service Desk Operations

4.5.4.1. Definition :

This theme talsk about Agentic support taking over human led service desks enabling real time self service capablities supported by autonomous bots.

4.5.4.2. Key Findings :

Agents deployed by AI enabled systems and Bots from IRPA will take over Ticket triaging, ticket routing, incident resolution and customer interaction.

PM1 highlights that AI agents will autonomously take over Level-1 support incidents and resolve the issue and respond to the business users. PM4 echoes the same sentiment in the quote : "*AI and automation can handle routine queries and issues, which traditionally would be managed by Level 1 or Level 2 support teams.*"

DM2 described the example of how they had used automation to streamline service desk ticket management, thereby reducing dependency on L1 teams. "*We had a POC for ticket rising...90% work of L1 team will be done with this automation*."

In FG2 , participant PM1 shared an example of RPA improving efficiency in ITSM operations . He was quoted saying "*Also, automation through RPA in.. for example, ticket classification and routing can now be automated, improving efficiency in the support process.*"

DIR3 states that Agentic AI and Intelligent Bots will take over lower level supports like L1 and L1.5. She was quoted saying that "*I think the L1's, L1.5's will slowly go away, it's already going away. There would be further AI automation*."

4.5.5. Theme – 5 : Predictive Insights and Self-healing capabilities: Embedding Predictive Maintenance in SAP AMS

4.5.5.1. Definition :

This theme talks about the emergence of ML and AI enabled predictive analytics systems which will lay the foundation for self healing systems.

4.5.5.2. Key Findings :

DIR4 explains how SAP AMS will evolve into value added services like predictive maintenance. DM3 explains how AI enhances problem

resolution efficiency by leveraging historical data for recommendations. "*AI will predict solutions...or direct historical tickets for similar incidents*."

In focus group session #4, module leads discuss the role of predictive analytics in evenly distributing workloads and reducing stress on team members. "*Analyzing incident trends allows us to predict peak periods and adjust staffing, improving workload management*."

SA3 talks about the self-service tools, empowered by AI, that are reducing the dependency on external AMS teams, improving turnaround times. He was quoted saying that "*Self-service tools have been implemented which allow users to resolve small issues without tickets."*

4.5.5.3. Quantitative Insights :

Among the 391 respondents, 75.70% (n=296) identified either predictive maintainence or self healing systems as a future trend for SAP AMS. A notable gender disparity was observed: while only 33% of female respondents highlighted self healing systems as the next trend, while 80% of male respondents acknowledged predicitve maintainence as future of shared services in SAP AMS. These findings emphasize the strong overall recognition of automation-driven advancements, while also reflecting differing perspectives across genders.

4.5.6. Theme – 6 : Acclerating Agile Adoption : Towards Future ready Shared services

4.5.6.1. Definition :

This theme talks about how the use of agile practices in SAP S/4HANA AMS Operations have spearhelded into formation of Agile pods or squads.

4.5.6.2. Key Findings :

In line with SAP Activate encouraging iterative realisation cycles for implementaitons, AMS Teams now deliver change requests and minor enhancemens in smaller sprints rather than one big waterfall delivery.

DM4 states that they have adopted MS teams planner for their cards and task tracking in Change Management. He quotes that : "*All our Change requests are entered into MS planner board from ITSM tool, and their lifecycle is managed on Teams board, There are different lanes available in the board to see the status of the CR.*"

SA4 illustrates the role of Agile methodologies and continuous improvement in the evolution of AMS service delivery. "*Continuous Improvement Continuous Delivery is one of the concept right that have*

evolved big time with AMM and with the introduction of agile or past few years."

4.5.6.3. Quantitative Insights :

Among the 391 respondents, only 26.3% (n=103) identify acclerated agile adoption as a future trend. Among the experience groups, mid-level professionals with 8–12 years of experience were the most optimistic, with 42% foreseeing agile adoption. Out of 223 male respondents, only a minority of 17.5% forsee agile adoption in SAP AMS. These findings indicate varying levels of optimism regarding agile practices, with mid-level members showing the strongest inclination toward its integration in SAP AMS.

4.5.7. Theme – 7 : Reinventing AMS Job Profiles: Bridging Traditional SAP Functions and AI Competencies

4.5.7.1. Definition :

This theme explores the shift in roles and responsibilities of SAP AMS members as AI takes over some of the team's lower level repetitive activities.

4.5.7.2. Key findings :

The focus of AMS will shift from supporting SAP digital core applications to supporting AI applications, which in turn manage the SAP applications. New job roles will also get introduced, in addition to SAP application experts, now AI experts will also be needed to monitor and support SAP- AI Architecture.

In focus group session #2, project managers discuss the new age roles in SAP AMS, one of the participants PM2 was quoted saying "*Moreover, new roles will emerge that we haven't even thought of yet, especially in areas like data science and AI within the SAP ecosystem*." CL2 continues that automation changes job roles, reducing routine work and evolving into new roles.

In FG2 , participant PM2 states that "*The nature of jobs will change, but there will still be a need for skilled professionals to manage and enhance these technologies*." DH2 predicts that AI/ML adoption will not impact IT job availability. "*AI will not replace IT jobs but will lead to more advanced delivery approaches*."

DIR2 predicts a shift in required skillsets and strategies due to AI and automation adoption in AMS. DH3 states that AI changes the nature of AMS tasks, requiring consultants to learn and manage AI-specific

processes.. She states that "*Functional consultants have to be trained to handle issues when you integrate artificial intelligence with your SAP functionalities.*"

4.5.7.3. Quantitative Insights :

Among the 391 respondents, 57.3% (n=224) marked hybrid job roles as an upcoming trend for SAP AMS. Among the experience groups, mid-level managers with 13–17 years of experience were the most optimistic about this role evolution, indicating a strong awareness of and adaptability to the integration of diverse skillsets and responsibilities in future job profiles.

4.5.8. Theme – 8 : Human-in-the-Loop: Ensuring Trust and Reliability in AI-Enhanced SAP AMS

4.5.8.1. Definition :

This theme touches upon the ethical AI and Responsible AI concepts and discusses the human-in-the-loop for governance oversights on decisions made by Autonomous bots, agents and systems.

4.5.8.2. Key findings :

DM3 acknowledges the limitations of AI, emphasizing the continued relevance of human expertise. SA1 discusses the need for ethical

guidelines and human oversight in decision-making processes involving AI. He was quoted saying : *"With AI ethics, everyone is speaking of introduction of human in decision making…. not allowing AI to take the decision, … AI is supposed to provide the options the governance of AI*."

In focus group session #2, project managers discuss the topic of human-in-the-loop, One of the summarising quotes is as follows : "*Clients feel more comfortable when they know we're actively monitoring the technology. In shared services, a hybrid approach—combining automation with human checks—is key*."

4.5.9. Theme – 9: Cultivating Automation-Resilient Competencies: Elevating Strategic and Analytical Skillsets

4.5.9.1. Definition :

This theme talks about how certain skillsets which are hard to be automated or taken over by AI Agents will be in demand in future, this will be a new category of skills known for their resilence to Automation, and will be actively preferred by humans.

4.5.9.2. Key Findings :

CL2 states that teams must adapt by acquiring skills in areas that cannot be automated, such as strategic and analytical roles. " *Team members need to develop skills in areas less likely to be automated."*

PM2 predicts that inspite of AI, human resources will be required for *"... more complex, value-added activities that require critical thinking and human judgment.*" DIR3 emphasies that client specific and industry-specific expertise will continue to remain relevant and deliver impactful services. "*Specialised teams can provide insights that are highly relevant to the client's industry, leading to better outcomes."*

4.5.9.3. Quantitative Insights :

Among the 391 respondents, 22.5% (n=88) identified automation resilient skills as a key future trend for SAP AMS. Notably, there was no significant variation in this perception across genders or experience groups, suggesting a consistent recognition of the importance of developing skills that remain relevant in the face of increasing automation.

4.6. Summary of Findings

4.6.1. Demographics and Research Overview

The participants, comprising 26 interviewees, 33 focus group members, and 391 survey respondents, represent a broad spectrum of roles,

experience levels, and genders. Data triangulation from qualitative and quantitative methods ensured rich insights into the themes, contextualized by participant demographics.

4.6.2. Understanding and Perceptions of Shared Services

Key themes highlight the evolution of shared services from cost optimization models to strategic partnerships delivering business value. Participants discussed the industry's maturity levels, client perceptions, and geographic shifts in shared services adoption.

4.6.3. Productivity and Efficiency Factors

The study identifies 12 factors affecting productivity and efficiency in shared services, ranging from workload balancing and seasonal surges to knowledge accessibility and the role of leadership. Operational challenges such as context-switching between multiple clients, and project rotation were identified while continuous learning, cross-skilling, and recognition were highlighted as vital factors.

