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Cloud-Driven Excellence: A Comprehensive Evaluation of SAP S/4HANA ERP

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Abstract In today's global market landscape, businesses regardless of their reliance on traditional ERP systems must strive to gain a competitive edge. Unfortunately, many organizations find themselves grappling with outdated interfaces and inefficient technologies, hindering productivity for end users. Despite the promises of significant benefits touted by S/4HANA Cloud ERP software, the full potential of enhanced productivity remains largely untapped. A key factor contributing to this reality is the lack of investment in ergonomic measures and cutting-edge technologies.

Through the design and implementation of S/4HANA Cloud ERP software applications, we aim to underscore the critical importance of ergonomic research. By integrating ergonomic principles into software design, businesses can minimize both financial costs and human-related challenges currently plaguing enterprises. This approach is essential for optimizing user experience, streamlining workflows, and maximizing the utilization of advanced technologies. Ultimately, prioritizing ergonomic research in software development not only enhances productivity but also fosters a more conducive work environment, driving sustainable growth and success in the modern business landscape.

Keywords Enterprise Resource Planning, Cloud ERP, Artificial Intelligence, Big Data, Business Intelligence System, S/4 HANA, IOT

1. Introduction

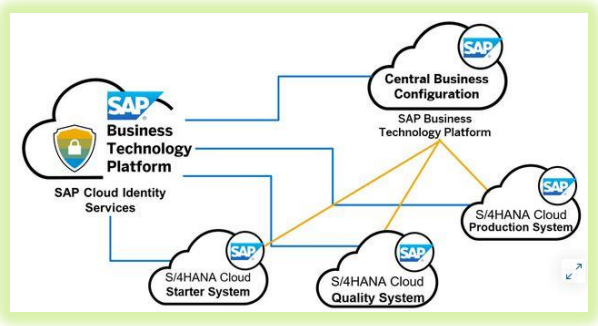

Figure 1: S4 HANA cloud integration

Solving today's challenges and seizing tomorrow's opportunities requires a complete, innovative, intelligent, and industry-ready cloud enterprise resource planning (ERP) platform. ERP solutions have evolved and changed fundamentally. ERP has grown from a single, one-size-fits-all, monolithic software with a unitary database to a platform that enables business process as a service. SAP S/4 HANA is a commercial software package that, under the assumption that every module is acquired and used, claims to fully integrate all information flow

through a particular stand-alone business or a collection of subsidiaries inside an organization. The use of SAP S4 Hana ERP aims to combine all departmental functions into a single system that can meet all of those departments' unique requirements, SAP HANA is a database management system that is primarily designed to be used in memory, offering users quick access, querying, and processing. SAP HANA boasts a substantial customer base. Over the past ten years, there has been a notable rise in both the quantity and variety of information. The worldwide markets of today, referred to as Industry 4.0 and the Internet of Things (IOT), are characterized by increased rates of complexity and a progressively faster rate of dynamism due to global supply chain networks. This necessitates the seamless interconnectedness of processes. It is comparatively crucial to solve the complexity issue in a field like supply chain logistics networks. The internal logistics frame, which represents the flow within the four walls of the organization, and the external logistics frame, which represents the flow among suppliers, factories, and distribution centers of the organization and their interactions with one another, will both be used to con-sider different logistics network nodes. We must first comprehend the basic architecture of ERP systems. These systems have a three-tier architecture, which divides applications into three levels of physical and logical computing. This design is typically used for mod-ern applications rather than more conventional ones. These layers are the application tier, which processes the data, the data tier, which manages and stores the data according to how it connects with the application, and the presentation tier, which is the user interface. The primary advantage of this three-tier architecture is that each layer functions on its own owned infrastructure, allows for multiple development teams to work on it concurrently, and allows for scalability and updating without affecting the other levels. These ERP system installations struggle because they are excessively expensive, take too long in comparison, and typically fall short of the promises made regarding cost savings and competitive advantage .According to a study looking into the efficacy of implementation in companies with sales over $500 million, there was a staggering 59 percent shortfall in average slide through functional improvements, an average scheduled overrun of 230 per-cent, and an average cost overrun of 175 percent .We all know deep down that ERP systems never malfunction, miscalculate, or wear out. They only act in accordance with their programming. Relatively poor project management, misconceptions about the chosen ERP capabilities and embedded features, a lack of executive buy-in a subset of organizational change management technical complexity, the inability to create strong business cases and appropriate business process reengineering, and the absence of important stakeholders in the decision-making process are the reasons behind what is referred to as a failure. With its newfound use of in-memory tables, embedded analytics, and streamlined data structures, SAP S/4HANA runs on top of HANA. Period-end closing is one of the time-consuming tasks that can now be completed quickly. It gets rid of the need for reconciliation between departments like finance, procurement, sales, and production. It provides you with Embedded Analytics-based real-time analytical reports. SAP HANA Cloud, the company's highly scalable cloud version of SAP HANA, is presently offered by Microsoft Azure and Amazon Web Services (AWS). An example of a SAP HANA Cloud landscape is shown below. A HANA instance offers the user a wide range of configuration options that may be adjusted to meet the demands of clients with various specifications. The customer and the user may be the same individual. It's important to keep track of the overall configuration of each instance and group of instances when managing a landscape that has many these highly changeable instances. A temporary workaround for an issue could be to modify the configuration of a HANA instance. For instance, this might prevent an outage. A bug would typically impact several HANA instances. As a result, configuration would be required for a collection of several instances. Gardener, a SAP product, manages the Kubernetes clusters in which HANA instances are operating. Gardener5 generates, updates, scales, and destroys Kubernetes clusters on demand. This makes these Kubernetes clusters SAP HANA Cloud landscapes. We should quickly discuss containerization in order to comprehend the goal of Kubernetes. Based on cloud computing, SAP S/4HANA Cloud provides apps in databases with data models, eliminates redundancies, offers better competitiveness, automates key business processes across the entire company, boosts productivity, and assists employees in their work.

