

ANALYSIS OF STOCK OVERVIEW REPORT FOR FINISHED,SEMI-FINISHED AND NEW GOODS

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Abstract –A typical company manages different processes like sales, production and accounting with the help of different systems.Each of these systems uses separate database and generate their own reports and so the information is rarely passed to other systems in a timely manner which may affect the growth of a company. This project makes use of SAP (system, applications and product in data processing) ERP (Enterprise Resource Planning) software for generating reports for finished, semi finished and new goods where each module in a business is highly integrated with other modules of business, which is not there in other software.The transactions are initiated by real time business events. The whole system is designed to be real time, and not historical.An effective tool like SAP is used to integrate all departments of the business so as to benefit the company by its dependability and to be customized to its own specific business needs.

Keywords- *System and Application Product,Enterprise Resource Planning.*

I. INTRODUCTION

For an organization to make profit and also to make a global presence, it needs to automate all their business processes. ERP software is needed to fulfill these requirements. ERP system integrates different modules of business areas such as sales and distribution, marketing management, finance department etc. in SAP, these modules have a centralized database and are integrated using software and hardware components. Among different types of software available, SAP is more suited to generate reports in a single window. SAP is expanded as System Application and Products in data processing. The SAP was mainly developed because of the need for standard application software that could help in real-time business processing. The ABAP (Advanced business application programming) is a high level programming language created by a German software company SAP SE and it is used to develop the SAP R/3 system. It was developed originally to generate reports, which enabled large organizations to build mainframe business applications for material

management, sales and distribution and financial accounting.

A. Overview of modules

In SAP, a business process is termed as “Module” which are categorized into 2 types of SAP ERP Modules. One is the Functional Module and the other is one is Technical Module. All SAP modules are integrated with each other with some functionality to provide the optimal solution for business. The three major modules in brief are Sales and Distribution, Material Management and Financial Accounting.

B. Sales and Distribution(SAP SD)

In SAP, the SAP SD module is one of the commonly used ERP module that is used. The management of sales and customer distribution data in an organization is dealt by the SAP Sales and Distribution module. To process the data more efficiently, it works along with other SAP modules. Configuring SAP SD requires adequate knowledge on handling SAP developed software products. Experts advise that it is necessary to undertake SAP SD training in order to build a strong base on SAP SD user. Multiple components make up the SAP SD module that integrate different processes within that particular job area.

C. Material Management (SAP MM)

The management of sales activity of an organization is done with the help of SAP material management which is a part of an execution area. It supports all aspects of material management (planning, control etc) thereby ensuring that there is no shortage of materials or any gaps in the supply chain process of an organization. SAP MM helps to speed up the sales and material management activities which

make the business to run smoothly with efficient cost and time. It manages the Procurement Process, Master Data, Account Determination and Evaluation of Material, Inventory Management, Invoice Verification, Material Requirement Planning etc.

D. Financial Accounting(SAP FI)

The SAP finance module is the most popularly used module for financials and accounting. SAP ERP solutions manage accounting aspects such as maintaining ledgers, profit and loss statements, balance sheets etc., automatically. To manage assets in enterprises, SAP FI module is used.

II. METHODOLOGY

ERP solutions are enterprise resource solutions used to provide software to an enterprise towards better work management. In every organization the different work processes are distributed among different teams such as sales team, finance team, marketing team, IT team, HR team, auditing team, communication management team and so on to manage work. Each team has their roles and responsibilities to perform focusing on their respective departments.

As a result, there are databases for each of the team which have become very difficult to manage. To manage these databases automatically ERP solutions are developed. The leading provider of ERP systems in today's world is SAP. It provides different modules such as SAP capital management, SAP sales and distribution, SAP material management, SAP financial accounting and controlling, SAP netweaver and more for different work processes.