4.6.4. Emerging Technologies and Future Trends

Themes such as AI-driven ITSM tools, predictive maintenance, and intelligent bots signal a paradigm shift toward automation and self-healing systems. Participants advocated for a human-in-the-loop approach to

maintain trust and reliability, ensuring AI complements rather than replaces human expertise in shared services.

4.7. Conclusion

The results of this study offer a comprehensive understanding of the dynamics shaping shared services in SAP S/4HANA AMS within the Indian IT industry. By integrating insights from interviews, focus groups, and survey responses, the chapter serve as a vital reference for organizations striving to enhance their shared services models while preparing for future trends in SAP S/4HANA AMS.

The findings highlights the progression of shared services from cost-centric models to strategic enablers. Productivity and efficiency are significantly influenced by factors such as leadership, workload balancing, continuous learning, and accessible knowledge systems. Additionally, emerging technologies such as AI, ML, and automation are reshaping the shared services landscape, requiring the evolution of workforce skills and governance models.

This chapter lays the foundation for deeper exploration into the implications of these findings for SAP AMS providers. In the next chapter, the results will be interpreted and recommendations for managers will be discussed.

CHAPTER V:

DISCUSSION

5.1. Discussion of Results

This chapter interprets the findings presented in the previous chapter, and provides recommendations for SAP AMS practitioners. The discussions will be done theme wise for each of the three research questions. The interpretations will be provided for each theme, followed by implications and recommendations for Managers operating shared services model in SAP AMS.

5.2. Discussion of Demographics

The demographics show that questionnaire survey was focused on younger functional and technical consultants, while interviews were directed towards senior members of the shared service delivery team.

Diversity of roles : The study sample included participants across the breadth of the AMS organisation ranging from delivery heads and practice directors down to functional consultants and developers. This diversity ensured a holistic perspective and cross comparision of viewpoints.

Diversity of Experience: The study sample included participants across from 3 years of experience to Delivery heads with over 23 years of experience. This diversity revealed notable trends like younger professionals preferring shared

services and timely project rotation, while experienced professionals preferring stability of dedicated projects for a longer duration.

Diversity of Gender: The study had a healthy gender distribution revealing notable trends like female associates valued supportive leadership and formal mentorship more than men, while male members had distinctive preference towards predictive maintenance as a future trend,

5.3. Discussion of Research Question One: Understanding and perceptions about S/4HANA AMS in Indian IT

The intent of the research question one was to paint the picture of shared services as seen from the eyes of practioners of SAP S/4HANA AMS providers in India.

The eight themes reflect the collective perceptions, challenges, and expectations surrounding the adoption and implementation of shared services models in SAP S/4HANA Application Management Services (AMS). Each theme is discussed in detail below.

5.3.1. Theme -1: From cost optimization to strategic partnership: Tracing the evolution of SAP AMS

5.3.1.1. Interpretations :

The findings show that early adopters of shared services were focussed on increasing resource utilistation by sharing across projects,

however they have evolved to outcome focussed value driven global strategic partners for the customers.

5.3.1.2. Implications and Recommendations for managers :

Insights driven Shared Services Model:

AMS practitioners should assess their SAP Practice and take the required steps to move to the next generation shared services delivery which will be agile enabled, leveraging emerging technologies like AI, ML, IRPA and predictive analytics, focussed on value based KPIs like business impact and Co-Innovation contribution.

5.3.2. Theme -2: Evolving client perspectives: From dedicated models to shared services

5.3.2.1. Interpretations :

Findings strongly suggest that customer perceptions towards shared services are not always favorable and that the SAP S/4HANA AMS providers will have to continue investing in customer education and awareness activities.

5.3.2.2. Implications and Recommendations for managers :

Thought Leadership :

SAP AMS providers should author and publish white papers demonstrating their tool sets and process offerings for shared services, thereby influencing customer leaders.

Industry-Specific Narratives:

Tailor communication strategies to resonate with key issues of industry verticals and how they are better solved by shared service models. For example, resilience and business continuity, rapid capacity scaling etc.

Customer Confidence Building and Stakeholder engagement:

Secure stakeholder buy-in by transparent communication about the benefits and addressing concerns related to the shared services transition.

5.3.3. Theme -3: Geographical Shifts in Shared Services: Balancing Cost, Talent, and Business Continuity

5.3.3.1. Interpretations :

The geographic dimension of Shared Services adoption has moved away from low-cost labor centers to continuous time-zone support and sustainable talent pools.

AI enabled Shoring:

The offshoring trend largely driven by cost arbitrage will face challenges from technology enabled teams at nearshore and onshore. The intelligent assistants and bots will reduce the need for humans to extent that non-offshore teams will become cost attractive. There will be new models available to serve the customer requirements.

5.3.3.2. Implications and Recommendations for managers:

Follow the Sun Model with AI orchestrated Workflows :

SAP AMS providers should complement the follow the sun models with AI-driven task allocation and orchestration across global teams in real-time. This reduces reliance on rigid handover schedules improving team productivity.

Regional Talent Sustainability:

SAP AMS Providers should use regional presence to tap into the local consultants with awareness of local industry-specific regulatory requirements, data sovereignty laws, and compliance standards.

Regional compliances:

SAP AMS providers should also leverage their regional presence to get locally compliant and certified with national and regional authorities,

simplifying adherence for customers, and enhancing the perceived reliability and integrity of Shared Services models.

5.3.4. Theme-4: Navigating Resistance: Overcoming Reluctance in Shared Services Adoption

5.3.4.1. Interpretation :

Findings indicate that senior employees are skeptical about their contribution in shared services models and prefer the predicatbility and structure of the dedicated projects.

5.3.4.2. Implications and Recommendations for managers:

Targeted adoption strategies :

Manager should implement redressal mechanisms tailored to different stakeholder groups. Younger consultants tend to appeal to resume diversity, faster learning opportunities and career growth, while experienced professionals look for work life balance and operational efficiencies.

Role Segmentation :

Shared services managers should fully utilise the flexibiltiy provided by shared services models to set up niche roles within the teams ,

more closely aligning to their responsibilites, highlighting their expertise and contribution to the floor activities.

5.3.5. Theme-5 : Aligning Organizational Maturity with Shared Services Efficiency

5.3.5.1. Interpretation :

Findings point that SAP AMS providers with lower maturity around streamlined processes, defined roles, and clear responsibilities will struggle with shared services implementation and realization of its intended benefits.

5.3.5.2. Implications and Recommendations for managers :

Organisational Maturity Assesments :

SAP AMS providers should assess maturity levels using the Capability Maturity Model (CMM) or similar diagnostic tools. These assessments can provide insights into areas requiring improvement and help prioritize interventions that align the organization with the requirements of a shared services model.

Leverage technology for process standardisation :

SAP AMS managers should streamline internal processes and standardise them with technology aids. Rosters like shift plans, leave plans, learning plans, backup teams, escalation contacts, customer contacts etc

should be easily available as confluence pages or sharepoint lists instead of excel files.

5.3.6. Theme-6: Balancing Customization and Standardization: Addressing Unique Demands in Shared Services Model

5.3.6.1. Interpretation :

In Shared services a pool of SAP support consultants should be able to manage multiple customers. This is enabled by having a standardised set of processes, guidelines and principles for working across the multiple customers.

However, If every customer has a specific way of working, the way in which the incidents are to be attended, diagonised, resolved and reported in their ITSM tool, then all this process variances create barriers to a common set of consultants being able to switch between different customers.

5.3.6.2. Implications and Recommendations for managers :

SAP AMS Service providers have to reconcile the efficiency of standardised support models with the flexibility of being able to meet customer specific demands. Otherwise, shared services will become

fragmented, less efficient, and more resource intensive thereby eroding their cost and scalability benefits.

Modularised Support offerings ;

SAP AMS modular approach allows the Shared Services framework to incorporate specialized “add-on” modules or tiers of service. While the core operations remain standardized, these optional modules can address unique workflows or industry-specific compliance requirements without redesigning the entire service delivery model.

Industry-Specific Add – on Services :

In sectors with strict regulatory controls—such as financial services, life sciences, and utilities—AMS providers can offer support models tailored to their compliance obligations. This includes unique audit trails, data retention policies, and localized quality assurance protocols

5.3.7. Theme-7 : Leveraging Multi-Client Exposure: Elevating Consultant Marketability in Shared Services

5.3.7.1. Interpretation :

Findings indicate that consultants working on shared services projects have the opportunity to synthesize knowledge across industries, leading to more innovative and efficient solutions. The added resume

diversity makes the consultants valuable in the market and gives them a competitive edge.