SAP S/4HANA Cloud, public edition/essential edition is a subscription-based Soft-ware as a Service (SaaS) on multi-tenant cloud infrastructure. The pre-configured "core ERP" is the extent of the capabilities. It is not permissible to add to or modify the current code. Public cloud: a conventional multi-tenant system provided as software as a service. It provides constrained configuration options and limited functionality. Programming

customization is not feasible because the system is shared by several clients on a technical level. The system just needs minimal configuration to be operational because it is already pre-configured. A single-tenant cloud system provided on an Infrastructure as a Service (IaaS) or Platform as a Service (PaaS) basis is known as a private cloud or on premise in the cloud. The customer rents from the cloud provider either a portion of the infrastructure (IaaS) or a portion of the infrastructure combined with a vanilla system (PaaS). One customer has exclusive use of the system, and that client is in charge of keeping the system functionally maintained as well as modifying and customizing it to suit their needs (sometimes with the help of an outside ES consultant). A cloud provider is in charge of upkeep of the system's technical aspects as well as its infrastructure (in certain cases).

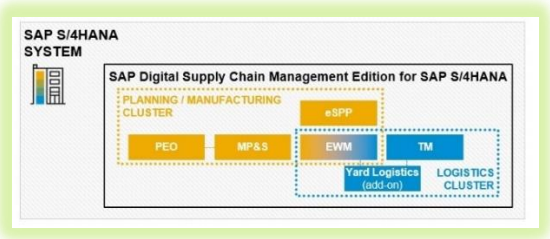

Figure 2: Supply Chain digital Transformation

1.2. S4 Hana Cloud Usage

User-friendly online interfaces are not included in this criterion because it is assumed that all SAP cloud users are at least experienced with using a command-line tool. The degree to which the service's launch shortens and streamlines the development and operations teams' burden in relation to HANA configuration assistance can be used to assess the usefulness.

1.3. System Performance

The performance of the S4 Hana is its primary benefit. It is not necessary to use the Hana cloud for real-time applications. Nevertheless, if HANAs need to be reconfigured in order to prevent them from becoming non-functional, the process of doing so should not take too long. The criteria explain the scenario in which the handler is intended to accomplish its goals with the least amount of API calls and computations. This will prevent the waste of valuable CPU resources.

1.4. Cloud Security considerations

Every ERP Software product should always have some level of security. The handler will eventually be incorporated into production landscapes if all goes well. The handler, operating in a production environment, has the ability to modify the settings of HANAs that actually process client data. As a result, the handler's security level ought to be fairly high compared to, say, a monitoring service that just keeps an eye on resources that are operational in the landscape. Permissions should only be granted to the handler when absolutely necessary. Among other things, decisions about the concepts that are utilized in the handler's implementation should be dependent on the required permissions. This implies, if at all feasible, staying away from ideas that require important permits.

