

**A STUDY OF ENTERPRISE RESOURCE PLANNING (ERP) SYSTEM &
IMPLIMENTATION OF ERP**

with special reference to Fineshift Software Pvt.Ltd.,Pune

Internship Report Submitted to

**Chhatrapati Shahu Institute of Business Education & Research,
Kolhapur**

(An Autonomous Institute)

As a Partial Fulfillment for the Award of Degree of

Master of Business Administration

(Environment & System)

By

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Under the Guidance of

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2022-2023

DECLARATION

I, the undersigned, hereby declare that the project report entitled “**A study of Enterprise Resource Planning System & Implementation of ERP with special reference to Fineshift Software Pvt.Ltd.,Pune**” is a genuine work, written and submitted by me as a partial fulfillment for the award of degree of **Master of Business Administration** in Environment & System.

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Date :

Place : Kolhapur

Mr. Akash Eknath Killedar

Forwarded Through

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CERTIFICATE

This is to certify that project report entitled “**A study of Enterprise Resource Planning System & Implementation of ERP with special reference to Fineshift Software Pvt.Ltd.,Pune**” is a bonafied work written and submitted by **Mr. Akash Eknath Killedar** to Chhatrapati Shahu Institute of Business Education and Research, Kolhapur (An Autonomous Institute) for the award of the degree of **Master of Business Administration** in Environment and System is an independent work carried out under my guidance and supervision.

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Acknowledgements

It is indeed a pleasure to acknowledge the contribution of those who have helped me in carrying out this project report successfully.

My heart-felt thanks goes to my project guide “**Dr. P. M. Patil**” for his scholarly guidance to make this report in a logical order during all the project period. I would like to thank all my teachers for all the help and suggestions.

I sincerely thank the Secretary Managing Trustee **Prof. Dr. R. A. Shinde**, and **Dr. S. P. Rath** Director, CSIBER, and **Prof. Dr. A. R. KULKARNI**, Head of Department, Environment Management Programme for providing all the necessary facilities and extended help for the successful completion of this project. I also want to extend my thanks to all the non-teaching staff of CSIBER for their help and encouragement.

I would like to take this opportunity to convey my gratitude and thanks to the team of **Fineshift Software Pvt. Ltd.**, for taking me in and guiding me throughout the process.

Mr. Akash Eknath Killedar

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CHAPTER – I
INTRODUCTION TO THE STUDY

INTRODUCTION AND RESEARCH METHODOLOGY

This Chapter includes: -

1.1 Introduction

1.2 Objective of the study

1.3 Research Methodology

1.4 Scope and Limitation

1.5 Limitations of study

1.1 Introduction to Enterprise Resource Planning(ERP) System :-

The initials ERP originated as an extension of MRP (material requirements planning: later manufacturing resource planning) and CIM (Computer Integrated Manufacturing). It was introduced by research and analysis firm Gartner in 1990. ERP systems now attempt to cover all core functions of an enterprise, regardless of the organization's business or charter. These systems can now be found in non-manufacturing businesses, non-profit organizations and governments.

To be considered an ERP system, a software package must provide the function of at least two systems. For example, a software package that provides both payroll and accounting functions could technically be considered an ERP software package

Examples of modules in an ERP which formerly would have been stand-alone applications include: Product lifecycle management, Supply chain management (e.g. Purchasing, Manufacturing and Distribution), Warehouse Management, Customer Relationship Management (CRM), Sales Order Processing, Online Sales, Financials. Human Resources and Decision Support System.

Some organizations typically those with sufficient in-house IT skills to integrate multiple software products-choose to implement only portions of an ERP system and develop an external interface to other ERP or stand-alone systems for their other application needs. For example, one may choose to use human resource management system from one vendor, and perform the integration between the systems themselves. This is common to retailers, where even a mid-sized retailer will have a discrete Point-of- Sale (POS) product and financials application, then a series of specialized applications to handle business requirements such as warehouse management, staff rostering, merchandising and logistics.

Enterprise resource planning is a term originally derived from manufacturing resource planning (MRP II) that followed material requirements planning (MRP). MRP evolved into ERP when "routings" became a major part of the software architecture and a company's capacity planning activity also became a part of the standard software activity. ERP systems typically handle the manufacturing, logistics, distribution, inventory and shipping. Invoicing, and accounting for a company. ERP software can aid

in the control of many business activities, including sales, marketing, delivery, billing, production, inventory management, quality management and human resource management.

ERP systems saw a large boost in sales in the 1990s as companies faced the Y2K problem in their legacy systems. Many companies took this opportunity to replace their legacy information systems with ERP systems. This rapid growth in sales was followed by a slump in 1999, at which time most companies had already implemented their Y2K solution.

ERPs are often incorrectly called back office systems indicating that customers and the general public are not directly involved. This is contrasted with front office systems like customer relationship management (CRM) systems that deal directly with the customers. Or the eBusiness systems such as eCommerce, eGovernment, eTelecom, and eFinance, or supplier relationship management (SRM) systems.

ERPs are cross-functional and enterprise wide. All functional departments that are involved in operations or production are integrated in one system. In addition to manufacturing, warehousing, logistics, and information technology, this would include accounting, human resources, marketing and strategic management.

ERP II, a term coined in the early 2000's, is often used to describe what would be the next generation of ERP software. This new generation of software is web-based, and allowed both internal employees, and external resources such as suppliers and customer's real-time access to the data stored within the system. ERP II is also different in that the software can be made to fit the business, instead of the business being made to fit the ERP software. As of 2009, many ERP solution providers have incorporated these features into their current offerings.

EAS-Enterprise Application Suite is a new name for formerly developed ERP systems which include (almost) all segments of business, using ordinary Internet browsers as thin clients.

Best practices are incorporated into most ERP vendor's software packages. When implementing an ERP system, organizations can choose between customizing the software and modifying their business processes to the "best practice" function delivered

in the "out-of-the-box" version of the software.

Prior to ERP, software was developed to fit the processes of an individual business. Due to the complexities of most ERP systems and the negative consequences of a failed ERP implementation, most vendors have included "Best Practices" into their software. These "Best Practices" are what the Vendor deems as the most efficient way to carry out a particular business process in an Integrated Enterprise-Wide system.

A study conducted by Ludwighafen University of Applied Science surveyed 192 companies and concluded that companies which implemented industry best practices decreased mission-critical project tasks such as configuration, documentation, testing and training. In addition, the use of best practices reduced over risk by 71% when compared to other software implementations.

The use of best practices can make complying with requirements such as IFRS, Sarbanes-Oxley or Basel II easier. They can also help where the process is a commodity such as electronic funds transfer. This is because the procedure of capturing and reporting legislative or commodity content can be readily codified within the ERP software, and then replicated with confidence across multiple businesses that have the same business requirement.

1.2 Objectives of the Study:-

- a)** To study & understand ERP system.
- b)** To study the selection process of right ERP system.
- c)** To study input and output process of ERP system.
- d)** To study different modules of Enterprise resource planning.
- e)** To study the implementation plan of ERP.
- f)** To analyse ERP benefits for the Fineshift Software Pvt. Ltd.
- g)** To evaluate the business process of the Fineshift Software Pvt. Ltd.

1.3 Research Methodology:-

Data Collection:

Research methodology is a method used by researcher for collecting the data which is used to analyzing and interpreting the results for solving the various problems.

i. **PRIMARY DATA: -**

The primary data is gathered for specific purpose and is collected by the researcher himself. The several methods of collecting primary data are Observation method, Interview method and Questionnaire method.

- Personal interview with persons in the organization such as managers, workers.
- Observation Method: To provide contextual information needed to frame the evaluation and make sense of data collected using other method

ii. **SECONDARY DATA: -**

Secondary data refers to data that was collected by someone other than the user. Common sources of secondary data for social science include censuses, information collected by government departments, organizational records and data that was originally collected for other research purpose.

- Organizational Reports
- Booklets
- Documents of the ERP
- Organization Web
- Study Material

1.4 Scope of study:-

- Scope of the study is limited to only enterprise resource planning system and implementation with reference to organization.
- This study is focuses on the existing business process of Fineshift Software Pvt. Ltd. with the help of enterprise resource planning (ERP) system.
- **Geographical Scope:** The geographical scope of this project is limited in the sense this study concerned only with one organization, namely Fineshift Software Pvt. Ltd.
- **Analytical scope:** The study include analytical study of ERP , Process of selecting right ERP system , Process of implementation, and studying various modules of ERP like financial management, Human resource management and Customer relationship management.

1.5 Limitations of study

- The study is limited to one and only one organization that is Fineshift Software Pvt. Ltd.
- The employees were busy with their daily schedule and it was very much difficult for them to give time.
- Personal biasness of various employees may have supplied wrong data.
- Time was also an important constraint because of 50 days of time limit.
- Because of the short period of time it was not possible to study in detail about further stages of this process i.e. Study of modules of ERP. (CSM, CRM, etc.).

CHAPTER – II

COMPANY PROFILE

This Chapter Includes:-

2.1 Introduction to Organisation

2.2 About Organisation

2.3 Vision & Mission of Organisation

2.4 Services of Organisation

2.5 Partners of Organisation

2.1 Introduction to Organisation:-



- i. Name of Organisation: - **Fineshift Software Pvt. Ltd.**
- ii. Year of registration:- 2022
- iii. Website:- www.fineshift.com
- iv. Contact number:- 7721995554
- v. Address:- Nyati Emporium, Office No 505, HQ88+R8H, Pashan Highway Side Rd, Mahalunge, Pune, Maharashtra.
- vi. Pin Code:- 411045
- vii. Number of Employees:- 100+
- viii. Board of Directors:-

Name	Designation
Amit Sindhikumte	Founder & CEO
Swapnil Borude	Co-Founder & Director

2.2 About Fineshift:-

FineShift, assist customers to acquire software tools, infrastructure, and human resources that provide end-to-end solutions for making your business digital. Our group of specialists continuously strives to provide best-in-class IT solutions for all your business needs. Our expertise in cutting-edge technologies like DevOps, DevSecOps, IT Infrastructure, Virtualization, Containerization, Managed Services, and Technology Advisory aid you in the smooth Digital Transformation of your businesses. Our experts help you pick the right bunch of tools to meet your end-to-end business needs. Services offered by us include professional services, Managed services, consultancy, migrations, Staff Augmentation, Training, and Licensing.