5.3.7.2. Implications and Recommendations for managers :

Create Specialist and Generalist Tracks :

Managers should collaborate with consultants to build specialist and generalist pools in line with their preferences and strengths, resulting in employee satisfaction while meeting organizational needs.

Specialist profiles are rotated in projects of a single domain or client deepening their industry specific insights while generalist profiles rotate among multiple domains gaining wider industry wide experiences.

Leverage Multi-Client Expertise for Sales

AMS Providers should position consultants' multi-client expertise during client acquisition highlighting the team’s ability to apply cross-industry insights and best practices.

5.3.8. Theme-8: Strategic Consolidation: The Role of CoEs in Modern Shared Services

5.3.8.1. Interpretation :

Domain Expertise and Specialization:

CoEs concentrate specialized talent—such as SAP S/4HANA functional experts, automation engineers, and compliance specialists—in dedicated teams. This heightened concentration of knowledge accelerates issue resolution and elevates the strategic advisory capabilities of the Shared Services model.

Improved Risk Management and Transparency:

CoEs are modelled on global corporate mandates, hence have consistent governance and adherence to quality standards. This concentrated model reduces the risk associated with dispersed, uncoordinated delivery models.

5.3.8.2. Implications and Recommendations for managers :

Future Ready Faster:

SAP AMS providers should utilize CoEs to expedite the rollout of new SAP S/4HANA functionalities, upgrades, and process enhancements. CoEs to be used as incubators for emerging technologies, analytical tools, and best practices.

Innovation Experience centers:

SAP AMS providers should set up and expand their innovation hubs and acclerator centers as a showcase for their customers and establish them as Industry leading thought leaders.

5.3.9. Comparison with Existing Literature

The eight themes identified in the study for Research Question-1 have meaningful connections with existing literature on shared services and SAP AMS. This section examines these correlations, highlighting agreements or expansions of previous studies.

From Cost Optimization to Strategic Partnership: The progression of shared services from cost-saving measures to strategic enablers aligns with Fielt et al. (2014), who identified a shift from economic objectives to strategic value creation. Janssen and Joha (2007) also emphasized this evolution in their analysis of shared services governance.

Evolving Client Perspectives: The gradual acceptance of shared services mirrors Bergeron's (2002) observations that clients' openness increases as the benefits of scalability and efficiency become evident. This study expands on Wenderoth's (2013) four-phase model by highlighting customer education's role in adoption.

Geographical Shifts in Shared Services: McKeen and Smith (2011) discussed the diminishing dominance of cost arbitrage in offshoring, a trend further explored by Afflerbach (2020) in hybrid team models. This study

highlights the shift toward “follow-the-sun” operations and regional talent sustainability.

Aligning Organizational Maturity: Fielt et al. (2014) emphasized the necessity of mature organizational structures for effective shared services, a finding echoed here through the emphasis on streamlined processes and role clarity.

Navigating Resistance: Resistance to shared services adoption, as noted by Bergeron (2002), aligns with findings that highlight change management challenges. This study reinforces the importance of tailored onboarding and engagement strategies.

Balancing Customization and Standardization: Schulz et al. (2009) noted the operational complexities of customization in shared services. This study adds value by proposing modular approaches to balance efficiency with client-specific demands.

Leveraging Multi-Client Exposure: Afflerbach (2020) recognized the broader expertise consultants gain through diverse client exposure. This study confirms its impact on marketability and innovation.

Strategic Consolidation through GCCs and CoEs: The role of Centers of Excellence (CoEs) in driving efficiency and specialization aligns with Lakshmi et al. (2020) and Fielt et al. (2014), supporting this study's findings on expertise centralization.

These correlations validate and extend existing literature while offering practical insights for SAP AMS shared services.

5.4. Discussion of Research Question Two: Factors affecting productivity and efficiency

Research Question Two focuses on the SAP consultants operating within shared services environments, examining the factors that influence their work performance and the challenges encountered by SAP AMS providers in maintaining a scalable workforce

This section discusses the identified twelve themes in detail, providing insights into how AMS providers can leverage them to enhance the overall efficiency of shared services and deliver greater value to end customers.

5.4.1. Theme-1: Balancing Workload and Efficiency: The Role of Team Size in Shared Services

5.4.1.1. Interpretation :

Shared services members are partially allocation to two or more projects. Any extra time consumed in one project will eat the time meant for the next project. This sometime results in deterioriation of quality of work and mostly the team members will end up spending extra time to cover up the backlog.

Frequent occurrence of such pileups leads to build up of frustration among the consultants. This frustration coupled with loss of worklife balance leads to the biggest drop in productivity and efficiency of the Shared Services team.

5.4.1.2. Implications and Recommendations for managers :

SAP AMS providers will have to constantly refine their models to achieve the balance between optimum team size and the right commercial model to win customer projects and being able to sustainably deliver them.

Project Pairing :

Consultants with partial FTE allocation to one project should be paired for the remaining FTE with a project that complements the workload and customer parameters of the already assigned project.

For example, if both the projects assigned to a consultant are in similar crucial, high workload phase, resulting in simultaneous peak demands or surges in incident volumes, then it will impact the productivity of the assigned consultant.

5.4.2. Theme-2: Seasonal Surges and Simultaneous Demands: Navigating Productivity Challenges

5.4.2.1. Interpretation :

Results show that practitioners talk about receiving high priority requests from multiple customer at same time. This creates conflict for the consultant managing the incident queue, as the SLA clock is running for both incidents and there is risk of mising out on SLA for one of the requests / customers.

One of such well known peak cycles is the financial reporting cycle, the book closure and inventory period ends ie month-ends, quarter-ends and Year ends. Some business activities would also lead to seasonal peaks like Black Friday Sales, Plant Shutdowns, Annual Maintainance windows.

5.4.2.2. Implications and Recommendations for managers :

Run book on prioritisation

SAP AMS providers operating in Shared Services model should set up clear operational guidelines in their run books to handle tasks with conflicting priorities. Team leads and Incident managers should be empowered to take corrective action to remedy the situation on floor, without allowing the situation to spiral and create domino effect. This also ties back to theme of organisational maturity.

Bench and Reserve Pool : Flex teams

If allowed by operational parameters, SAP AMS providers should invest in maintaining a team of reserve consultants, who can jump in to resolve any peak workload cases. In certain cases, where such specialised pools cannot be maintained due to resource availability constraints or financial margins, other projects within the shared services center can lend their resources for short term relief.

5.4.3. Theme-3: Multi-Client Complexity: Managing Context Shifts in Shared Services Models

5.4.3.1. Interpretation :

Shared service members by virtue of the nature of the model are working on multiple customers, it so happens that sometimes multiple times during the day they have to alternate between the various projects assigned to them. This leads to a short focus window for the consultants

working on the topic at hand. The multiple customers assinged to a single cluster or team of consultants may also have varying business processes and contexts.

5.4.3.2. Implications and Recommendations for managers :

Context management Tool chains :

SAP AMS providers will have to invest in intelligent systems that can bring up the context of the scenario so that the consultants can quickly recap the scenario in a nutshell.

This could be as simple as a Generative AI powered summary of the incident history so far, so when a SAP consultant picks up an incident in ITSM tool like Jira or Service Now, the GenAI tool provides a summary of all the activities that have been done on this incident so far, and / or a summary of all the conversations to and fro with the customer.

5.4.4. Theme-4: Navigating the Transition to Shared Services: Addressing Initial Frustrations in Multi-Customer Support

5.4.4.1. Interpretation :

The requirement to manage multiple customer's unique SAP configurations, SLAs, and priorities requires consultants to rapidly adapt and

switch mindsets, resulting in initial frustrations and strained focus decreasing productivity.

5.4.4.2. Implications and Recommendations for managers :

Gradual Exposure with personalised onboarding

SAP AMS teams should have customizable onboarding programs that focus on introducing the shared services model, its workflows, and best practices. Hands-on simulations and mentoring with one-on-one sessions, team discussions, and knowledge-sharing forums will provide guidance on handling diverse client requirements, managing workloads, and adapting to the shared services model.

5.4.5. Theme-5: Knowledge Accessibility and Retrieval: Catalysts for Efficiency in Shared Services

5.4.5.1. Interpretation :

The documentation required for resolving the task at hand should be readily accessible to the consultant so as to have the optimal efficiency in these tasks. These documents whether stored in customer sharepoint, or AMS provider sharepoint should be accessible and easily searchable.

Customers that have evolved their systems over the time, have fragmented knowledge portals scattered across multiple technology

platforms, Accessing and Logging into each application and searching for relevant information eats away valuable time of the SAP Consultants.