1.5. Scalability

The landscapes may dynamically grow up and down in size because they are distributed systems made up of S4 Hana cloud clusters. Most services that operate on these kinds of systems place a high importance on scalability. While it is not anticipated that the handler will be used heavily or continuously, it would be ideal if it could adjust its functionality based on the number of HANAs or usage density. This is a feature of cloud-native programming.

1.6. Design and Implementation

The S4 Hana's implemented features are completely described, along with the design strategies that were applied in various global contexts. Other potential solutions will be listed for each feature, along with an explanation of why they weren't selected. The created artifacts and documentation are then listed. For the handler to function, there are two prerequisites. First off, since the release of Cloud S4 Hana, no HANA is manually configured anymore. Second, after the SAP S4 Hana Cloud ERP's innovative features and adaptability make it an essential tool for success in the digital era. ERP systems have historically brought businesses a great

deal of value by helping them become more knowledgeable and productive But everything has changed as a result of digitization, including the degree of competition. Locally installed ERP solutions are just unable to keep up. It is difficult for them to adjust to sustained change. Because they were designed for simpler environments, the majority of traditional ERP systems are unable to give businesses the speed, flexibility, and insight they need to operate in new, more flexible ways. Consumers of today want more dependability, lower costs, faster delivery of goods and services, and ongoing product and service improvement. Businesses frequently need to venture outside of their boundaries in order to give clients the best value. They work digitally with a variety of partners for production, product distribution, sales management, service, support, and even basic business operations. As a result, they need software that supports both man-aging their increasingly complex internal procedures and managing international business networks. That would not be feasible without cloud ERP. It makes sense to question the security of cloud ERP. Considering the latest news regarding infections and data breaches. No system is impregnable, but how secure it is will rely on who is in charge of it and how it was put into place. SAP HANA Security ensures that the company's adopted security criteria are followed and safeguards sensitive data from unauthorized access. Multiple databases can be created on a single SAP HANA system thanks to a technology called multitenant databases. It's called a multitenant database container. Consequently, SAP HANA provides full security-related functionality for all multitenant databases. Since database security is a difficult task that requires a thorough, all-encompassing approach, SAP HANA and SAP HANA Cloud come pre-configured with an extensive, potent, and robust security framework. It assists businesses in complying with security-related regulations and policies and seeks to protect data's accessibility, integrity, and con-identicality from common threats like improper access, misplaced privileges, and a lack of control guidelines.

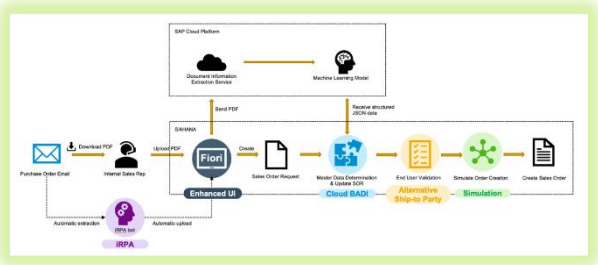

Figure 3: Project flow in SAP S4 Hana Cloud

2. S4 Cloud Transformation process

SAP S/4HANA Supply Chain Management comprises solution capabilities for managing sophisticated business processes for planning and optimizing stock and goods movements, checking the availability of products in the order creation process, as well as handling shipping, warehousing and transportation and there are three implementation scenarios available for SAP S/4HANA.

Green Field Implementation:

This scenario is suitable for those seeking to establish a new instance of SAP S/4HANA.It involves either migrating, data from a legacy system or conducting a net-new installation of SAP S/4HANA capabilities.

Landscape Transformation:

Organizations opting for this scenario aim to streamline, their existing SAP software landscape. This may involve consolidating various entities or processes or isolating specific components as part of the transition to SAP S/4HANA.

System Conversion:

This scenario is designed for those who wish to convert, their existing SAP ERP application to SAP S/4HANA. The process includes migrating both business data and configuration to the new platform.