2.3 Vision & Mission of Organisation:-

i. Vision of Fineshift:-

FineShift aims to establish ourselves as a reliable mediator & market leader in cloud consulting/DevOps. Furthermore, our dedicated client support adds value to our accomplishments. Our creative & in-depth enterprise disruption allows us to expand the horizons of the business environment as a dependable yet dynamic digital transformation partner.

ii. Mission of Fineshift:-

Fineshift is on a revolutionary path to excellence in Cloud and DevOps, leveraging our capabilities to give our cherished customers business flexibility, lower operational costs, faster time to market, and the security and scalability of enterprise workloads. We do this by providing robust yet dynamic cloud and DevOps technology.

iii. What Fineshift Offers?

Fineshift examines each DevOps service provider internationally and evaluates their offerings using a comprehensive set of criteria. Our team of experts examines the most recent trends, gathers client feedback, gauges internet reputation, and prioritizes support feedback to compile a list of the top DevOps service providers. By ranking the top **DevOps Tools** and other high-ranking efficient tools on our Leader board we assist service seekers in finding the top DevOps Consulting firms to handle their DevOps Migration and requirements.

2.4 Services of Organisation:-

- a) **Licensing Service:** - To support software and application licences without need for an in-house licencing engine.
- b) **Professional Service:** - We'll engage with the customer to ensure product functionality is understood & adopted company wide.
- c) **Consulting Service:** - To enter a new market successfully with your software product, we first conduct a thorough analysis of that market.

- d) **Managed Service:** - Support and administer a network, application, infrastructure, and security on customers' premises.
- e) **Staff Augmentation:** - Hire experts on a temporary basis in order to meet your business's temporary staffing needs.
- f) **Monitoring Service:** - Keeping track of all the apps and sites that have been utilised on the company's PCs.
- g) **Migration Service:** - Initiating the digital shift from an existing digital system to the new modern one.
- h) **Training Service:** - Learn all about the new software and adapt to it.

2.5 Major Partners of Organisation:-

- i. **GitLab**
- ii. **Amazon Web Service(AWS)**
- iii. **Google Cloud Platform**
- iv. **Microsoft Azure**
- v. **GitHub**
- vi. **CircleCI**
- vii. **Splunk**
- viii. **Snyk**
- ix. **Fortify**
- x. **Xopero**

CHAPTER – III
THEORITICAL BACKGROUND

THEORITICAL BACKGROUND

This Chapter includes: -

3.1 History of ERP

3.2 ERP system selection methodology

3.3 Important issues to consider before ERP implementation

3.4 Methods in implementing ERP

3.5 Successful ERP Implementation

3.1 History of ERP:-

ERP, or Enterprise Resource Planning, is a software system used by organizations to manage their business processes and operations. The history of ERP can be traced back to the 1960s when the concept of Material Requirements Planning (MRP) was introduced.

MRP was a system that was used by manufacturing companies to manage their production processes. It helped companies to plan their production by ensuring that they had the necessary materials in stock to manufacture their products.

In the 1980s, the concept of MRP was expanded to include other business processes such as finance, accounting, and human resources. This led to the development of a new system called Manufacturing Resource Planning (MRP II).

MRP II was an integrated system that allowed companies to manage all their business processes from a single platform. It helped companies to streamline their operations, reduce costs, and improve efficiency.

In the 1990s, MRP II was further expanded to include more business processes and became known as Enterprise Resource Planning (ERP). ERP systems became more sophisticated and offered companies even more features such as supply chain management, customer relationship management, and e-commerce capabilities.

Today, ERP systems are an essential tool for many organizations across various industries. They continue to evolve and become more advanced, offering companies even more functionality and features to help them streamline their operations, improve efficiency, and make better business decisions.

3.2 ERP system selection methodology:-

An ERP system selection methodology is a formal process for selecting an Enterprise Resource Planning (ERP) system.

Irrespective of whether the company is a multinational multi-million dollar organisation or a small company with single digit million turnover, the goal of system selection is to source a

system that can provide functionality for all of the business processes; that will get complete user acceptance; management approval and, most importantly, can provide significant return on investment for the shareholders.

Since in the mid-70s, when there was wide-spread introduction of computer packages into leading companies to assist in Material Requirements Planning software companies have strived, and for the most part succeeded, to create packages that assist in all aspects of running a business from Manufacturing: Supply Chain Management; Human Resources; through to Financials. This led to the evolution of ERP Systems.

Accordingly, a significant number of packages purporting to be ERP systems have entered into the marketplace since 1990. There are packages at the upper end of the market such as SAP: Oracle, Movex; and IFS among others in addition to medium enterprise systems such as Microsoft Navision; Axapta: Tropos: Great Plains, Dynamics; iRenaissance: Sage; and Epicor Vantage and a vast quantity of other packages that vendors claim to be ERP Systems. There are also packages that claim to be best of breed for certain processes and sold merely as an add-on to an ERP System. The options are many and this, in reality, creates a problem for the company who has to make a decision.

Attempting to select an ERP system is further exacerbated by the fact that some systems are geared for discrete manufacturing environment where a distinct amount of items make up a finished product while others are more suited to process industries such as chemical and food processing where the ingredients are not exact and where there might be re-work and byproducts of a process.

In the last decade, companies have also become interested in enhanced functionality such as Customer Relationship Management and e-Commerce capability.

Given all of the potential solutions, it is not uncommon for companies to choose a system that is not the best fit for the business and this normally leads to a more expensive implementation. Thus, it is understandable that "ERP Costs can run as high as two or three percent of revenues". A Proper ERP System Selection Methodology will deliver, within time and budget, an ERP system that is best fit for the business processes and the user in an enterprise.

i. Poor System Selection:-

It is seldom that companies adopt a fully objective system selection methodology when choosing an ERP System. Some of the common mistakes that companies resort to are:

- **Incomplete Set of Requirements:-**

When a new ERP has been implemented in an enterprise, Wallace & Kremzar state that "It requires people to do their job differently". Therefore, it is very important to understand the requirements of each user for current processes and for future processes [i.e. before and after the new system is installed]. One can then review systems that have the best fit from a functionality perspective. It is also imperative that the requirements go into great detail for complicated processes or processes that may be unique to a particular business.

- **Reliance on Vendor Demos:-**

Vendor Demonstrations tend to focus on very simplistic processes. A typical demonstration will show an ideal order to cash process where a customer orders a quantity of product that is in stock. The reality in most businesses is that most customers have varying and more complicated commercial arrangements and products are not always in stock.

- **Over-Emphasis on System Cost:-**

According to Finlay and Servant "The differential in purchase price between packages is unlikely to be the dominant factor". While the cost of an ERP system is very important for a company, there tends to be a lack of focus on the other important decision criteria such as functionality; future proofing; underlying infrastructure [network & database]; and e-commerce capability among others.

- **Selection Bias:-**

It is not unusual that the decision on which system to purchase is made by one individual or by one department within the company. In these situations, an ERP system that may be excellent at one function but weak at other processes may be imposed on the entire enterprise with serious consequences for the business.

- **Failure to use Objective Professional Services:-**

One the main reasons for failure in system selection is the understandable lack of knowledge within the company. Experienced Consultants can provide excellent information on all of the packages that are available in the marketplace: the latest functionality available in the most common packages and, most importantly, can assist the user in deciding whether a specific requirement would provide added value to the user and to the business. However, it is worth noting that the professional help must be provided by objective consultants who have no affiliation with ERP System vendors. "If a consultancy has built up an expertise in the use of a particular package then it is in its interest to recommend that package to its client".

- **Inability to Understand Offering by ERP Vendor:-**

"It is estimated that approximately 90% of enterprise system implementations are late or over budget". A plausible explanation for implementations being late and over budget is that the company did not understand the offering by the vendor before the contract was signed. A typical example of this would be the scenario where a vendor may offer 5 days of services for the purpose of data migration. The reality is that there is a huge amount of work required to input data onto a new system. The vendor will import the data into the new system but expects the company to put the data into a file that is easy to import into the system. The company are also expected to extract the data from the old system; clean the data and add new data that is required by the new system. "ERP, to be successful, requires levels of data integrity far higher than most companies have ever achieved - or even considered. Inventory records, bill of materials (BOM), formulas. Recipes, routings, and other data need to become highly accurate, complete and properly structured". This typical scenario is one of many issues that cause implementations to be delayed and invariably lead to requests for more resources.

ii. A Proper System Selection Methodology:-

To address the common mistakes that lead to a poor system selection. It is important to apply key principles to the process, some of which are listed hereunder:

- **Structured Approach:-**

The first step in selection of a new system is to adopt a structured approach to the process. The set of practices are presented to all the stakeholders within the enterprise before the system selection process begins. Everyone needs to understand the method of gathering requirements; invitation to tender; how potential vendors will be selected; the format of demonstrations and the process for selecting the vendor. Thus, each stakeholder is aware that the decision will be made on an objective and collective basis and this will always lead to a high level of co-operation within the process.

- **Focused Demonstrations:-**

Demonstrations by potential vendors must be relevant to the business. However, it is important to understand that there is considerable amount of preparation required by vendors to perform demonstrations that are specific to a business. Therefore it is imperative that vendors are treated equally in requests for demonstrations and it is incumbent on the company [and the objective consultant assisting the company in the selection process] to identify sufficient demonstrations that will allow a proper decision to be made but will also ensure that vendors do not opt out of the selection process due to the extent of preparation required.