5.4.5.2. Implications and Recommendations for managers :

Establishing Centralised Knowledge Repositories :

SAP AMS managers should strive to establish centralised knowledge academies or knowledge portals for their Shared Services customers. This will improve the time taken to access and retrieve information needed and hence boost the efficiency of the team.

GenAI based Knowledge search and Summary :

Managers should invest in GenAI solutions which are able to extract relevant information from the knowledge documents available in the repository. This is now a well developed use case the retrieval augmented generation (RAG).

5.4.6. Theme-6: AI-Driven ITSM Assistants: Revolutionizing Productivity in Shared Services

5.4.6.1. Interpretation :

The findings indicate that for regular ITSM activities AI agents and automation bots will be available which will assist and in many cases

automate the various activities to be done by SAP AMS Team members, thereby improving their productivity.

5.4.6.2. Implications and Recommendations for managers :

Smaller Teams

SAP AMS Managers should utilise the automation trends as an opportunity to optimise existing AMS capacity teams. Smaller concentrated teams could be formed which can serve higher number of customers or services scope thereby improving unit realisation and overall productivity.

Testing Bots

Automated testing tools and offerings have evolved very well and should be readily adopted to reduce the time spent by functional consultants on Unit testing and Integration testing.

Co-Pilots

SAP AMS Managers should encourage the adoption of Copilots from relevant technology providers, be it Microsoft or Github or as per their preferred stack. This will boost the efficiency of their teams in meetings and calendar management, also will save time spent on mails and other written communication

5.4.7. Theme-7 : Continuous Learning: The Role of Upskilling and Cross-Skilling in Shared Services

5.4.7.1. Interpretation :

Participants say that in SAP industry, demand far exceeds the supply of skilled SAP consultants. There is also a consensus that the intelligent systems powered by AI will not replace the human expert. Hence it is prudent to invest in developing organic pools of skilled talent.

5.4.7.2. Implications and Recommendations for managers :

Access to Self Learning Portals

SAP AMS teams should be enabled with industry leading self learning portals like Udemy, Coursera, linkedin learning along with inhouse learning management portals. Team should be encouraged to spend a minimum of 10% of their monthly hous on learning activities.

Niche SAP Skills

SAP AMS managers should focus attention on developing competency in niche skill areas by cross skilling existing members, This is a cost effective solution as market places a premium on such skill sets, plus consultants dedicated to niche skills generally have lower utilisation,

Knowledge Hours

Managers should encourage knowledge sharing sessions in the team and across the larger SAP Practice. To imbibe best practices sharing as a way of working, there should be dedicated knowledge hour, recurring at a suitable frequency like every week or every fortnight.

5.4.8. Theme-8 : Recognizing Excellence: The Role of Rewards in Enhancing Team Productivity

5.4.8.1. Interpretation :

The findings show that rewards and recognition improve team morale and motivation and influence productivity. The quantitative results reinforce the importance of this factor in enhancing productivity.

5.4.8.2. Implications and Recommendations for managers:

Peer to peer recognition platforms:

Organization should invest in appreciation platforms which allow employees to acknowledge and appreciate their peers. This accompanied with a gamification portal will encourage consultants to accumulate appreciation points from various service improvement and customer delight activities.

Periodic R&R Programs

Specific events focussed on the awardees should be organised periodically such as monthly, quarterly, half yearly and annually at various organisational levels like project wise, unit wise, segment wise and practice wise.

5.4.9. Theme-9 : Dynamic Assignments: Elevating Team Performance Through Strategic Rotation

5.4.9.1. Interpretation :

By adopting planned and meaningful project rotation in SAP AMS Shared Services various benefits can be realized—from enhancing technical skill sets and consultant motivation to ensuring effective resource utilization and improved service quality. By actively implementing rotation programs, organizations can build an agile, adaptable, risk mitigated, future-ready sustainable service delivery model.

5.4.9.2. Implications and Recommendations for managers:

SAP AMS Managers and responsible team leads should plan for project assignments for the team in a way that optimum placement is achieved. The multiple projects assigned to an indivudual consultant should be selected according to the work history of the consultant, in a way that provides best value to the experience history and sets path for the AMS practitioner to become an SME or a cross industry expert.

5.4.10. Theme-10 : Supportive Leadership: Enhancing Team Morale and Productivity in Shared Services

5.4.10.1. Interpretation :

The findings indicate that supportive leadership helps manage high-pressure environments of multi customer engagements. Leaders make team members feel valued and supported, thereby influencing team culture.

5.4.10.2. Implications and Recommendations for managers:

Adopt Empathetic Leadership Practices:

Managers should practice empathy, active listening, acknowledge team and strive to build a safe, unbiased work environment. Managers should recommend and encourage all people leads to undergo emotional intelligence workshops and build on their emphatetic skills.

5.4.11. Theme-11: Collaborative Cultures: Driving Productivity Through Team Dynamics and Support

5.4.11.1. Interpretation :

SAP AMS teams in organisations supported by mature processes and frameworks tend to better manage the operational challenges of Shared Services Model. An enabling technical and cultural ecosystem improves the efficiency of the team.

5.4.11.2. Implications and Recommendations for managers:

SAP AMS Managers should strive to maintain a positive, non toxic, healthy culture around the team. They should also be instrumental in communicating the organisation's vision and values to the team , and articulate how the team fits into the larger scheme of things. Such a healthy communication will positively influence the team output.

5.4.12. Theme-12 : Periodic Connects and Mentoring: Driving Team Success & Enhancing Team Productivity

5.4.12.1. Interpretation :

The findings indicate that proactive periodic connects enable managers to identify potential issues early and take corrective actions, preventing minor challenges from escalating into larger disruptions. The targeted mentoring bridges knowledge gaps and prevents inefficiencies caused by partial understanding of tasks.

5.4.12.2. Implications and Recommendations for managers:

Proactive Morale Monitoring:

SAP AMS managers should incorporate relevant proactive mechanisms like periodic connects. Surveys, one on one discussions, group activities, engagement workshops for identifying areas creating dissatisfaction and proactively boost morale.

Formal Mentorship Programs:

Shared Service managers should establish formal mentorship programs enabled by platforms that facilitate the end-to-end mentoring journey for both mentors and mentees. Mentees should be able to search and find appropriate mentors. Mentors should be able to schedule and capture the mentoring outcomes.

5.4.13. Comparison with Existing Literature

The twelve themes identified for Research Question 2 align with and expand upon existing literature in several significant ways. The key correlations are as follows:

1. **Balancing Workload and Efficiency**

   Afflerbach (2020) emphasized the role of workload management in hybrid virtual teams, noting that overburdened teams face a decline in morale and productivity. This study builds on these observations by connecting team size directly to incident resolution efficiency in multi-client environments.

2. **Seasonal Surges and Simultaneous Demands**

   Fielt et al. (2014) discussed the necessity of dynamic resource allocation in shared services to manage fluctuating demands effectively. This study

supports their insights by highlighting the challenges posed by cyclical peaks, Proactive measures, such as maintaining a bench of reserve consultants, resonate with Shahar et al.'s (2019) recommendations for mitigating demand surges to sustain team efficiency.

3. **Knowledge Accessibility and Retrieval**

This study corroborates the findings on Centralized knowledge repositories by Fielt et al. (2014). and introduces the added dimension of AI-powered retrieval systems, which can significantly reduce the time required to locate critical information.

4. **AI-Driven ITSM Tools**

The transformative potential of AI and automation in shared services aligns with Lakshmi et al.'s (2020) observations on leveraging Robotic Process Automation (RPA) and AI for efficiency gains.

5. **Dynamic Assignments and Recognition**

Dynamic assignments and recognition programs align closely with McKeen and Smith's (2011) emphasis on motivating employees through project rotation and acknowledgment of their contributions. This study expands on these insights by linking structured rotation programs to skill diversification, consultant satisfaction, and risk mitigation in shared services.

6. **Supportive Leadership and Collaborative Cultures**

The emphasis on fostering positive team dynamics aligns with Fielt et al.'s (2014) recognition of collaboration as a cornerstone of successful shared services.

7. **Continuous Learning and Mentorship**

Continuous upskilling and cross-skilling align with Lakshmi et al.'s (2020) emphasis on the importance of learning to meet evolving technological demands. McKeen and Smith (2011) similarly highlighted cross-skilling as essential for flexibility in shared services. This study builds on these findings by recommending formal mentorship programs and AI-supported knowledge sharing as tools to enhance team efficiency.

In conclusion, this study validates and extends existing literature on productivity and efficiency in shared services. It introduces innovative recommendations, such as AI-enabled knowledge retrieval and structured mentoring, to address specific challenges in SAP AMS operations.