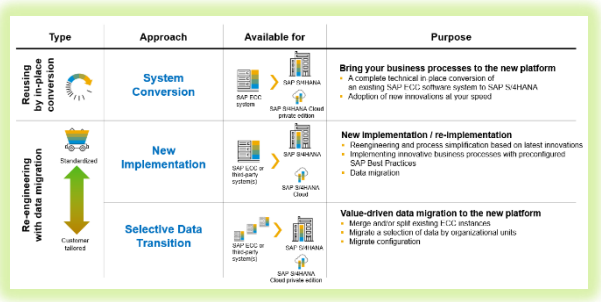

Figure 4: S4 Hana cloud Migration process/Transformation

2.1. Key Considerations for Designing a Roadmap to S/4 HANA cloud Transformation

This section aims to help in planning the transition to SAP S/4HANA and constructing a roadmap. While it outlines a general approach and addresses common customer queries, it provides generic statements and recommendations. It is important to note that, given the diverse nature of specific cases and requirements, the roadmap may vary significantly to SAP S/4HANA.

Alignment with Business Strategy

A successful roadmap to SAP S/4HANA begins with a clear alignment with the overall business strategy. Organizations should articulate how the move to S/4HANA supports their long-term goals, such as improving operational efficiency, enhancing data-driven decision-making, or enabling greater agility. This alignment ensures that the roadmap is not just an IT initiative but a strategic enabler of business success.

Assessment of Current Landscape

Before designing the roadmap, a comprehensive assessment of the existing IT landscape is crucial. This includes an analysis of the current ERP system, customizations, integrations, and data structures. Understanding the strengths and limitations of the current environment helps in making informed decisions about the migration approach, whether it is a new implementation, landscape transformation, or system conversion.

Data Quality and Cleansing Involved

Data is the lifeblood of any ERP system and migrating to SAP S/4HANA presents an opportunity to enhance data quality. Organizations should invest time in cleansing and validating data before the migration. This includes addressing data inconsistencies, duplicates, and obsolete records. A robust data quality strategy ensures a smooth transition and sets the foundation for accurate reporting and analytics in the new system.

User Training and Change Management

The success of any ERP migration hinges on user adoption, and training is a pivotal element. Organizations should invest in comprehensive training programs for end-users, key stakeholders, and IT teams. Additionally, a robust change management strategy is vital to address resistance, foster a culture of adaptability, and ensure a smooth transition for employees.

Custom Code Analysis

Many organizations have custom code in their current ERP systems, and this code may need adjustments to function correctly with SAP S/4HANA.The roadmap should include a detailed plan for identifying, analysing, and adjusting custom code. Leveraging tools and resources for code optimization ensures a seamless transition and minimizes post-migration issues.

Integration with Other Systems

Consideration for how SAP S/4HANA integrates with other systems is paramount. Whether it is third-party applications, legacy systems, or cloud services, a comprehensive integration strategy is essential. This includes assessing the impact on existing integrations, planning for adjustments, and ensuring a smooth flow of data across the entire IT landscape. Depending on the scenario, this may include migrating from any database to SAP HANA, implementing SAP S/4HANA, loading and converting business data into the new and simplified business data model, and conducting landscape transformation activities.

Project Management Office

The project management team oversees common project and quality management tasks, including project planning. Collaboration between the technical quality manager (TQM) from SAP and the project manager, whether from your company or the implementation partner, is integral to this workstream.

IT and User Acceptance Testing

This workstream encompasses test planning and execution, including integration, regression, and user acceptance testing. Technical architecture and infrastructure SAP S/4HANA has HANA as the underlying database. The introduction of SAP HANA into your data centre must be properly planned based on your business and IT American Journal of Computer Architecture 2023, 10(2): 37-41 39 requirements. You may also

include connectivity to SAP Cloud Platform or any Hyper Scaler of choice for integration or extension use cases.

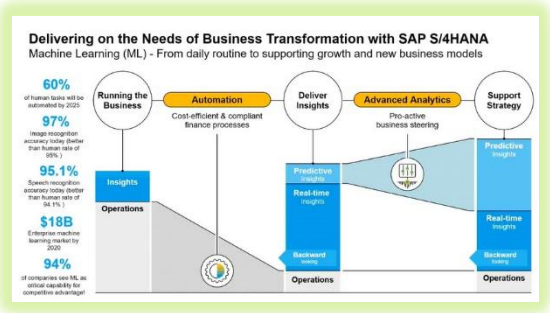

Figure 5. Deciding the path

3. S4 Hana Cloud Tools & Accelerators

SAP offers a range of tools and resources to facilitate the migration from ECC (ERP Central Component) to S/4HANA. The migration process is a significant undertaking, and these tools aim to streamline various aspects of the transition. Here are key tools and resources provided by SAP for ECC to S/4HANA migration.