- **Objective Decision Process:-**

"Choosing which ERP to use is a complex decision that has significant economic consequences, thus it requires a multi-criterion approach." There are two key points to note when the major decision makers are agreeing on selection criteria that will be used in evaluating potential vendors. Firstly, the criteria and the scoring system must be agreed in advance prior to viewing any potential systems. The criteria must be wide- ranging and decided upon by as many objective people as possible within and external to the enterprise. In no circumstance should people with affiliations to one or more systems be allowed to advise in this regard.

- **Full Involvement by all Personnel**

The decision on the system must be made by all stakeholders within the enterprise. "It requires top management leadership and participation..... it involves virtually every department within the company". Representatives of all users should:

- Be involved in the project initiation phase where the decision making process is agreed:
- Assist in the gathering of requirements:
- Attend the Vendor Demonstrations;
- Have a significant participation in the short-listing and final selection of a vendor.

The implementation of an ERP system takes a significantly longer time and level of resource than the selection process. However, the extent of the implementation will be profoundly influenced by the level of resource and objectivity within the selection. Companies that use a proper System Selection Methodology reap the benefit not only during the implementation phase but also and most significantly during the life of the ERP System.

3.3 Important issues to consider before ERP implementation

Before integrating business functions, managers must consider several important issues that will help them decide whether an ERP integration is the right choice for their organization. These pertinent issues are classified under the following categories: fundamental issues, organizational change process, people, and the different approaches to implementing ERP.

- **Fundamental Issues:-**

First, managers must consider the fundamental issues of system integration by analysing the organization's vision and corporate objectives. For instance, does management fully understand its current business processes, and can it make implementation decisions in a timely manner? Is management ready to undertake drastic business process reengineering efforts to yield dramatic outcomes? Is management ready to make any changes in the structure, operations, and cultural environment to accommodate the options configured in the ERP system? Is the organization financially and economically prepared to invest heavily in an ERP implementation? Next, management needs to decide on the key related implementation and business issues and how to proceed. Certainly, ERP is not suitable for companies that are experiencing rapid growth and change in an unstable environment are undergoing change in the corporate management and philosophy, or that will be experiencing merger or liquidation in the near future. Understandably, there will be more foreseeable system integration problems if one of the merging companies is in the midst of an ERP upgrade because it must deal with scalability, a new IT infrastructure, and a different corporate culture simultaneously. Further, ERP integration is not recommended for companies which require a lot of flexibility to succeed or which manufacture products that are constantly changing. Similarly, companies that have very little experience with formal information systems or have constantly changing information systems requirements will not benefit from an ERP implementation. Finally, organizations need to exploit future communication and computing technology to integrate the ERP system with e-business applications. Oftentimes, additional new hardware and specialized professionals are needed to run the powerful software system. Depending on the size of the company and the modules installed, the cost of implementation can range from one million to five hundred million dollars, and will take as long as two years for a mid-size company and seven years for a large, multinational corporation to complete.

- **People:-**

People-related issues such as corporate philosophy and leadership style can play an important role in the ERP implementation process. Research has concluded that active top management support and commitment are essential to the success of any system implementation. Frequently, executive councils and steering committees consisting of top managers are developed to plan and manage the IT initiatives. Such senior managerial involvement tends to increase the optimization of IT business values. Employees can be quite wary of any kind of change in the business processes, particularly during periods of economic downturn. Ill-trained employees who fight the changes in the business process tend to be poor performers. Therefore, to increase the chance of a successful ERP implementation and to reduce users' resistance to change. End users, especially those who are very knowledgeable with the operations, must be involved in all stages of the implementation process. Employees must also be educated about the ERP installation. Such educational endeavour should include a concise introduction to the basic concepts and architecture of ERP systems, including actual screen shots of the function modules. During these training sessions, it is important to discuss the managerial issues involved and to build a basic understanding of the integration concepts prior to the actual installation of the ERP system. Further, any Business-to-Business initiatives, reengineering projects, alliances, and the introduction of new technologies should also be addressed. Project managers must take charge of the implementation process at all times. They must oversee the reengineering of the key business processes, reassign job responsibilities, restructure the organization's chart, and redefine work relationships. Further, they must also learn how to manage the software vendors and any outside consultants.

- **The Organizational Change Process:-**

ERP implementation requires organizations to reengineer their key business processes in fundamental ways, revamping old ways of conducting business, redefining job responsibilities, and restructuring the organization. For major multinational corporations (MNC), the ERP systems must be customized to address global issues where different countries have different ways of doing business, and to incorporate country-specific business practices pertaining to accounting, tax requirements, environmental regulations, human resources, manufacturing, and currency conversion into the integrated systems. While integrating the information systems across various countries. Three types of misfits (relating

to data, process, and output) can occur due to incompatibilities between software functionality and organizational requirements as well as differences in cultural and regulatory environments. The unique context of each country in which an organization operates must be carefully enmeshed into the traditionally Western-biased business practices inherent in the ERP systems. Diese, et al. (2000) describes an eight-level process that managers can use to manage change. The first step is to create a comprehensive change vision and to make the vision operational. Then, a change strategy is defined to assess readiness change within the organization, to select the best change configuration, and to establish change governance. The third process is to develop leadership, in order to lead the change program and to develop leadership capability.

Commitment from teams is built through communication, managing resistance, and transferring of knowledge and skills. The fifth process is to manage employee and stakeholders' performance by establishing needs, and implementing performance management and people practices. Business benefits are delivered through the building of business cases, and quantifying and sustaining benefits. The next process is to develop culture in the organization by understanding the current culture, and then to design the target culture and to implement cultural change. The final process is to design the organization by understanding the current organization, and then to design the target organization and to implement organizational change.

- **Selecting Right ERP Vendor:-**

- i. Microsoft Dynamic**



Microsoft has no formal ownership experience program defined. Microsoft has developed its cost management strategy based on a very low software price point and close to 100% out-of-the-box deployments with little ability to customize the software. As a result, Microsoft offers basic functionality that does not require extensive training, but it also does not necessarily deliver the full value expected by the customer in view of the ownership experience.

ii. Oracle



Addressing cost of ownership is at the heart of Oracle's philosophy for Enterprise Applications. Based on the Oracle eBusiness Suite, an integrated suite of applications, Oracle claims that it can lower implementation costs by avoiding unnecessary costs, such as those associated with costly custom integration between applications. Although Oracle's approach has some merit - some measurable benefits have been highlighted through ROI case studies, serious concerns are still being raised regarding what Oracle has delivered to date.

iii. SAP



Many users of SAP applications have, over the years, noted the complexity of SAP applications, the resulting high implementation costs, and consequent budget overruns. In response to these issues, SAP today highlights SAP NetWeaver as the centerpiece to SAP's product strategy for decreasing the complexity and cost of ownership for SAP applications. Currently, the impact of SAP NetWeaver on the overall SAP cost of ownership remains to be proven. SAP has not yet provided proof points validating that its customers benefit from improved ownership experience through the implementation of SAP's latest technology.

3.4 Methods in implementing ERP

ERP implementation support includes all the services of the vendor. Companies spend a lot of time in discussing about the need to go for ERP. They make all sorts of assessments and bring the necessary resources to work on ERP. They even carry the exercises suggested in restructuring. When the stage is all set to take ERP the next million dollar question that comes to them is the appropriate method of implementation due to the risk for ERP implementation. Some popular methods for implementation are as follows:

- **Joint ventures with the Respective Industry**

The company need not necessarily implement ERP all on its own. They can as well share it with leading players in the same industry. This will ensure that the risks will not be heavy in the case of loss. This practice is assuming greater significance in the current scenario. The sharing allows them to have an interface with the systems on the basis of a common platform. This is catching up in the market with the only trouble being reluctance of competitive firms to come together on a mutual agreement for fear of losing business tactics. It is also seen as ERP implementation problem solution.

Though the companies are at liberty to create security for their respective information there will not be any protection for the (pool of) records in the common database. However this has helped largely in many aspects. For e.g. the medical history of a patient brought in an emergency condition can be immediately accessed through ERP. This particular fact has itself saved many lives. On the contrary they would have to go through the rigorous process of finding the patient's identity and the steps aftermath which brings down the chances of the patient's survival are very minimal, in the absence of ERP. This is one of ERP implementation support. Perhaps there are many risks for ERP implementation.

- **Doing it all alone**

This is in fact one of the primitive methods and is no doubt followed till date. This method takes a lot of risks in this method. But if they are calculated properly then the regime would be inscribed as a golden period in the company's history. The simple formula behind this phenomenon is that the company should go for it subject to its financial potential, requirements, technical acumen management policy and similar facts. All these will help them to arrive at ERP implementation problem solution.

- **Full/Partial Implementation**

It has always been said that ERP products and services are purely based on the needs and resources of the company. This is not a risk for ERP implementation. Hence the companies can choose to go for a full-fledged ERP system and implement it through the organization and thereby interlink the whole process and the people concerned. Otherwise they may prefer to go for an ERP system that performs a particular function of the company. This is an important step in choosing the appropriate ERP software but at the same time it also adds more value to the implementation process. It is also an important ERP problem solution.

3.5 Successful ERP Implementation

Businesses have a wide scope of applications and processes throughout their functional units; producing ERP software systems that are typically complex and usually impose significant changes on staff work practices. Implementing ERP software is typically too complex for "in-house" skill, so it is desirable and highly advised to hire outside consultants who are professionally trained to implement these systems. This is typically the most cost effective way. There are three types of services that may be employed for - Consulting, Customization, Support. The length of time to implement an ERP system depends on the size of the business, the number of modules, the extent of customization, the scope of the change and the willingness of the customer to take ownership for the project. ERP systems are modular, so they don't all need be implemented at once. It can be divided into various stages, or phase-ins. The typical project is about 14 months and requires around 150 consultants. A small project (e.g., a company of less than 100 staff) may be planned and delivered within 3-9 months; however, a large, multi-site or multi-country implementation may take years.[citation needed] The length of the implementations is closely tied to the amount of customization desired.