5.5 Discussion of Research Question Three: Impact of emerging technologies and future trends

The Third objective of this study was to focus on the emerging themes that will impact and shape the world of SAP S/4HANA AMS Operations. As discused in the results chapter, Nine major themes were identified from the thematic analysis of focus group sessions and semi structured interviews.

5.5.1. Theme – 1 : Reimagining Shared Services: Towards Business Value and Customer Experience

5.5.1.1. Interpretations :

It has become evident that all SAP partners are not offering full shared sercices, some of them are focused on niche areas like industry specific domains or geographic specialisations. The extent to which each vendor is providing shared services is defined by its organisation and employee maturity.

5.5.1.2. Implications and Recommendations for managers :

Beyond Steady State support :

Shared Services centers have over the time matured their offerings, they are no longer a basic lights-on support providers but are now treated as a consulting partners for the customers. Findings indicate that customers now expect AMS service providers to adopt a more value based approach and suggest continuous improvements to their system.

5.5.2. Theme – 2 : Inevitable AI Adoption : The Unavoidable Paradigm Shift in SAP AMS

5.5.2.1. Interpretation :

It is clear from the results that Artificial Intelligence will be penetrate all the service offerings of SAP AMS, furthermore it will continue to see strong customer demand. AI enabled services will act as a key win theme influencing the outcomes of upcoming AMS RFPs. It will become a competitive necessity. The quantitative findings suggest that both experience level and gender influence perceptions of AI's role in shaping the future of SAP AMS.

5.5.2.2. Implications and Recommendations for managers:

AI Mindset and Adoption:

The study recommends AMS Managers to adopt an AI mindset and to accommodate AI products and services in all their offerings, across the breadth and width of the AMS organisation. Failure to do so may end up in competitive disadvantage making it difficult to win new SAP AMS business and retain existing customers.

AI driven Governance :

AI will provide real time governance inputs to deviation in SLAs and KPIs, It will also embrace proactive risk management and mitigation

strategies. Future AMS Governance forums will be discussing AI recommendations and the extent of their adoption.

5.5.3. Theme– 3 : Personalized AMS Delivery: User-Centric Services powered by AI Insights

5.5.3.1. Interpretation :

The discussion on AI driven personalisation showcases exciting opportunities to leverage AI for enhanced and personalised user experience and thereby creating new revenue streams and enhancing differntiation and competitiveness of AMS providers in SAP ecosystem.

5.5.3.2. Implications and Recommendations for managers:

Insights as a Service :

AI will enable new revenue streams for AMS like custom AI model development, and subscription-based AI features for specific SAP modules. AMS providers can also bundle the AI -Aware services providing business process insights and personalized user recommendations as “Insights as a Service.”

Personalized Support and Recommendations:

AMS providers can leverage AI features to offer need-based analytics, real time business transaction updates, customized user specific

dashboards, on demand documentation and tailored byte sized training nuggets.

5.5.4. Theme – 4 : Intelligent Bots and Autonomous Agents: Reimagining Service Desk Operations

5.5.4.1. Interpretation :

Agentic AI will take over SAP AMS and act autonomously to take independent corrective actions based on real time data from business transaction monitoring and system health reports.

5.5.4.2. Implications and Recommendations for managers :

Redefining Core Responsibilities:

SAP support consultants will move away from repetitive break-fix responsibilities and shift toward higher-value activities such as solution optimization, innovation enablement, and long-term capability planning.

Focus on Process Improvement:

Instead of solely providing reactive support, consultants will increasingly leverage AI-generated insights to recommend process enhancements, proactively prevent system issues, and streamline support workflows.

5.5.5. Theme – 5 : Predictive Insights and Self-healing capabilities: Embedding Predictive Maintenance in SAP AMS

5.5.5.1. Interpretation:

Shift Left will reach its zenith with Self service tools and interfaces for corrective actions. The next evolution will be systems which can predict disruptions, incidents and bugs and subsequently take corrective actions autonomously,

5.5.5.2. Implications and Recommendations for managers:

Scalable Automation Models :

AMS teams in future will be focussed on RPA Maintainece to create, deploy, and monitor bots across multiple geographies and systems, reducing reliance on traditional manual labor.

Portfolio Improvement :

AMS vendors will have to invest in strengthening their portfolios of Self healing solutions. These products may be in-house developed as part of the CoE or portfolio enrichment program. The specialised solution providers will develop and maintain suite of self-healing solutions for SAP ecosystem.

5.5.6. Theme – 6 : Acclerating Agile Adoption : Towards Future ready Shared services

5.5.6.1. Interpretation :

Over the period of time, resistance to agile practices has decreased and integration of Agile methodologies like scrum, kanban into SAP AMS operations have increased. DevOps and DevSecOps have now penetrated SAP AMS operations and shared services models are aligned to these agile aligned governance structures and processes.

5.5.6.2. Implications and Recommendations for managers :

This study predicts that AMS operations will continue to be monitored and managed using monthly sprints, and Kanban Boards. Change management activities, problem managmeent, continous Improvements, release management all are now being delivered in DevOps model.

5.5.7. Theme – 7 : Reinventing AMS Job Profiles: Bridging Traditional SAP Functions and AI Competencies

5.5.7.1. Interpretation :

The findings indicate that consultants will need to focus on monitoring AI systems and addressing AI-related integration challenges. Moreover, new roles will emerge, such as AI specialists within the SAP

ecosystem, who will bridge the gap between AI architecture and SAP applications.

5.5.7.2. Implications and Recommendations for managers:

Strategic Upskilling and Re-skilling Programs:

SAP AMS Providers will have to invest in training that equips consultants with AI literacy, data interpretation skills, and an understanding of automation toolchains. This includes formal certifications, workshops, and e-learning modules focused on AI tools relevant to SAP S/4HANA AMS.

AI Talent Acquisition:

The emergence of new AI roles like AI specialists will trigger a need to do strategic hiring and retaining professionals with expertise in AI and data science. Organizational role definitions will need to be updated to reflect the hybrid skills that combine traditional SAP expertise with AI capabilities.

Role Progression Pathways :

SAP AMS Shared services units should clearly articulate the transition to AI and simplify role transitions. Managers should reassure

employees about job continuity and focus on creating a culture of adaptability to reduce resistance to AI adoption.

5.5.8. Theme – 8 : Human-in-the-Loop: Ensuring Trust and Reliability in AI-Enhanced SAP AMS

5.5.8.1. Interpretation :

The findings indicate that clients are more comfortable with a hybrid approach where human oversight complements autonomous entities. Relationship-building relies heavily on emotional intelligence, contextual understanding, and personalized engagement.

5.5.8.2. Implications and Recommendations for managers:

Implement a Human-in-the-Loop Framework:

SAP AMS providers should design and implement a human-in-the-loop framework for AI-enhanced SAP AMS operations. It should clearly define roles for human oversight, particularly in critical decision-making processes where ethical considerations or client trust are at stake.

5.5.9. Theme – 9: Cultivating Automation-Resilient Competencies: Elevating Strategic and Analytical Skillsets

5.5.9.1. Interpretation :

Automation-resilient skills represent a new category of capabilities that are less likely to be taken over by AI and will be in high demand. The skills that could be labelled automation resilient will also evolve as AI matures and picks up more complex capabilities.

5.5.9.2. Implications and Recommendations for managers:

Customer Specific Expertise :

SAP AMS Managers should encourage teams to build deeper domain-specific expertise so that they can deliver tailored, high-value services to clients, leveraging insights that AI cannot replicate.

5.5.10. Comparison with Existing Literature

The findings for Research Question 3 align with and expand existing literature on emerging technologies and future trends in SAP AMS shared services. Key correlations include:

AI Adoption and Predictive Maintenance: Lakshmi et al. (2020) emphasized the transformative role of AI, RPA, and predictive analytics in driving operational efficiencies. This study corroborates their relevance by highlighting predictive maintenance and self-healing systems reducing downtime and enhancing service reliability.

Personalized AMS Delivery: The concept of AI-driven user personalization aligns with Afflerbach's (2020) discussion on tailored services in hybrid shared service models, but this study extends the discussion by introducing "Insights as a Service" as a revenue-generating opportunity.

Reinventing Roles and Automation Resilience: The evolution of roles in SAP AMS, from operational to strategic, builds on McKeen and Smith's (2011) recognition of skill diversification. The focus on automation-resilient competencies showcases the next level of workforce evolution.

This study contributes to the literature by identifying specific innovations, such as AI-enabled ITSM tools and hybrid governance models, and emphasizing their potential to redefine shared services.

5.6. Summary

This Chapter 5 interprets the findings from the study's three research questions, linking them to existing literature and offering actionable recommendations for SAP S/4HANA AMS shared services.

For research question-1, the study identified eight themes, highlighting the evolution of shared services from cost-focused models to strategic enablers. Challenges such as balancing customization and standardization and achieving client acceptance were discussed.