3.1. SAP Readiness Check

Offer an overview and planning baseline for important topics in the migration process. Assess the readiness of the current system for the planned conversion to SAP S/4HANA. Performs functional and technical assessments. Provides insights into changes and associated impacts. Assesses functional redesign needs for system conversion. Evaluates Fiori compatibility with your system's current transactional load. Covers technical aspects like sizing, data volume management, and software prerequisites. Facilitate team collaboration through an interactive dashboard. Analyses the existing system landscape. Provides insights into potential issues and areas that require attention. Generates a detailed report on the system's compatibility with S/4HANA.

3.2. SAP S/4HANA Migration Cockpit

SAP S/4HANA Migration Cockpit is a tool provided by SAP to facilitate and streamline the process of migrating data from legacy systems to SAP S/4HANA.It is an integral part of the data migration strategy when transitioning to the S/4HANA suite.

3.3. SAP Advanced Data Migration (ADM)

SAP Advanced Data Migration (ADM) stands as a robust solution designed to address the intricate challenges associated with migrating data in large-scale enterprises. In the dynamic landscape of business operations, where data is a critical asset, ADM emerges as a powerful tool to ensure seamless, accurate, and efficient data migration processes.

3.4. SAP Transformation Navigator

The SAP Transformation Navigator serves as a guiding companion rather than a mere options provider. This tool facilitates your journey through digital transformation by generating a tailored product roadmap comprising recommended SAP products and solutions aligned with your business needs. Furthermore, it aids in aligning your company's aspirations by selecting value drivers, thereby assisting in constructing a compelling business case for your transformative journey. The tool offers insights into customer proof points and successful adoption cases, serving as a valuable resource for potential license implications. Upon completion, it produces a set of three guides (business, technical, and transformation) encompassing detailed information about products, licenses, integration, services, and business capabilities.

3.5. SAP Fiori Apps Library

The SAP Fiori Apps Library is a centralized hub that houses a vast collection of Fiori apps designed to streamline and simplify user interactions with SAP applications. It serves as a dynamic resource for businesses leveraging the Fiori design principles to deliver intuitive, responsive, and efficient user interfaces.

3.6. SAP S/4HANA Migration Object Modeler

The SAP S/4HANA Migration Object Modeler is a pivotal tool designed to facilitate and streamline the intricate process of data migration during the transition to SAP's next-generation business suite, S/4HANA. In the evolving landscape of enterprise technology, where data precision is paramount, the Migration Object Modeler emerges as a powerful solution, empowering organizations to achieve seamless and accurate data migration.

3.7. Maintenance Planner

The Maintenance Planner (MP) stands as a crucial tool in orchestrating the planning phase of a system conversion, underscoring the importance of initiating it early in the migration process to ascertain the technical feasibility of transitioning from SAP ERP to SAP S/4HANA.This tool plays a pivotal role in assessing the

compatibility of add-ons, allowing organizations to proactively determine how to handle each one. Notably, it conducts a thorough examination to identify unsupported add-ons that may pose challenges during the conversion process.

3.8. ABAP Test Cockpit

The ABAP Test Cockpit (ATC) stands as SAP's essential toolset for conducting static checks and unit tests on ABAP programs, leveraging the foundation of Code Inspector (SCI) checks. This tool is integral for the identification of ABAP custom code requiring adaptation to pre-empt potential functional issues. Evaluating custom code is a critical task, often underestimated in complexity. It is not a task to be initiated at the onset of a project; rather, adjusting ABAP to run seamlessly on HANA is a substantial undertaking that demands proactive attention well in advance.

3.9. Simplification Item Catalog

SAP furnishes a catalog of simplification items for each S/4HANA release, with the current S/4HANA 1909 release comprising 632 items. These items serve to delineate incompatible or disruptive changes inherent in SAP S/4HANA as compared to SAP ERP or preceding versions of SAP S/4HANA. Conduct the Simplification Items check expeditiously, as the adjustment of intricate business processes may necessitate more time than initially 40 Moyinuddeen Shaik: Guiding Your Journey to SAP S/4 HANA: Effective Migration Strategies anticipated. On average, the simplification check report typically highlights between 50 to 80 relevant implications items for a given system. Given the potential significance of these items as potential showstoppers, leveraging the tool early in the process is imperative to identify and address them promptly, contributing to a smoother and more expeditious conversion.