To implement ERP systems, companies often seek the help of an ERP vendor or of third-party consulting companies. These firms typically provide three areas of professional services: consulting, customization and support. The client organisation may also employ independent program management, business analysis, change management and UAT specialists to ensure their business requirements remain a priority during implementation.

Data migration is one of the most important activities in determining the success of an ERP implementation. Since many decisions must be made before migration, a significant amount of planning must occur. Unfortunately, data migration is the last activity before the production phase of an ERP implementation, and therefore receives minimal attention due to time constraints. The following are steps of a data migration strategy that can help with the success of an ERP implementation:

- Identifying the data to be migrated
- Determining the timing of data migration
- Generating the data templates
- Freezing the tools for data migration
- Deciding on migration related setups
- Deciding on data archiving

- **Process preparation**

ERP vendors have designed their systems around standard business processes, based upon best business practices. Different vendor(s) have different types of processes but they are all of a standard, modular nature. Firms that want to implement ERP systems are consequently forced to adapt their organizations to standardized processes as opposed to adapting the ERP package to the existing processes. Neglecting to map current business processes prior to starting ERP implementation is a main reason for failure of ERP projects. It is therefore crucial that organizations perform a thorough business process analysis before selecting an ERP vendor and setting off on the implementation track. This analysis should map out all present operational processes, enabling selection of an ERP vendor whose standard modules are most closely aligned with the established organization. Redesign can then be implemented to achieve further process congruence. Research indicates that the risk of business process mismatch is decreased by: linking each current organizational process to the organization's strategy; analysing the effectiveness of each process in light of its current related business capability; understanding the automated solutions currently implemented.

ERP implementation is considerably more difficult (and politically charged) in organizations structured into nearly independent business units, each responsible for their own profit and loss, because they will each have different processes, business rules, data semantics, authorization hierarchies and decision centers. Solutions include requirements coordination negotiated by local change management professionals or, if this is not possible, federated implementation using loosely integrated instances (e.g. linked via Master Data Management) specifically configured and/or customized to meet local needs.

A disadvantage usually attributed to ERP is that business process redesign to fit the standardized ERP modules can lead to a loss of competitive advantage. While documented cases exist where this has indeed materialized, other cases show that following thorough process preparation ERP systems can actually increase sustainable competitive advantage.

- **Configuration:-**

Configuring an ERP system is largely a matter of balancing the way you want the system to work with the way the system lets you work. Begin by deciding which modules to install, then adjust the system using configuration tables to achieve the best possible fit in working with your company's processes.

- **Modules:-**

Most systems are modular simply for the flexibility of implementing some functions but not others. Some common modules, such as finance and accounting are adopted by nearly all companies implementing enterprise systems; others however such as human resource management are not needed by some companies and therefore not adopted. A service company for example will not likely need a module for manufacturing. Other times companies will not adopt a module because they already have their own proprietary system they believe to be superior. Generally speaking the greater number of modules selected, the greater the integration benefits, but also the increase in costs, risks and changes involved.

- **Configuration Tables:-**

A configuration table enables a company to tailor a particular aspect of the system to the way it chooses to do business. For example, an organization can select the type of inventory accounting - FIFO or LIFO - it will employ or whether it wants to recognize revenue by geographical unit, product line, or distribution channel. So what happens when the options the system allows just aren't good enough? At this point a company has two choices, both of which are not ideal. It can re-write some of the enterprise system's code, or it can continue to use an existing system and build interfaces between it and the new enterprise system. Both options will add time and cost to the implementation process. Additionally they can dilute the system's integration benefits. The more customized the system becomes the less possible seamless communication between suppliers and customers.

- **Consulting services:-**

Many organizations did not have sufficient internal skills to implement an ERP project. This resulted in many organizations offering consulting services for ERP implementation. Typically, a consulting team was responsible for the entire ERP implementation including planning, training, testing, implementation, and delivery of any customized modules. Examples of customization include additional product training; creation of process triggers and workflow; specialist advice to improve how the ERP is used in the business; system optimization, and assistance writing reports, complex data extracts or implementing Business Intelligence.

For most mid-sized companies, the cost of the implementation will range from around the list price of the ERP user licenses to up to twice this amount (depending on the level of customization required). Large companies, and especially those with multiple sites or countries, will often spend considerably more on the implementation than the cost of the user licenses -- three to five times more is not uncommon for a multi-site implementation.

Unlike most single-purpose applications, ERP packages have historically included full source code and shipped with vendor-supported team IDEs for customizing and extending the delivered code. During the early years of ERP the guarantee of mature tools and support for extensive customization was an important sales argument when a potential customer was considering developing their own unique solution in-house, or assembling a cross-functional solution by integrating multiple "best of breed" applications.

- **"Core system" Customization vs Configuration:-**

Increasingly, ERP vendors have tried to reduce the need for customization by providing built-in "configuration" tools to address most customers' needs for changing how the out-of-the-box core system works. Key differences between customization and configuration include:

Customization is always optional, whereas some degree of configuration (e.g. setting up cost/profit centre structures, organisational trees, purchase approval rules, etc.) may be needed before the software will work at all.

Configuration is available to all customers, whereas customization allows individual customer to implement proprietary "market-beating" processes.

Configuration changes tend to be recorded as entries in vendor-supplied data tables, whereas customization usually requires some element of programming and/or changes to table structures or views.

The effect of configuration changes on the performance of the system is relatively predictable and is largely the responsibility of the ERP vendor. The effect of customization is unpredictable and may require time-consuming stress testing by the implementation team.

Configuration changes are almost always guaranteed to survive upgrades to new software versions. Some customizations (e.g. code that uses pre-defined "hooks" that are called before/after displaying data screens) will survive upgrades, though they will still need to be re-tested. More extensive customizations (e.g. those involving changes to fundamental data structures) will be overwritten during upgrades and must be re-implemented manually.

By this analysis, customizing an ERP package can be unexpectedly expensive and complicated, and tends to delay delivery of the obvious benefits of an integrated system. Nevertheless, customizing an ERP suite gives the scope to implement secret recipes for excellence in specific areas while ensuring that industry best practices are achieved in less sensitive areas.

- **Extension:-**

In this context "Extension" refers to ways that the delivered ERP environment can be extended with third-party programs. It is technically easy to expose most ERP transactions to outside programs, e.g.

Scenarios to do with archiving, reporting and republishing (these easiest to achieve, because they mainly address static data):

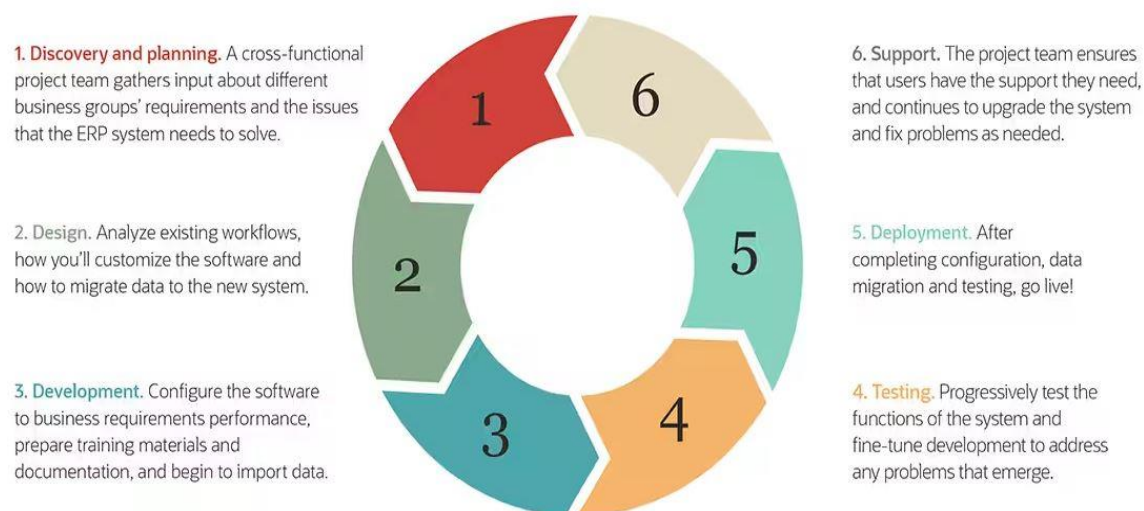
Transactional data capture scenarios, e.g. using scanners, tills or RFIDs, are relatively easy (because they touch existing data); however because ERP applications typically contain sophisticated rules that control how master data can be created or changed, some scenarios are very difficult to implement.

- **Maintenance and support services:-**

Maintenance and support services involve monitoring and managing an operational ERP system. This function is often provided in-house using members of the IT department, or may be provided by a specialist external consulting and services company.