For research question-2, twelve themes revealed factors influencing productivity, including workload balancing, leadership, and AI-driven tools. Recommendations emphasized collaborative cultures, intelligent resource allocation, and continuous learning.

For research question-3, Nine themes explored AI, predictive maintenance, and automation's role in shaping SAP AMS. Recommendations focused on AI-driven governance, predictive analytics, and skill development.

The chapter significantly contributes to literature by deepening the understanding of shared services, while providing practitioners with strategies to align shared services with emerging trends in SAP AMS.

CHAPTER VI:

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

6.1. Summary

The study explores the shared services model in SAP S/4HANA AMS, with specific attention to Indian IT service providers. The findings emerged from a mixed-methods approach, integrating semi-structured interviews, focus groups, and a quantitative survey.The discussion provides insights into the implications of adopting SAP Shared Services in the AMS industry, highlighting both theoretical and practical contributions

The study throws light on the industry practitoners understanding and perceptions of shared services in SAP AMS. This is a good reflection on the state of the industry and the shared services delivery model as it is practiced in India in 2023-2025 era. Key findings highlight the transition of shared services from cost-centric models to strategic enablers.

Additionally, the study explores operational challenges within the shared services model, such as their impacts on team productivity and efficiency. It also assesses emerging technological trends like AI, RPA, and predictive analytics, offering forecasts for their adoption. Quantitative results affirm high practitioner acceptance of these trends, corroborating the qualitative findings. This dual approach ensures theoretical depth and practical relevance.

6.2. Implications

The discussion chapter of the study discusses in detail the interpretations of the findings and the recommendations for practitioners. The below section summarises the implications and recommendations.

6.2.1. Research Question 1: Understanding and Perceptions of Shared Services

6.2.1.1. Implications:

- Shared services have evolved from cost-saving initiatives to strategic enablers focused on value delivery.
- Client acceptance of shared services depends on awareness and demonstrated benefits.
- Offshore cost advantages are diminishing, necessitating regional integration.
- Resistance from senior employees and stakeholders hinders adoption.
- Organizational maturity significantly impacts shared services success.
- Excessive client-specific customisation hampers shared services efficiency.
- Multi-client exposure enhances consultant marketability.
- CoEs improve risk management, governance, and innovation.

6.2.1.2 Recommendations for SAP AMS Shared Services Managers:

- AMS providers should transition to business outcomes and co-innovation.
- Publish white papers and thought leadership content to showcase shared services benefits.

- Tailor communication strategies to industry-specific narratives.
- Engage stakeholders through transparent discussions to build confidence.
- Implement follow-the-sun models enhanced with AI-driven task orchestration.
- Establish regional delivery centres to tap into local talent.
- Develop targeted adoption strategies addressing concerns of different groups.
- Establish niche roles to highlight expertise and contributions.
- Conduct maturity assessments using frameworks like the Capability Maturity Model (CMM).
- Streamline internal processes using technology for better standardisation.
- Use modularised support offerings to accommodate unique client needs.
- Develop industry-specific add-ons for compliance-heavy sectors.
- Create specialist and generalist tracks for consultants.
- Use multi-client expertise as a value proposition during client acquisition.
- Use CoEs to expedite emerging technology adoption.
- Establish innovation hubs to showcase expertise and attract clients.

6.2.2. Research Question 2: Factors Affecting Productivity and Efficiency

6.2.2.1. Implications:

- Overburdened consultants lead to quality issues and burnout.
- Cyclical peaks create conflicts in task prioritisation.
- Frequent context-switching reduces consultant efficiency.
- New consultants struggle with the complexity of shared services.

- Fragmented knowledge repositories slow down incident resolution.
- Automation can reduce routine workloads and improve efficiency.
- Upskilling and cross-skilling are essential for team efficiency.
- Recognition boosts morale and motivation.
- Rotating consultants across projects prevents stagnation.
- Empathetic leadership improves team morale and productivity.
- Positive team dynamics enhance productivity.
- Proactive engagement and mentoring improve efficiency.

6.2.2.2. Recommendations for SAP AMS Shared Services Managers:

- Optimise team size and pairing to balance workloads effectively.
- Establish clear guidelines in run books for handling conflicting priorities.
- Maintain a reserve pool or flex teams to address peak demands.
- Invest in intelligent task management and context-switching tools.
- Use AI-driven incident summaries to reduce cognitive load.
- Implement customised onboarding programmes with mentoring.
- Establish centralised knowledge repositories.
- Use AI-based knowledge retrieval tools to improve information access.
- Implement smaller, more efficient teams enabled by AI tools.
- Adopt testing bots and AI-powered copilots for enhanced productivity.
- Provide access to industry-leading self-learning platforms.
- Conduct regular knowledge-sharing sessions to foster a learning culture.

- Establish peer-to-peer recognition platforms.
- Organise periodic rewards and recognition programmes.
- Implement structured project rotation policies to diversify skills.
- Train leaders in emotional intelligence and empathetic management.
- Foster a collaborative culture and articulate the team's role in organisational goals.
- Conduct periodic morale checks through surveys and discussions.
- Establish formal mentorship programmes with measurable outcomes.

6.2.3. Research Question 3: Emerging Technologies and Future Trends

6.2.3.1. Implications:

- Clients demand more specialised, value-driven shared services.
- AI adoption is inevitable and essential to remain competitive.
- AI enables tailored services, enhancing client satisfaction.
- AI agents will take over routine tasks, enabling consultants to focus on high value activities.
- Predictive systems improve uptime and service reliability.
- Agile practices improve responsiveness and collaboration.
- Job roles are evolving to include AI and strategic responsibilities.
- Human oversight ensures trust and reliability in AI-enhanced systems.
- Strategic and analytical skills remain critical in an automated landscape.

6.2.3.2. Recommendations for SAP AMS Shared Services Managers:

- Transition shared services to focus on insights, customer satisfaction, and co-innovation.
- Adopt AI technologies to enhance offerings.
- Develop "Insights as a Service" offerings using AI-driven personalisation.
- Focus on process improvements and solution optimisation using AI insights.
- Invest in scalable automation models and self-healing solutions.
- Adopt Agile and DevOps frameworks for change and release management.
- Establish upskilling programmes for AI literacy.
- Create new roles focused on AI and data science within SAP AMS.
- Implement hybrid governance frameworks combining AI automation and human decision-making.
- Focus on developing automation-resilient competencies through strategic training initiatives.

The above summary highlights the practical implications and recommendations derived from the study, offering actionable insights for SAP AMS providers and future researchers.

6.3. Recommendations for future research

This study provides a wealth of themes and findings that can guide future research on shared services in SAP S/4HANA AMS. Below are recommended research areas and questions for further scholarly exploration, with a focus on its importance for SAP AMS providers.

Evolution of Shared Services Models

- What organisational capabilities are required to transition from traditional shared services to strategic business enablers?
- How does the geographical distribution of shared services teams affect collaboration, efficiency, and service quality?
- What strategies can mitigate challenges in cross-regional shared services operations?
- What digital tools and practices are most effective for enabling hybrid shared services operations?
- How does cultural diversity influence team dynamics and collaboration in shared services?
- What best practices can enhance cross-cultural communication in geographically distributed teams?

Adoption of Emerging Technologies in Shared Services

- Which factors influence the adoption of emerging technologies like AI, ML, and blockchain in SAP AMS Shared services?
- What competencies are considered automation-resilient in SAP AMS shared services?

Customisation versus Standardisation

- How can SAP AMS providers optimise standardisation without compromising client-specific requirements?
- What technological interventions can reduce the cognitive load associated with multi-client engagements?

Role of Centres of Excellence (CoEs) and Innovation Hubs

- What are the critical success factors for establishing CoEs in SAP AMS shared services?
- What frameworks ensure effective collaboration between innovation hubs and shared services delivery teams?

Governance and Leadership in Shared Services

- What governance frameworks are most effective in managing shared services models in SAP AMS?
- How do leadership styles influence team cohesion and productivity in shared services?

Scalability and Flexibility in Shared Services

- How can SAP AMS shared services models scale efficiently to handle sudden surges in demand?
- What frameworks enable dynamic resource allocation across clients without compromising service quality?

Data Privacy and Security in Shared Services

- What are the key challenges in maintaining data security and privacy in shared services models for SAP AMS?
- What frameworks are effective for managing multi-client data in a shared services environment?

Ethical AI in Shared Services

- How can shared services providers ensure ethical AI implementation in SAP AMS operations?
- What governance frameworks are required to maintain accountability in AI-enhanced shared services?
- How do clients perceive the ethical implications of AI-driven decisions in shared services?