A. SAP ASAP Methodology

SAP designed the ASAP (Accelerated SAP) methodology for quick and easy

implementation of the ERP system. The different phases of SAP ASAP methodology includes,

1. Project Preparation
2. Business Blueprint
3. Realization
4. Final Preparation
5. Go Live & Support

Accelerated Strategy Alignment and Planning Methodology involves people, process and proven technologies in managing work and work processes. ASAP methodology is being used in organizations to simplify complex issues in organizations. The SAP ASAP methodology includes:

- Organizing work processes.
- Defining the information in a structured manner.
- Opening up business possibilities for products and services.
- Ensuring customer satisfaction.
- Ensuring effective strategic decisions.
- Maximizing customer value and ROI.
- Assessing business risks.
- Redefining business processes.

An organization needs to have certain key elements to incorporate SAP ASAP methodology in an organization successfully. To ensure successful implementation of SAP methodology, it is necessary for a company to have a vision,

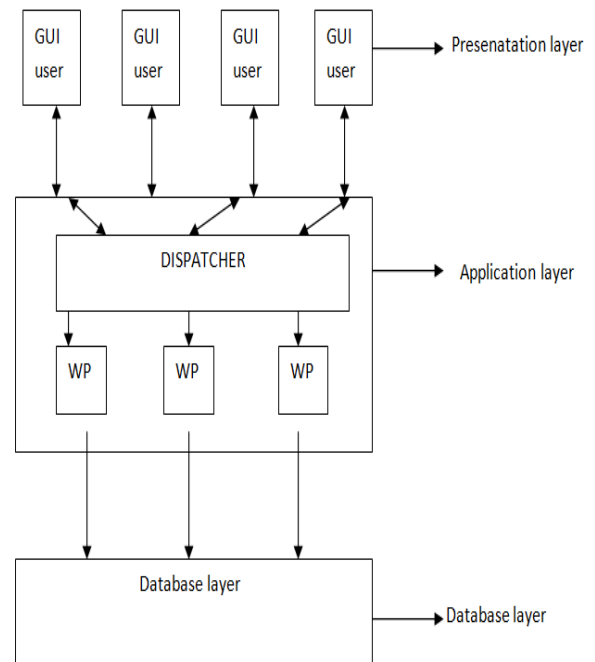
experience and effective decision making members and dedicated team.

B.SAP R/3 Architecture

SAP R/3 is a 3 tier architecture consisting of 3 layers which are,

1. Presentation layer
2. Application layer
3. Database layer

It is a client server architecture. In the name R/3 architecture, R represents Real-time system and 3 signifies the 3-tier architecture. Presentation layer acts as the front-end which takes user's requests to the database server and application servers. Processing business logic is done by the application server. Application server exists in a remote location from the location of the user PC. Storing and retrieving data as per SQL queries that is generated by ABAP and Java applications is done by the database server. The dispatcher queue is used to store various work processes.



C. Role of SAP Implementation methodology

SAP implementation methodology plays a significant role in businesses which makes sure that the data processing is simplified, integration management and the work processes are organized. The SAP methodology is mainly used to manage centralized data base information for an organization. There are different SAP modules developed for different process and independent run and install process is required for each module. The implementation of SAP provides better report generation and better online business possibilities towards the growth of the organization. Also, organizations are able to manage a single repository using SAP ERP system as there is a single data base system to manage different processes. The implementation of SAP also helps to analyse online reporting and documentation. Though it was initially used in larger businesses, small to medium size business too have begun to use SAP implementation in their process over the years. The users should have enough knowledge and expertise on using SAP systems in order to ensure successful SAP implementation.

D. Practices to ensure Successful SAP implementation

- *Planning:* In SAP implementation, the planning phase plays a more significant role. It involves planning the requirement and the outcome that is expected from SAP implementation. This helps to reach the strategic business goals and also helps to track the result of profit or loss after its implementation.
- *Defined Goals and Scope:* All the key stakeholders should be aware of the scope of the SAP implementation methodology. The goals should be

unambiguous and the roles and responsibilities should be clearly defined.