CHAPTER – IV
DATA ANALYSIS & DATA
INTERPRETATION

ERP Implementation Stages

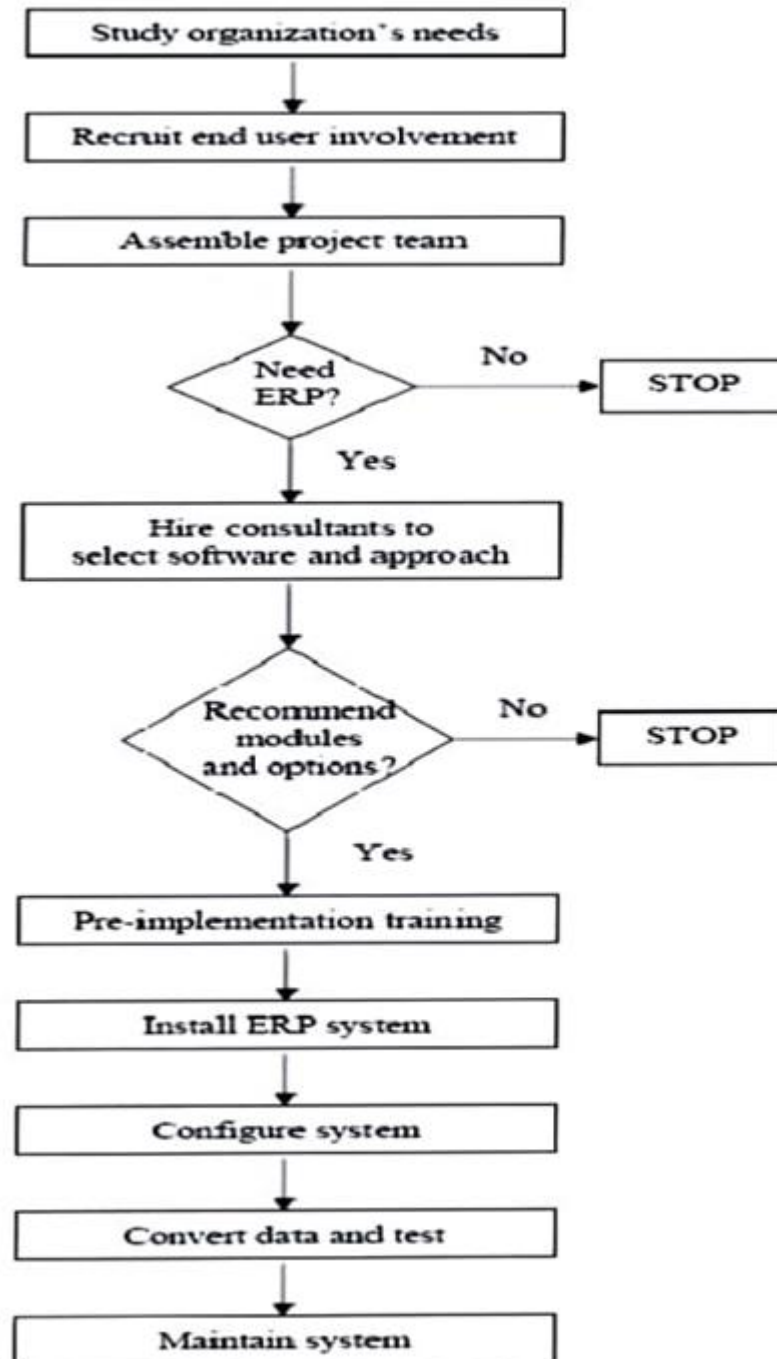


- **There are six important stages in the ERP Implementation Process:-**

- Planning
- Designing
- Development
- Testing
- Deployment
- Maintenance.

4.2 ERP Implementation Plan:-

ERP Implementation Plan



Flowchart of ERP Implementation Plan

- **Interpretation of the Flow chart:-**

The flowchart in Figure 1 depicts several activities that must be performed before implementing an ERP system. First, managers must conduct a feasibility study of the current situation to assess the organization's needs by analysing the availability of hardware, software, databases, and in house computer expertise, and make the decision to implement ERP where integration is essential.

They must also set goals for improvement and establish objectives for the implementation, and calculate the break-even points and benefits to be received from this expensive IT investment. The second major activity involves educating and recruiting end users to be involved throughout the implementation process.

Third, managers will form a project team or steering committee that consists of experts from all functional areas to lead the project. After a decision is made, a team of system consultants will be hired to evaluate the appropriateness of implementing an ERP system, and to help select the best enterprise software provider and the best approach to implementing ERP. In most situations, the consultant team will also recommend the modules that are best suited to the company's operations (manufacturing, financials, human resources, logistics, forecasting, etc.), system configurations, and Business-to-Business applications such as supply-chain management, customer relationship management, e-procurement, and e-marketplace.

The importance of adequate employee and manager training can never be overestimated. IT analysts usually recommend that managers reserve 11% of the project's budget for training. Different kinds and different levels of training must be provided to all business stakeholders, including managers, end users, customers, and vendors, before the system is implemented. Such training is usually customized and can be provided by either internal or outside trainers.

The system installation process will address issues such as software configuration. Hardware acquisition, and software testing. Data and information in the databases must be converted to the format used in the new ERP system and servers and networks need to be upgraded. System maintenance will address issues and problems that arise during operations. A post implementation review is recommended to ensure that all business objectives established during the planning phase are achieved. Needed modifications are tackled during this phase too.

4.3 ERP MODULES:-

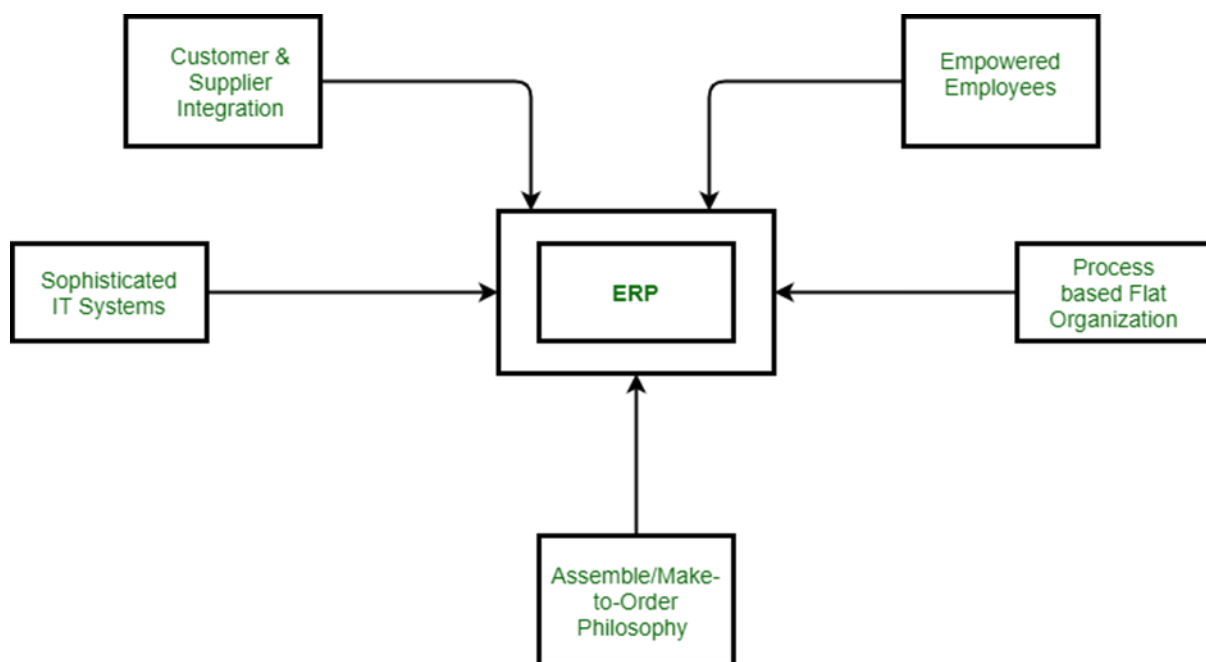


- **Some most used modules of ERP system:-**
 - **Finance and Accounting:** This module manages financial transactions.
 - **Human Resources (HR):** The HR module handles employee management.
 - **Supply Chain Management (SCM):** The SCM module manages the entire supply chain process.
 - **Customer Relationship Management (CRM):** This module focuses on managing customer interactions and relationships.
 - **Project Management:** This module facilitates project planning, execution, and monitoring.
 - **Manufacturing:** The manufacturing module helps manage production processes and workflows.

4.4 ERP Input and Output Process:-

In an Enterprise Resource Planning (ERP) system, inputs and outputs refer to the data and information that flow into and out of the system. Here's an overview of ERP inputs and outputs:

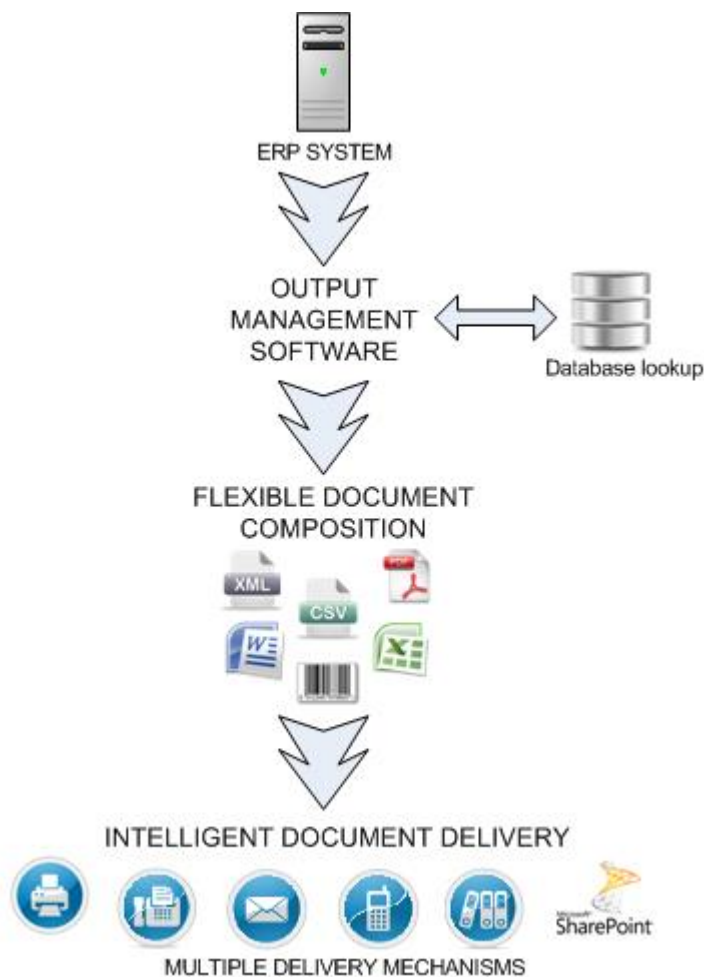
I. Inputs:



- a) **Data Entry:** Users input various types of data into the ERP system. This includes transactional data such as sales orders, purchase orders, invoices, and inventory levels. It also includes master data such as customer information, vendor details, product specifications, and employee records.
- b) **External Data Feeds:** ERP systems can receive inputs from external sources such as suppliers, customers, and partners. This may include electronic data interchange (EDI) transactions, supplier catalogs, customer orders, or data from other systems that integrate with the ERP system.