Measuring Productivity in Shared Services

- What metrics and KPIs are most effective in evaluating productivity in next gen SAP AMS shared services?
- What role do advanced analytics play in monitoring and improving shared services performance?

Sustainability in Shared Services

- How can SAP AMS shared services models incorporate sustainability practices into their operations?
- How can technology like cloud computing and AI contribute to more sustainable shared services?

Strategic Talent Management in Shared Services

- What strategies are effective for attracting and retaining top talent in SAP AMS shared services?
- How can shared services providers create career progression paths that balance employee aspirations with business needs?

Crisis Management in Shared Services

- What frameworks can improve resilience and business continuity in SAP AMS shared services?
- How can shared services providers prepare for future crises while maintaining service quality?

These research recommendations align with the evolving needs of SAP AMS shared services and provide a roadmap for future studies. Addressing these areas will equip SAP AMS providers with actionable insights to enhance their service delivery models.

6.4. Conclusion.

This study provides a comprehensive exploration of the shared services model in SAP S/4HANA AMS, with a focus on Indian IT service providers. By integrating qualitative and quantitative methods, it captures valuable insights into the evolution, operational dynamics, and future trends shaping shared services.

The research highlights the transition from cost-centric models to strategic enablers, reflecting a paradigm shift in how shared services contribute to business value. Operational challenges, such as managing multi-client complexity and balancing customization with standardization, underline the need for robust governance and organizational maturity. Emerging technologies like AI and predictive analytics are identified as transformative forces, while reshaping roles and skill requirements within shared services teams.

In conclusion, this research contributes to the growing body of knowledge on shared services. The implications and recommendations presented in this study serve as a roadmap for SAP AMS providers to optimize their shared services delivery. The study offers actionable insights for both academia and industry, in an ever-evolving SAP AMS landscape.

APPENDIX A

SURVEY QUESTIONNAIRE

Shared Services in SAP AMS : Insights and Trends

SAP Shared Services : Current understanding and Future Trends . This study is part of doctoral study by Sunil Pillai. All data will be anonymized and aggregated.

Qualifying Questions

Just 3 questions, so that we know you are right audience for us

1) My Experience in SAP Projects is (_____) Years
   a) 0-2 Years
   b) 3-7 Years
   c) 8-12 Years
   d) 13-17 Years
   e) 18+ Years
   f) I don't have SAP experience

2) I have worked in Shared Services Model or on more than one projects simultaneously for approximately (_____) Years
   a) 0-2 Years
   b) 3-7 Years
   c) 8-12 Years
   d) 13-17 Years
   e) 18+ Years
   f) I have never worked in multiple projects

3) Within SAP, I have worked on project types
   a) SAP Implementations
   b) SAP Support (AMS / AD)
   c) SAP Rollouts and Upgrades
   d) Other types of project

Evolution of Shared Services in SAP AMS

Your early exposure to Shared Services Model

1) In your company, if you are given a choice, which type of delivery team will you join: Dedicated Team with One project or Shared Services team with partial work in multiple projects*
    a) Dedicated Team: Working on only one project with full capacity
    b) Shared Services Team: Working on two or more projects simultaneously in shared capacity
    c) I have no preference

2) Working in Shared Services (or on Multiple Projects Simultaneously) has improved my career profile due to multiple domain experience in same time and increased my marketability.*
    a) Strongly Agree
    b) Agree
    c) Neither Agree nor Disagree
    d) Disagree
    e) Strongly Disagree

3) Having Center of Excellences (CoEs) helps adopt new functionalities and features in S/4HANA faster by making available relevant information, PoCs, guidance in configuration and trainings.*
    a) Strongly Agree
    b) Agree
    c) Neither Agree nor DisAgree
    d) Disagree
    e) Strongly Disagree

Productivity and Efficiency in SAP Shared Services

Your early exposure to Shared Services Model

4) Working for multiple customers results in frequent context and task switching leading to reduction in productivity and efficiency*

a) Strongly Agree
b) Agree
c) Neither Agree nor Disagree
d) Disagree
e) Strongly Disagree

5) Knowledge repositories which are easy to access and search will improve efficiency and productivity*

a) Strongly Agree
b) Agree
c) Neither Agree nor Disagree
d) Disagree
e) Strongly Disagree

6) Artificial Intelligence and Automation will lead to reduction of SAP AMS Ticket resolution efforts.*

a) Strongly Agree
b) Agree
c) Neither Agree nor Disagree
d) Disagree
e) Strongly Disagree

7) Which of the below activities will you recommend to improve team morale, satisfaction and boost productivity? *

a) Peer to Peer Recognition
b) Platforms Periodic
c) Rewards and Recognition
d) Empathetic Leadership

e) Timely Project Rotation
f) Periodic Skip level connects
g) Formal Mentorship Programs
h) Any Other Recommendations

8) Which of the below activities will you recommend to improve Upskilling and cross skilling in Shared Services?*

a) Access to Self Learning Portals
b) Access to SAP Hands-On Systems
c) Byte sized Learning nuggets
d) Group Learning platforms
e) Gamified Learning with Rewards
f) Recognition of Learning Champions
g) Sponsored Certification Drives
h) Certification Coaching Programs
i) Knowledge sharing Programs
j) Any Other Recommendations

Future Trends in SAP AMS

Impact of Emerging Technologies

9) What future trends do you anticipate will impact SAP AMS?*

a) Inevitable AI Adoption
b) Business Outcome based KPIs
c) AI enabled Personalization
d) Predictive Maintenance
e) Self Healing Systems
f) Accelerated Agile Adoption
g) Hybrid Job Roles : AI + SAP
h) Automation Resilient Human Skills
i) Any Other Trend

10) What best practices would you recommend for successful shared services implementation in SAP AMS? (Optional, Open-ended, limit 200 words)

11) Any additional comments or suggestions for improving shared services delivery in SAP AMS ? (Optional, Open-ended, limit 200 words)

Demographics

We are almost done, Last 4 questions. A bit more information about you.

1) Gender*

a) Male
b) Female
c) Prefer not to say
d) Other

2) Age Group*

a) 20-25 Years
b) 26-30 Years
c) 31-40 Years
d) 41-50 Years
e) 50+ Years
f) Prefer not to say

3) Within SAP, my areas of expertise are : (Select all that apply)*

a) Functional Consulting
b) Technical Consulting
c) Project Management
d) People management :
e) Solution Architecting
f) Other Areas

4) In my career, I have worked for below companies : (Select all that apply)*

a) Accenture
b) Capgemini
c) Cognizant
d) Deloitte
e) EY
f) HCL Tech
g) IBM
h) Infosys
i) PWC
j) TCS
k) Techmahindra
l) Wipro

5) I would like to participate in online Focus group Session on the area of Shared Services, Please contact me in future. *

- Yes, I would like to participate in further studies
- No, I will opt out, please do not contact me further

APPENDIX B

INTERVIEW GUIDE

The below is the interview question bank reffered for the semi structured interviews and focus group sessions with senior AMS Practitioners:

Section 1: Background Information

1. **Role and Responsibilities**: Could you please describe your current role and responsibilities within your organization?
2. **Involvement with Shared Services**: Can you briefly explain your involvement with the shared services teams in your organization?

Section 2: Understanding and Perceptions of the Shared Services Model

1. **Definition**: In your own words, how would you define the shared services model in the context of SAP S/4HANA AMS?
2. **Benefits**: What are your perceptions of the benefits of using a shared services model in SAP S/4HANA AMS?
3. **Challenges**: What challenges have you observed or experienced with the shared services model in your organization?
4. **Customer Satisfaction**: How do you think the shared services model impacts customer satisfaction and service delivery?

5. **Strategic Alignment**: In your opinion, how does the shared services model align with your organization's strategic goals?
6. **Perception Changes**: Have you noticed any changes in the perception of the shared services model over time within your organization or the industry?

Section 3: Factors Affecting Team Productivity and Efficiency

1. **Productivity Factors**: What factors do you believe most significantly impact the productivity of teams in the shared services center?
2. **Operational Challenges**: Can you discuss any operational challenges that teams face in the shared services environment?
3. **Metrics and KPIs**: How are performance metrics and KPIs used to measure team efficiency in your organization?
4. **Training Opportunities**: What training and development opportunities are available to team members to enhance their productivity?
5. **Technology Infrastructure**: How does technology infrastructure impact the efficiency of teams working in shared services?
6. **Best Practices**: Can you share any strategies or best practices that have been effective in improving team productivity and efficiency?

Section 4: Impact of Emerging Technologies and Future Trends

1. **New Technologies** : What is your understanding of new technologies that are currently being integrated into SAP S/4HANA AMS?