- *Process Selection:* The implementation of SAP is done for the better management of data and work in an organization which depends on the organization size, need and budget.

These are some of the best practices to be used while implementing SAP methodology in an organization. Implementation of SAP methodologies in organizations can ensure strategic planning, better decision making power and structured work process.

III. PERFORMANCE ANALYSIS

The performance is analysed by measuring the response time of each business processes and other data that represents the SAP monitoring architecture, overload situations of SAP systems and the report that is prepared on the results which focuses on system-specific potential for optimisation.

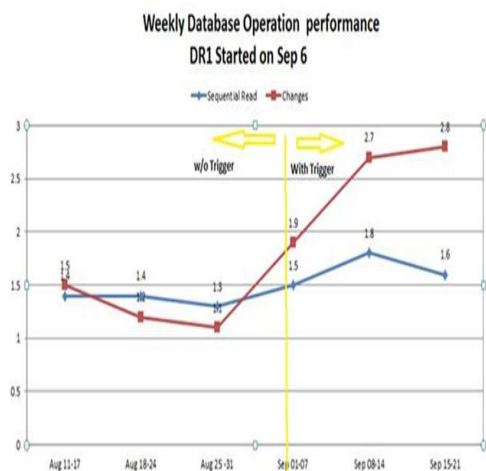
A. Work process utilization analysis

The work process can be analyzed by checking the wait time at system and instance level for each day, week and year. Wait time defines the measure of time taken for a transaction to wait for the system to find a free SAP work process to run it. So, if the wait time is high, it indicates that there is not enough SAP work processes which are configured in the system or there is not enough CPU or applications that has occupied work processes for too long due to the design of the application. If there are no issues like storage, network, database issue etc., then an “abnormal” or “error” status is put on work processes.

Task Type Name	# Steps	Ø Time	Avg. Proc. Time	Ø CPU Time	Ø DB Time	Ø Time
ALE	4	172.8	77.8	15.0	92.3	0.0
AUTOABAP	1,440	838.4	681.5	457.3	141.0	0.0
AUTOCCMS	7,200	0.8	0.7	0.1	0.0	0.0
AUTOH	4,474	0.4	0.3	0.2	0.0	0.0
BACKGROUND	55,543	8,108.2	6,273.5	762.8	1,577.2	217.3
BUFFER SYNC	3,600	5.2	1.7	1.8	3.5	0.0
DDLOG CLEANUP	3,600	4.2	0.6	0.1	3.5	0.0
DEL. THCALL	34,173	1.8	1.1	0.9	0.5	0.0
DIALOG	34,871	411.9	117.9	121.5	107.3	3.1

B.Database Performance

The overall database performance is indicated by the average time taken for database access like direct read, sequential read and change operation. It helps to calculate the average response time taken for each transaction step of a specific transaction over a period of time. This would give an indication of SAP transaction or program or job performance evolution to the organization.



C.Advantages

1. Global integration is easier using ERP.
2. Provides real time information and hence the possibility of redundancy errors is significantly reduced.

3. Creates a more efficient work environment making it easier for the employees to do their job which will lead to effectiveness.
4. Vendors would have past knowledge and experience on how to build and implement a system efficiently.

D.Disadvantages

1. The company and the vendor are bound together by a contract until the contract expires which can be unprofitable to switch vendors as the switching costs are too high.
2. The vendor packages may not be fit for a company's business model if it is inflexible and customizing them can be very expensive.
3. Return on investment will take too long for it to be profitable.
4. SAP ERP project suffers from the risk of project failure.

IV.CONCLUSION

Business reports contain information which is the result of research and analysis of data and of issues. The analysis of stock overview report for finished, semi finished and new goods using SAP is more efficient than the traditional way of analyzing reports because the traditional way of analyzing report satisfies only the client request where as analyzing reports using SAP not only satisfies the client request but also provides the integration for world wide business.

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