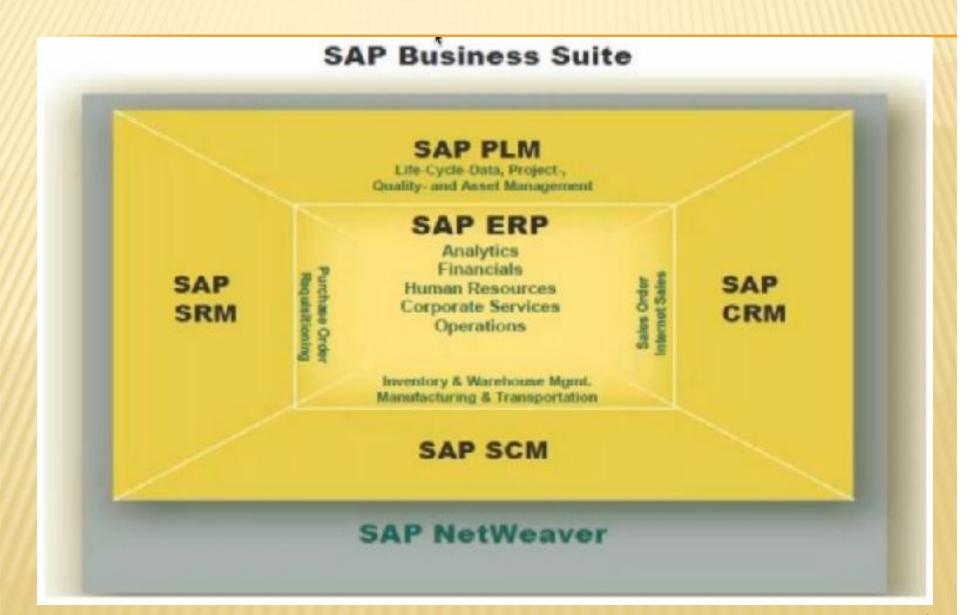
# SAP S/4 HANA FINANCE INTRODUCTION

- Every company wants to speed up the business process. In ECC due to batch processing's the company cannot speed up the business process.
- In the older version there were different components e.g FI, CO, COPA and each of these components has its own set of tables. Because of which the data which is updated in FI may not be updated properly updated in CO, and lot of time goes in month end reconciliations, especially if a company is on classic G/L.
- Huge infrastructure cost as there was no cloud option available in the older version.

- Data loading Problems For consolidation in the BPC system the data has to be loaded in to BW server and then to the BPC System which is a time consuming process. By the time the consolidation report is generated the data becomes outdated i.e. real time data is not available. From the ECC system the data has to be loaded in to BW server and then to the BPC System which is a time consuming process. By the time the consolidation report is generated the data becomes outdated i.e. real time data is not available.
- Not accessible from every device (like mobiles, tablets etc) and not user friendly for a new user.



- SAP ERP is the central component with core areas like Financials, materials etc.
- Apart from the core components SAP CRM,SRM etc are separate components which are not a part of core components.
- To reduce the load on the SAP ERP these were introduced as separate components.
- The speed will get affected severely if all the components are kept at one place.

- These challenges can be put under two heads-
- IT challenges –
- Big data explosion.
- With different components the company has to maintain multiple servers.
- Traditional ETL (Extraction, transformation and loading) system especially when the company is generating reports in BW.

### Separation of Transactions, Analysis, and Accelerated Reporting



- Various copies of data in different data models
- Inherent data latency and alignment issues
- Serial processes to ensure data quality

- CHALLENGES FOR BUSINESS USERS-
- User interface is highly complex. A new user needs time to understand the screens in SAP.
- Slower transaction and reporting process.
- Due to slow ETL processing the reports become outdated and are not useful for decision making. Real time reports are not available
- Month end reconciliation process is time consuming.

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- All these IT and User related problems were linked to the functioning of the traditional database systems.
- The traditional database systems were designed to perform well on computer systems with limited RAM. Due to which the slow disk I/O was the main bottleneck.

## OVERCOMING THE CHALLENGES WITH SAP HANA

#### SAP HANA

- To resolve the problems SAP came out with HANA in the year 2011. This is known as in memory platform which makes it faster when compared with the older versions.
- It is a common database approach for online transaction processing (OLTP) and online analytical processing(OLAP) using in memory column database. The need to transfer the data to BW for report requirements is no longer there.
- With universal journal SAP has come with single source of truth in SAP HANA.

- Until 2011, R/3 was considered the most innovative product in SAP's history. This has changed with the introduction of HANA.
- HANA is High Performance analytic appliance.
- HANA is the underlying in-memory database to power the applications, and S/4 is the latest package of these applications, in replacement of the traditional ECC in favor for a cloud-based IT environment.
- SAP HANA is the underlying platform on which SAP S/4 HANA is built.

- The distinction between HANA, S/4HANA and S/4HANA Finance must be understood clearly.
- HANA is SAP's new high-performing database, S/4HANA is the new version of Business Suite (now called S/4HANA Enterprise Management),
- S/4HANA Finance is the application for financial and management accounting.
- SAP S/4 HANA FINANCE—APPLICATION-FRONTEND
- SAP HANA DATABASE BACKEND.

- Application SAP S/4 HANA can have only SAP HANA as the backend database.
- The on premise versions which are available for SAP S/4 HANA are 1511, 1610, 1709, 1809 and the latest is 1909.
- Even the older versions like EHP7/EHP8 (Application) can also have SAP HANA as database.

#### HANA is an –

- 1.In Memory Database
- 2. Column Oriented database.
- 3. Massive Parallel processing of data.
- The high performance of the database is because RAM is much faster than the disk.
- Column oriented database scans only the required columns and skips the unwanted columns. In one way it takes the shortcut to scan the data.
- Massive parallel processing the more the resources the less time it takes to process the data and hence high performance.