3.10. SAP Roadmap Viewer

The SAP Roadmap Viewer grants entry to the comprehensive content of the SAP Activate Methodology, encompassing tasks, templates, and accelerators. Additionally, it incorporates valuable project experiences derived from SAP S/4HANA implementations, offering substantial support for your conversion project through structured documentation for each project phase. If you seek a consistent and proven approach, you will discover it within the SAP Roadmap Viewer.

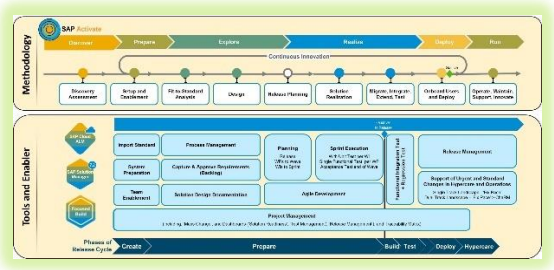

Figure 6: S4 Hana Tools and enablers

4. Benefits of SAP S/4 HANA Cloud

A single source of truth for all data and equipped with an in-memory database, SAP's latest cloud-based ERP system provides users with personalised insights in real-time. And with AI-powered capabilities for every industry, your business will have everything it needs to adapt, innovate, and accelerate growth.

Let's dive into some of the key benefits that will enable your business to position itself ahead of change and uncertainty.

Complete ERP

SAP S/4 HANA is a comprehensive enterprise resource planning system that lets you handle everything from sales performance and operational purchasing to engineering and accounting. Capabilities include asset management, finance, sales, procurement, manufacturing, research and development, service, and supply chain management.

Core functionality

SAP S/4 HANA Cloud serves as the heart of your business system. Data is fully integrated, giving users a clear view of in-the-moment operations.

And with increased visibility across business operations, networks, and processes, all your users are always in sync even though they might be focusing on different tasks, for different departments, in different parts of the world.

That's the level of harmony an enterprise organisation needs to consistently outperform competitors.

Robust and intelligent digital platform

With machine learning and AI, there's no limit to what you can do with automation. SAP S/4 HANA automates repeated tasks and learns how to make processes more efficiently. You can also create fully automated processes that enable you to easily and quickly launch new digital business models, allowing your company to tap into the subscription service market.

Built-in analytics

With insights personalised to the user, each one of your employees has the information they need to make intelligent decisions at every moment. The embedded analytics can be configured to the individual user's needs. You can also develop your analytics into apps for specific roles, such as a materials management app that shows managers when stock levels are low, or a sales quotation app so sales managers can see the probability of a conversion.

Device-independent

With cloud ERP, all your users can access your system through a secure online portal, and they can log in from any device and any location. This allows corporate organisations to operate seamlessly with a distributed workforce. Whether you're using a hybrid, remote, or in-office work model, your teams will stay connected.

5. Project Methodology of S4 Hana Cloud

Figure 7: S4 Hana cloud Methodology process

The "Transition to SAP S/4HANA" roadmap unfolds in distinct phases aligned with the SAP Activate methodology, detailed in the below section:

5.1. Discover Phase

Focuses on recognizing the value of SAP S/4HANA within the digital transformation strategy. It involves creating an implementation plan, identifying high-level areas in the existing solution landscape that benefit from SAP S/4HANA, and devising a value-based implementation strategy. A "cloud trial" may be employed to highlight potential implementation issues.

5.2. Prepare Phase

Officially initiates the project after the business case approval. This phase includes the preparation of an implementation plan, considering findings from the "Discover" phase and potentially incorporating insights from a prototype project. Additional preparation activities, such as the detailed planning of specific scenarios are undertaken. General project preparations, including staffing and governance, are carried out.

5.3. Explore Phase

Involves defining the to-be design of the SAP S/4HANA
solution, documenting functional gaps, and prioritizing them. Fit-Gap-Workshops are conducted with pre-configured sandbox systems representing SAP's Best Practice solutions. For system conversion scenarios, existing custom code is analysed for SAP S/4HANA readiness. Technical design and documentation are crucial for the technical setup of sandbox and development environments. All technical and functional aspects are fully planned and documented by the end of this phase.

5.4. Realize Phase

Encompasses preparing the technical architecture and
infrastructure for SAP S/4HANA. Supporting systems are set up or converted following best practices and the implementation plan. Custom code is adjusted, and application and analytics functions are implemented, configured, integrated, and tested. Integration validation addresses performance issues in key business processes. IT adjusts operational tools and procedures, and end-user training is conducted.