- c) **Sensor Data:** In certain industries, ERP systems may receive inputs from sensors or Internet of Things (IoT) devices. For example, sensors in a manufacturing plant may capture machine performance data or inventory levels, which are then fed into the ERP system for analysis and decision-making.
- d) **Manual Inputs:** Users may also provide manual inputs in the form of manual journal entries, data corrections, or adjustments. These inputs are typically made by authorized personnel to ensure data accuracy and integrity.

II. Outputs:-



- a) **Reports and Dashboards:** ERP systems generate various reports and dashboards as outputs. These include financial statements, sales reports, inventory status, production reports, and performance metrics. These outputs provide insights into the organization's operations, financial health, and key performance indicators.
- b) **Notifications and Alerts:** ERP systems can generate notifications and alerts as outputs. These can include reminders for pending tasks, alerts for inventory shortages, order status updates, or notifications for abnormal system conditions. These outputs help users stay informed and take timely actions.
- c) **Transactional Outputs:** ERP systems generate outputs for transactions such as purchase orders, sales orders, invoices, and payment receipts. These outputs are typically in standardized formats and can be sent to customers, suppliers, or other stakeholders.
- d) **Decision Support:** ERP systems provide outputs that support decision-making. This includes data analysis, forecasting, and simulation outputs. Decision-makers can access relevant information and insights from the ERP system to make informed strategic, operational, and tactical decisions.
- e) **Integration with Other Systems:** ERP systems can produce outputs that integrate with other systems within the organization. This includes data feeds or outputs that interface with customer relationship management (CRM) systems, supply chain management (SCM) systems, or business intelligence (BI) tools, enabling data sharing and synchronization between systems.
- f) **Electronic Data Exchange:** ERP systems generate outputs in formats suitable for electronic data exchange, such as EDI transactions, XML files, or other standardized formats. These outputs enable seamless data exchange with external systems, customers, suppliers, or regulatory bodies.

- g) Data Extracts:** ERP systems can generate data extracts or exports in various formats. These outputs allow organizations to extract specific data subsets or datasets for analysis, reporting, or integration with other systems.

Inputs and outputs in an ERP system are interconnected, with inputs being processed and transformed into outputs through various modules and functionalities within the system. The data inputs and outputs are crucial for effective decision-making, process automation, and overall business operations within an organization.

4.5 Steps in Data input in ERP System:

Step 1:- Identify Data Requirements:

- Determine the data required to be input into the ERP system.
- Identify the specific modules or areas where data needs to be entered, such as finance, sales, inventory, procurement, or HR.

Step 2:- Data Preparation:

- Collect and organize the data to be entered into the ERP system.
- Cleanse and validate the data to ensure accuracy and integrity.
- Convert data formats if necessary and ensure it meets the system's data requirements.

Step 3:- Access the ERP System:

Sign In
Oracle Applications Cloud

User ID

Password

[Forgot Password](#)

Select Language
English

ORACLE

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- Log in to the ERP system using your credentials.
- Navigate to the appropriate module or screen where data entry is performed.
- Depending on the system, you may have different access levels and roles that determine your data entry privileges.

Step 4:- Select Data Entry Form:

The screenshot shows the 'Users' form in the Oracle Applications interface. The form is divided into several sections:

- User Information:** Fields for User Name, Password, Description, and Status.
- Person Information:** Fields for Person, Customer, Supplier, E-Mail, and Fax.
- Password Expiration:** Radio buttons for Days, Accesses, and None.
- Effective Dates:** Fields for From (25-JAN-2016) and To.
- Responsibilities:** Tabs for Direct Responsibilities, Indirect Responsibilities, and Securing Attributes.
- Table:** A table with columns: Responsibility, Application, Description, Security Group, and Effective Dates (From, To).
- Buttons:** An 'Open' button at the bottom right.

- Choose the relevant data entry form or screen within the ERP system.
- The system may provide predefined forms with fields specific to the type of data you are entering.
- Some systems allow customization of forms to match specific business requirements.

Step 6:- Validate Data

Condition	Source Type	Source Value	Operator	Target Type	Target Value	Process	Actions
IF	Member Name	Account	Equals	Value	Total Cost	AND	
	Current Cell Value		>	Value	0.05	AND	
THEN	Process Cell						

- Once you have entered the data, the ERP system may perform validation checks.
- The system verifies the entered data against predefined rules, such as data type, range, and format validations.
- Address any error messages or validation issues that arise and make the necessary corrections.

Step 7:- Save or Submit Data:

- After validating the data, save or submit the entered information in the ERP system.
- Depending on the system's configuration, you may have options to save the data as a draft or submit it for processing immediately.
- Be aware of any required fields or mandatory information that must be completed before saving or submitting.

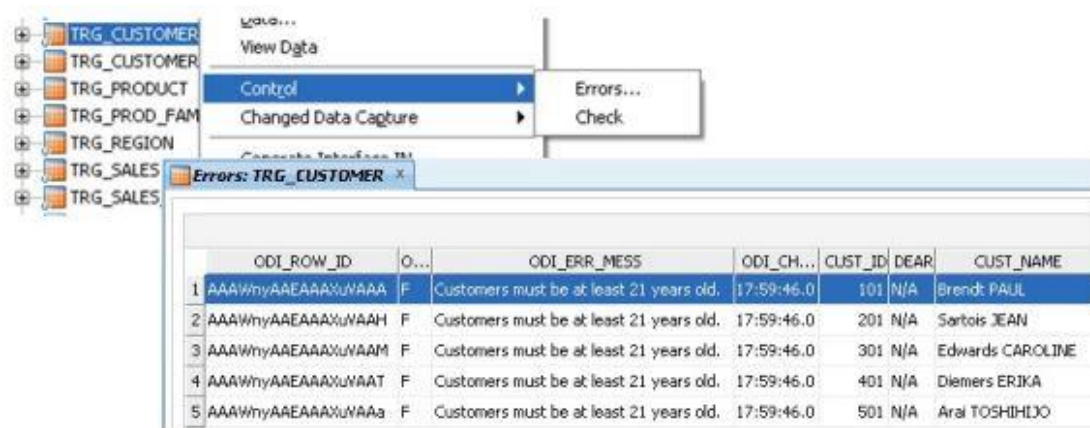
Step 8:- Review and Approvals:

- In some cases, data entry may require review and approvals from designated individuals or departments.
- Follow the designated workflow or approval processes within the ERP system.
- Collaborate with the appropriate stakeholders to ensure timely reviews and approvals.

Step 9:- Update and Modify Data:

- As business processes evolve or changes occur, you may need to update or modify existing data in the ERP system.
- Access the relevant forms or screens to make the necessary changes.
- Follow the same data entry and validation steps as mentioned earlier.

Step 10:- Monitor Data Quality:



The screenshot shows a software interface with a tree view on the left containing items like TRG_CUSTOMER, TRG_PRODUCT, TRG_PROD_FAM, TRG_REGION, TRG_SALES, and TRG_SALES. A context menu is open over TRG_CUSTOMER, showing options: View Data, Control, Errors..., and Changed Data Capture. The 'Errors...' option is selected, opening a window titled 'Errors: TRG_CUSTOMER'. This window displays a table of data quality errors.

ODI_ROW_ID	O...	ODI_ERR_MESS	ODI_CH...	CUST_ID	DEAR	CUST_NAME
1	AAAWnyAAEAAAXuWAAA	F Customers must be at least 21 years old.	17:59:46.0	101	N/A	Brendt PAUL
2	AAAWnyAAEAAAXuWAAH	F Customers must be at least 21 years old.	17:59:46.0	201	N/A	Sartois JEAN
3	AAAWnyAAEAAAXuWAAM	F Customers must be at least 21 years old.	17:59:46.0	301	N/A	Edwards CAROLINE
4	AAAWnyAAEAAAXuWAAT	F Customers must be at least 21 years old.	17:59:46.0	401	N/A	Diemers ERIKA
5	AAAWnyAAEAAAXuWAAa	F Customers must be at least 21 years old.	17:59:46.0	501	N/A	Arai TOSHIKO

- Continuously monitor the quality of the data entered into the ERP system.
- Regularly review data reports, conduct audits, and resolve any data discrepancies or issues.
- Implement data governance practices to ensure on-going data accuracy, consistency, and compliance.

4.4 Steps in Data Output process in ERP System:-

Step 1:- Access the ERP System:

- Log in to the ERP system using your credentials.
- Depending on your access privileges and roles, navigate to the appropriate module or screen where data output is generated.

Step 2:- Select Output Reports or Queries:

The screenshot displays the Oracle Applications - Enginetics Blitz Report™ demo interface. The main window shows the 'AR Transaction Line Details' report, which is a table of receivables transactions and line details. The report is filtered by 'Category' (ORDER ENTRY) and 'Inv. Date From' (01-JAN-2006). The report includes columns for Account Number, Party Name, Item, Description, Amount, Currency, Tax Amount, Amount Incl Tax, Sales Order Date, and Revenue Account. The data is presented in a grid format, with rows representing individual transaction lines. The report is titled 'AR Transaction Line Details 19-Jan-2018 19:30:3 - Excel' and is displayed in a window titled 'AR Transaction Line Details'.