2. **Impact of ML and AI**: Can you provide examples of how ML and AI have impacted the shared services model in your organization?
3. **Role Evolution**: How have these technologies affected the roles and responsibilities of team members in shared services centers?
4. **Challenges with Technology**: What challenges have arisen from integrating ML and AI into the shared services model?
5. **Future Trends**: What future trends do you anticipate in the SAP S/4HANA AMS shared services space related to emerging technologies?
6. **Impact of Trends**: How do you foresee these trends impacting the shared services model and the broader SAP AMS industry?
7. **Adaptation Strategies**: What steps is your organization taking to adapt to these anticipated trends?

Section 5: Closing Questions

1. **Recommendations**: Based on your experience, what recommendations would you make to organizations looking to implement or improve their shared services model in SAP S/4HANA AMS?
2. **Additional Thoughts**: Is there anything else you would like to add that we haven't covered but you feel is important regarding shared services in SAP S/4HANA AMS?
3. **Questions for the Study**: Do you have any questions for me about the study or how the information you provided will be used?

REFERENCES

Adeoye-Olatunde, O. & Olenik, N., 2021. Research and scholarly methods: Semi-structured interviews. *Journal of the american college of clinical pharmacy,* 4(10), pp. 1358-1367.

Afflerbach, T., 2020. *Hybrid Virtual Teams in Shared Services Organisations.* s.l.:Springer.

Aithal, A. & Aithal, P. S., 2020. Development and Validation of Survey Questionnaire & Experimental Data – A Systematical Review-based Statistical Approach. *International Journal of Management, Technology, and Social Sciences (IJMTS),* 5(2), pp. 233-251.

Al-Amin, M., 2023. History, Features,Challenges, and Critical Success Factors of Enterprise Resource Planning (ERP) in The Era of Industry 4.0. *European Scientific Journal,* 19(6), p. 31.

Ben, M., 2020. Streamlining Information Technology Services in a Local Government. *MPA Major Research Papers,* p. 188.

Bergeron, 2002. *Essentials of Shared Services.* Vol 26 ed. s.l.:John Wiley & Sons.

Borman, M., 2008. The Design and Success of Shared Services Centres. *ECIS,* Volume 77.

Busetto, L., Wick, W. & Gumbinger, C., 2020. How to use and assess qualitative research. *Neurological Research and Practice,* 2(1), p. 14.

Dawadi, S., Shrestha, S. & Giri, R. A., 2021. Mixed-Methods Research: A Discussion on its Types, Challenges, and Criticisms.. *Journal of Practical Studies in Education,* 2(2), pp. 25-36.

Fielt, E., Bandara, W., Miskon, S. & Gable, G., 2014. Exploring Shared Services from an IS Perspective: A Literature Review and Research Agenda. *Communications of the Association for Information Systems,* 34(1), pp. 1001-1040.

Gartner, 2024. *SAP Application Services Worldwide Reviews and Ratings.* [Online] Available at: https://www.gartner.com/reviews/market/sap-application-services-worldwide
[Accessed 4 September 2024].

Gill, P., Stewart, K., Treasure, E. & Chadwick, B., 2008. Methods of data collection in qualitative research: interviews and focus groups. *British Dental Journal*, 204(6), pp. 291-295.

Goldschmidt, G. & Matthews, B., 2022. Formulating design research questions: A framework.. *Design Studies*, Volume 78, p. 101062.

Gundumogula, M., 2020. Importance of Focus Groups in Qualitative Research. *THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES*, 8(11), pp. 299-302.

Hancerliogullari Koksalmis, G. & Damar, S., 2022. An empirical evaluation of a modified technology acceptance model for SAP ERP system.. *Engineering Management Journal*,, 34(2), pp. 201-216..

Harris, L. R. & Brown, G. . T., 2010. Mixing interview and questionnaire methods: Practical problems. *Practical Assessment, Research, and Evaluation*, 15(1).

Hennick, M. M., Kaiser, B. N. & Marconi, V. C., 2017. Code saturation versus meaning saturation: how many interviews are enough. *Qualitative Health Research*, 27(4), pp. 591-608.

Hennink, M. & Kaiser, B. N., 2022. Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social Science & Medicine*, January, Volume 292, p. 114523.

ISG, 2024. *SAP Ecosystem Quadrant Report*, U.S: ISG Provider Lens.

Janssen, M. & Joha, A., 2007. Understanding IT governance for the operation of shared services in public service networks. *Int. J. Networking and Virtual Organisations*, 4(1), pp. 20-34.

Katuu, S., 2020. Enterprise Resource Planning: Past, Present, and Future. *NEW REVIEW OF INFORMATION NETWORKING*, 25(1), pp. 37-46.

KEARNEY, A., 2023. *Global Services Location Index.* [Online]
Available at: https://www.kearney.com/service/digital/gsli/2023-full-report
[Accessed 28 July 2023].

Kenge, R. a. Z. K., 2020. A Research Study on the ERP System Implementation and Current Trends in ERP. *Shanlax International Journal of Management*, 8(2), pp. 34-39.

Lakshmi, M. N., Sricharan, Y. S. & Vijaykumar, T., 2020. Leveraging technology for shared services transformation. In: R. R. Behl, ed. *Innovation, Technology, and Market Ecosystems: Managing Industrial Growth in Emerging Markets.* s.l.:Springer, pp. 51-64.

Langerman, J. & Leung, W., 2023. The effect of outsourcing and insourcing on Agile and DevOps. *Journal of Information Technology Teaching Cases,* 0(I).

McKeen, J. D. & Smith, H. A., 2011. Creating IT Shared Services. *Communications of the Association for Information Systems,* Volume 29.

Miskon, S., Bandara, W., Fielt, E. & Gable, G., 2009. Understanding Shared Services: An Exploration of the IS Literature. *ACIS,* Volume 68.

Modrzynski, P., 2020. *Local Government Shared Services Centers: Management and Organization.* First ed. Poland: Emerald Group Publishing.

Mwita, K. M., 2022. Factors influencing data saturation in qualitative studies. *Research in Business & Social Science,* 11(4), pp. 414-420.

Pallathadka, H. et al., 2022. Attrition in software companies: Reason and measures. *Materials Today: Proceedings,,* 51(1), pp. 528-531.

Rabiee, F., 2004. *Focus Group Interviews and Data Analysis.* s.l., Cambridge University press, pp. 655-660.

Rahman, M. M., 2023. SAMPLE SIZE DETERMINATION FOR SURVEY RESEARCH AND NON-PROBABILITY SAMPLING TECHNIQUES: A REVIEW AND SET OF RECOMMENDATIONS. *Journal of Entrepreneurship, Business and Economics,* 11(1), pp. 42-62.

Roulston, K. & Choi, M., 2018. Qualitative Interviews. *The Sage Handbook of qualitative data collection,* pp. 233-249.

SAP Global Communications, 2023. *SAP Global Company Information.* [Online]
Available at: https://www.sap.com/about/company.html?pdf-asset=4666ecdd-b67c-0010-82c7-eda71af511fa&page=1
[Accessed 28 July 2023].

SAP, 2023. *SAP Outsourcing Operations Partners Guide.* [Online]
Available at: https://www.sap.com/dmc/exp/2018_Partner_Guide/#/partners
[Accessed 28 July 2023].

SAP, 2024. *SAP History.* [Online]
Available at: https://www.sap.com/india/about/company/history.html
[Accessed 4 September 2024].

Schulz, V., Hochstein, A., Uebernickel, F. & Brenner, W., 2009. *Proceedings of the Fifteenth Americas Conference on Information Systems.* San Francisco, s.n.

Shahar, S. M., Mohd Satar, N. S. & Abu Bakar, K. A., 2019. The Challenges in Managing Information Technology Shared Services Operations. *International Journal of Recent Technology and Engineering (IJRTE),* 8(1C2), pp. 322-328.

Taherdoost, H., 2016. How to Design and Create an Effective Survey/Questionnaire; A Step by Step Guide. *International Journal of Academic Research in Management (IJARM),* 5(4), pp. 37-41.

Taherdoost, H., 2022. Designing a Questionnaire for a Research Paper: A Comprehensive Guide to Design and Develop an Effective Questionnaire. *Asian Journal of Managerial Science,* 11(1), pp. 8-16.

Vaxevanou, A. & Konstantopoulos, N., 2014. *Models referring to outsourcing theory.* Madrid, Elsevier.

Wenderoth, M. H., 2013. *Four Phase Model for Implementation of Shared Services,* s.l.: s.n.

Willemsen, R., Aardoom, J., Chavannes, N. & Versluis, A., 2023. Online synchronous focus group interviews: Practical considerations.. *, Aardoom, J.J., Chavannes, N.H. and Versluis, A.*, 23(6), pp. 1810-1820.