5.5. Deploy Phase

Finalizes readiness for SAP S/4HANA and business
processes for production go-live. This involves final testing, rehearsing the cutover, and ensuring the IT infrastructure is optimized. End-user training is delivered, and the productive instance of SAP S/4HANA is

implemented or converted on the Go-Live weekend. The "hyper care" phase follows, optimizing IT operations before full operational responsibility is transferred to the production support team.

5.6. Run Phase

Focuses on stabilizing and optimizing operations. The SAP system is continuously updated, incorporating the latest innovations from SAP. This phase marks the beginning of the innovation cycle.

5.7. Cost and Licensing

The licensing and cost options for SAP S/4HANA migration can vary based on several factors, including the deployment model, edition chosen, and the specific needs of your organization. It's important to note that SAP's pricing and licensing models may be subject to change, and you should always refer to the latest information provided by SAP or consult with SAP representatives for the most accurate and up-to-date details. Here are some general considerations regarding licensing and cost options for SAP S/4HANA migration.

5.8. Editions or Versions

SAP S/4HANA is available in couple of editions, such as SAP S/4HANA RISE or cloud and SAP S/4HANA On-Premise.

5.9. Deployment Models

5.9.1 Cloud: SAP offers a cloud-based deployment model where you pay for a subscription based on factors such as the number of users and specific functionalities required.

5.9.2 On-Premises: For on premise deployments, the pricing may include software licenses, maintenance, and support fees. Licensing may be based on metrics like the number of users or the size of the organization.

5.9.3 User Licensing: In addition to offering customers the versatility to employ the deployment alternatives, SAP presents flexible licensing American Journal of Computer Architecture 2023, 10(2): 37-41 41 options with three distinct models:

5.9.4 Perpetual License Model: SAP's perpetual license model grants the customer enduring rights to utilize the software perpetually, primarily applicable in on-premises deployment scenarios. In this context, the initial one-time software fee confers perpetual usage rights for a specified quantity of software. This fee forms the foundation for the annual SAP support fee, contingent upon the terms outlined in the respective SAP support agreement.

5.9.5 Subscription License Model: The subscription license model is applicable to all SAP software deployed in the cloud. Under this model, customers do not possess perpetual usage rights, instead, they remit an annual subscription fee as part of a term contract. This fee encompasses all Software as a Service (SaaS) components, inclusive of support. Subscription terms typically span three to five years, with renewal lengths defined in the contract, typically ranging from one to three years. In standard private or public cloud contracts, customers retain the flexibility to augment the contract with new software or additional quantities of existing software during the initial term or renewal periods.

5.9.6 Consumption-Based Model: The consumption-based model is presently applicable to a subset of SAP software deployed in SAP's public cloud, including solutions such as SAP Fieldglass, SAP Ariba, and SAP Cloud Platform. In this model, customers are billed retrospectively based on actual usage. The fee incorporates SAP Enterprise Support cloud edition and all SaaS components.

5.9.7 Infrastructure Costs: For on-premises deployments, organizations may need to consider infrastructure costs, such as hardware, storage, and networking.

5.9.8 Support and Maintenance: Annual maintenance and support fees are typically part of the overall cost. These fees may cover updates, patches, and access to SAP support services.

5.9.9 Additional Functionalities: Additional functionalities or modules beyond the core SAP S/4HANA offering may have separate costs.

5.10.1 Customization and Integration: Costs associated with customizing the system or integrating it with other applications.

5.10.2 Contractual Agreements: Licensing agreements and costs are subject to negotiation, and contractual terms may vary based on the specific agreement with SAP. It's crucial to engage with SAP representatives or authorized partners to get a personalized quote and discuss the specific requirements and circumstances of your organization. Additionally, SAP regularly updates its offerings, so it's advisable to check the latest information on the official SAP website or contact SAP directly for the most accurate details.

6. Conclusion

SAP S/4HANA Cloud is a very attractive solution for customers wishing to implement a simplified ERP solution and gain the associated benefits. Being able to be agile and quick to change is a real competitive advantage for SAP S/4HANA Cloud. With “the cloud” the overall cost of the implementation, licences, hosting, and support are much more competitive compared to an on-premises implementation. Finally, SAP S/4HANA is

now market ready and growing in functionality with a true digital core, it is a product that will be attracting a lot of attention over the coming months and years.

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