Account Number	Party Name	Item	Description	Amount	Currency	Tax Amount	Amount Incl Tax	Sales Order Date	Revenue Account
656 1002	Imaging Innovations, Inc.	XP9001	Silver List #1.202689	-500.00	USD	-32.5	-532.5	11-Jan-06 01:440-4110-0000-270	
657 1002	Imaging Innovations, Inc.	XP9001	Digital Camera, Standard	9,999.75	USD	649.98	10649.73	11-Jan-06 01:440-4110-0000-270	
658 1002	Imaging Innovations, Inc.	XP9001	Silver List #1.202689	-500.00	USD	-32.5	-532.5	11-Jan-06 01:440-4110-0000-270	
659 1002	Imaging Innovations, Inc.	XP9001	Digital Camera, Standard	9,999.75	USD	649.98	10649.73	11-Jan-06 01:440-4110-0000-270	
660 1002	Imaging Innovations, Inc.	XP9001	Silver List #1.202689	-500.00	USD	-32.5	-532.5	11-Jan-06 01:440-4110-0000-270	
661 1002	Imaging Innovations, Inc.	XP9001	Digital Camera, Standard	9,999.75	USD	649.98	10649.73	11-Jan-06 01:440-4110-0000-270	
662 1002	Imaging Innovations, Inc.	XP9001	Silver List #1.202689	-500.00	USD	-32.5	-532.5	11-Jan-06 01:440-4110-0000-270	
663 1002	Imaging Innovations, Inc.	XP9001	Digital Camera, Standard	9,999.75	USD	649.98	10649.73	11-Jan-06 01:440-4110-0000-270	
664 1002	Imaging Innovations, Inc.	XP9001	Silver List #1.202689	-500.00	USD	-32.5	-532.5	11-Jan-06 01:440-4110-0000-270	
665 1002	Imaging Innovations, Inc.	XP9001	Digital Camera, Standard	9,999.90	USD	259.99	4259.89	11-Jan-06 01:440-4110-0000-270	
666 1002	Imaging Innovations, Inc.	XP9001	Silver List #1.202689	-200.00	USD	-13	-213	11-Jan-06 01:440-4110-0000-270	
667 3849	Sunshine ElectroCity	XP9001	Digital Camera, Standard	9,999.75	USD	699.98	10699.73	11-Jan-06 01:421-4110-0000-270	
668 3849	Sunshine ElectroCity	XP9001	Digital Camera, Standard	39,999.00	USD	2799.93	42798.93	11-Jan-06 01:421-4110-0000-270	
669 3849	Sunshine ElectroCity	XP9001	Digital Camera, Standard	9,999.75	USD	699.98	10699.73	11-Jan-06 01:421-4110-0000-270	
670 3849	Sunshine ElectroCity	XP9001	Digital Camera, Standard	1,999.95	USD	140	2139.95	11-Jan-06 01:421-4110-0000-270	
671 3849	Sunshine ElectroCity	XP9001	Digital Camera, Standard	39,999.00	USD	2799.93	42798.93	11-Jan-06 01:421-4110-0000-270	
672 1168	Bigmart	XP9002	Digital Camera, Deluxe	12,499.75	USD	765.61	13265.36	11-Jan-06 01:440-4110-0000-270	
673 1168	Bigmart	XP9002	Gold List #1.8202	-1,250.00	USD	-76.56	-1326.56	11-Jan-06 01:440-4110-0000-270	
674 1168	Bigmart	XP9002	Digital Camera, Deluxe	12,499.75	USD	765.61	13265.36	11-Jan-06 01:440-4110-0000-270	
675 1168	Bigmart	XP9002	Gold List #1.8202	-1,250.00	USD	-76.56	-1326.56	11-Jan-06 01:440-4110-0000-270	
676 1167	Goodway	XP9002	Digital Camera, Deluxe	14,999.70	USD	1222.48	16222.18	11-Jan-06 01:422-4110-0000-270	
677 1167	Goodway	XP9002	Silver List #1.202689	-750.00	USD	-61.13	-811.13	11-Jan-06 01:422-4110-0000-270	
678 1167	Goodway	XP9002	Digital Camera, Deluxe	13,499.73	USD	1100.23	14599.96	11-Jan-06 01:422-4110-0000-270	
679 1167	Goodway	XP9002	Silver List #1.202689	-675.00	USD	-55.01	-730.01	11-Jan-06 01:422-4110-0000-270	
680 1167	Goodway	XP9002	Digital Camera, Deluxe	4,999.90	USD	407.49	5407.39	11-Jan-06 01:422-4110-0000-270	
681 1167	Goodway	XP9002	Silver List #1.202689	-250.00	USD	-20.38	-270.38	11-Jan-06 01:422-4110-0000-270	
682 1167	Goodway	XP9002	Digital Camera, Deluxe	13,499.73	USD	1100.23	14599.96	11-Jan-06 01:422-4110-0000-270	
683 1167	Goodway	XP9002	Silver List #1.202689	-675.00	USD	-55.01	-730.01	11-Jan-06 01:422-4110-0000-270	
684 1167	Goodway	XP9002	Silver List #1.202689	-250.00	USD	-20.38	-270.38	11-Jan-06 01:422-4110-0000-270	
685 1167	Goodway	XP9002	Digital Camera, Deluxe	4,999.90	USD	407.49	5407.39	11-Jan-06 01:422-4110-0000-270	

- Identify the specific reports, queries, or data outputs that you need from the ERP system.
- The system may offer a variety of predefined reports or customizable queries to retrieve the desired data.

Step 3:- Define Report Parameters:

The screenshot shows the 'Concurrent Programs' window with the following configuration details:

- Program:** GOV Supervisor Hierarchy Report (Enabled)
- Short Name:** GOV_TEST_TEMP
- Application:** Application Object Library
- Description:** (Empty)
- Executable:**
 - Name:** XDODTEXE
 - Method:** Java Concurrent Program
 - Options:** (Empty)
 - Priority:** (Empty)
- Request:**
 - Type:** (Empty)
 - Incrementor:** (Empty)
 - MLS Function:** (Empty)
 - ☒ Use in SRS
 - ☐ Run Alone
 - ☐ Enable Trace
 - ☐ Allow Disabled Values
 - ☒ Restart on System Failure
 - ☒ NLS Compliant
- Output:**
 - Format:** XML
 - ☒ Save (S)
 - ☒ Print
 - Columns:** (Empty)
 - Rows:** (Empty)
 - Style:** (Empty)
 - ☐ Style Required
 - Printer:** (Empty)
- Business Events:**
 - ☐ Request Submitted (Y)
 - ☐ Request On Hold
 - ☐ Request Resumed
 - ☐ Request Running
 - ☐ Program Completed
 - ☐ Post Processing Started
 - ☐ Post Processing Ended
 - ☐ Request Completed (Z)
- Buttons:** Copy to..., Session Control, Incompatibilities, Parameters (highlighted)

- Specify the parameters or criteria for the data output, such as a specific date range, department, product, or customer.
- Use the available options within the ERP system to select and filter the data according to your requirements.

Step 4:- Generate Output:-

- Trigger the generation of the desired output by clicking on the appropriate button or selecting the relevant option.
- The ERP system will process the data and generate the output based on the defined parameters and criteria.

Step 5:- Review and Verify the Output:

- Carefully review the generated output to ensure it meets your expectations.
- Check for accuracy, completeness, and relevance of the data presented in the output.
- Cross-reference the output with the defined parameters to ensure data integrity.

Step 6:- Save or Export the Output:

ORACLE[®] Purchasing

Diagnostics Home Logout Preferences

Purchasing Options Go

* Indicates required field Cancel Save

Document Control

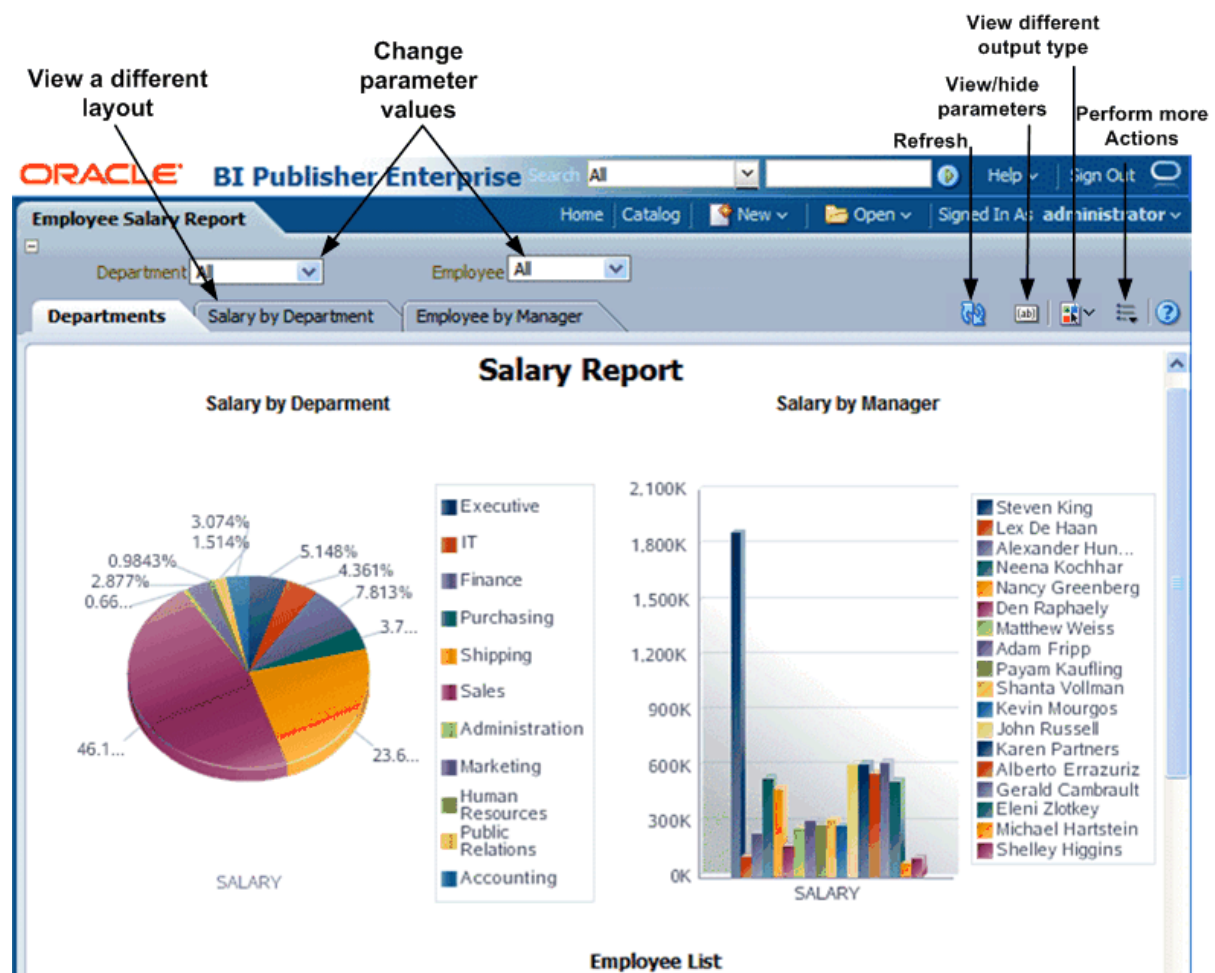
Price Tolerance (%)	<input type="text"/>	<input type="checkbox"/> Enforce Price Tolerance (%)
Price Tolerance Amount (CAD)	<input type="text"/>	<input type="checkbox"/> Enforce Price Tolerance Amount
Enforce Full Lot Quantity	None <input type="button" value="v"/>	<input type="checkbox"/> Display Disposition Messages
Receipt Close Point	Delivered <input type="button" value="v"/>	<input checked="" type="checkbox"/> Notify if Blanket PO exists
Cancel Requisitions	Optionally <input type="button" value="v"/>	<input type="checkbox"/> Allow Item Description Update
SBI Buying Company Identifier	<input type="text"/>	<input checked="" type="checkbox"/> Enforce Buyer Name
Output Format	PDF <input type="button" value="v"/>	<input checked="" type="checkbox"/> Enforce Supplier Hold
Maximum Attachment Size (in MB)	0	<input type="checkbox"/> Gapless Invoice Numbering
Email Attachment Filename	Attachments.zip	<input type="checkbox"/> RFQ Required
		<input checked="" type="checkbox"/> Group Shipments

- Save the output report or export it to a desired format, such as PDF, Excel, CSV, or HTML.
- Some ERP systems provide options to save the output within the system for future reference or share it with others.

Step 7:- Distribute or Share the Output:

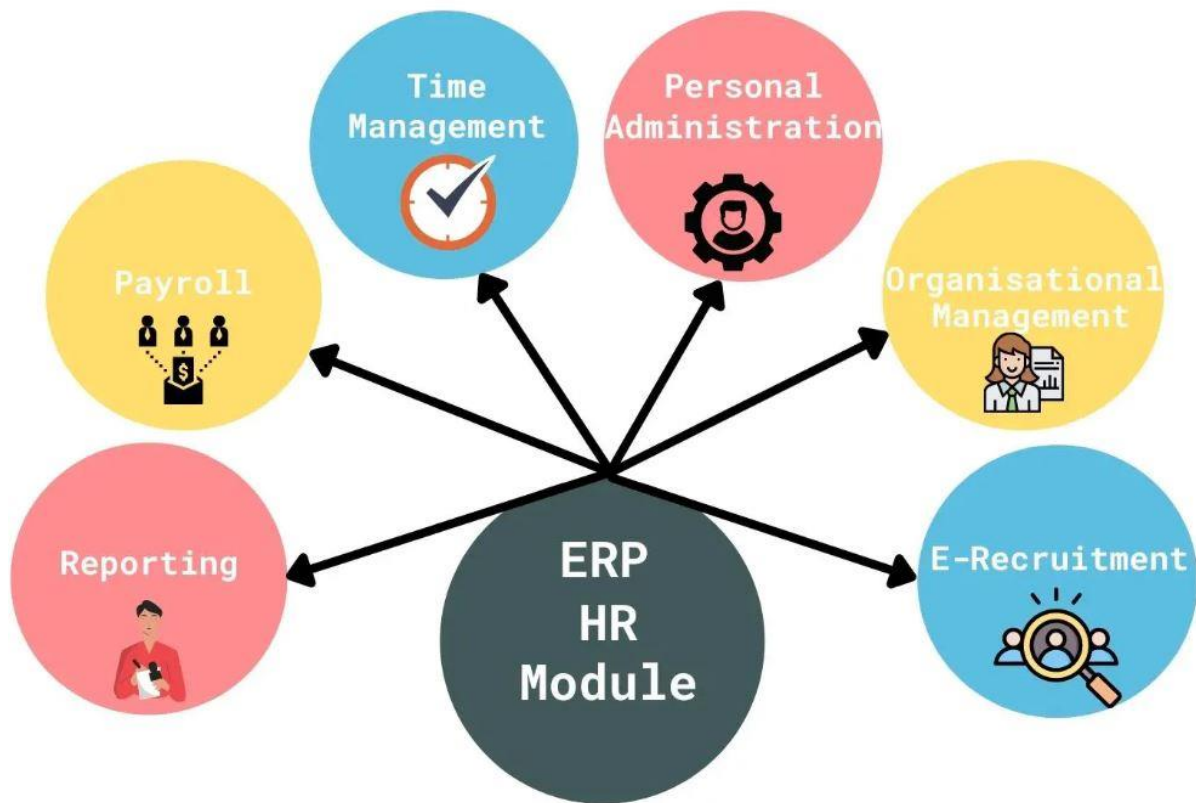
- Depending on the intended recipients, distribute or share the output with the relevant stakeholders.
- This can be done through various means, such as email, printing, file sharing platforms, or integrated collaboration tools.

Step 8:- Analyse and Interpret the Output:



- Analyse the data presented in the output to gain insights and make informed decisions.
- Use data visualization tools, graphs, or charts to facilitate analysis and interpretation.
- Compare the output with previous reports or benchmarks to identify trends, patterns, or areas for improvement.

4.6 Use of Human resource management module in FineShift Software:-



- The Human Resource (HR) module in an Enterprise Resource Planning (ERP) system is designed to streamline and automate HR processes and activities within Fineshift Software Pvt. Ltd.
- This module helped Fineshift to manage various aspects of human resource management, including employee data, payroll, benefits administration, recruitment, training, and performance management.

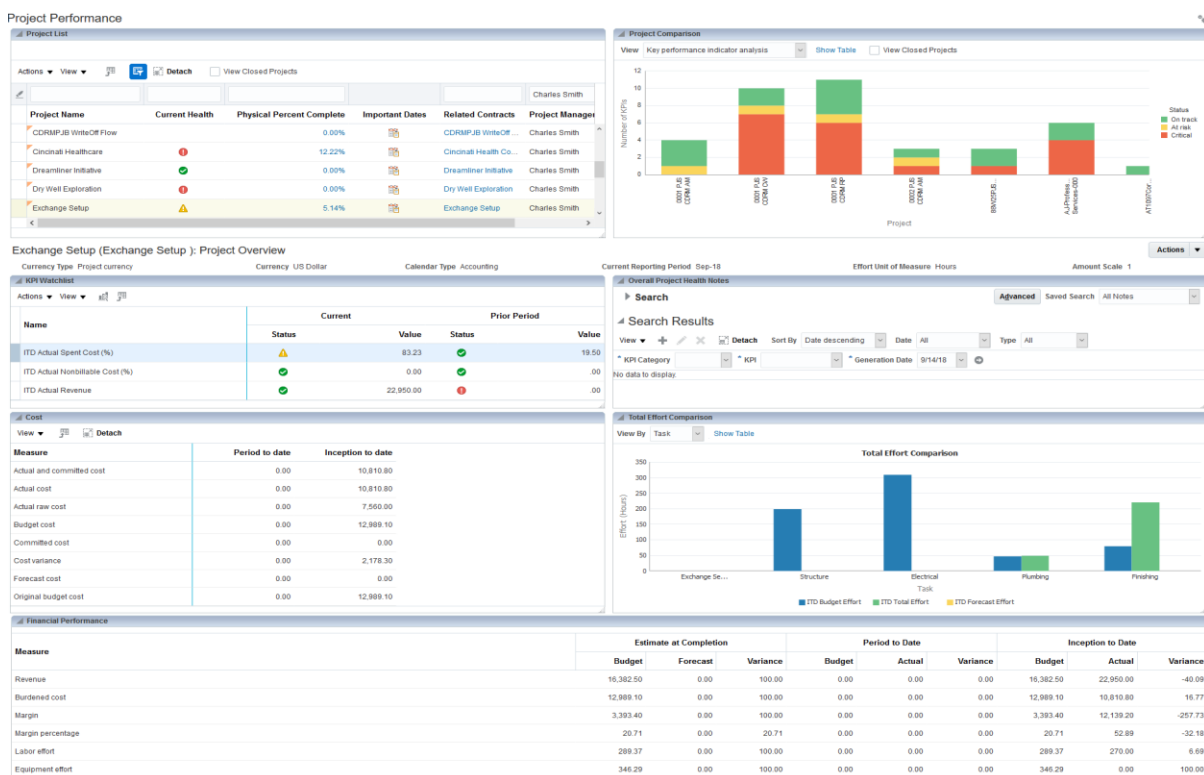
• 4.7 Snapshots of Oracle ERP Dashboards

i. Oracle ERP Analysis Decks:-



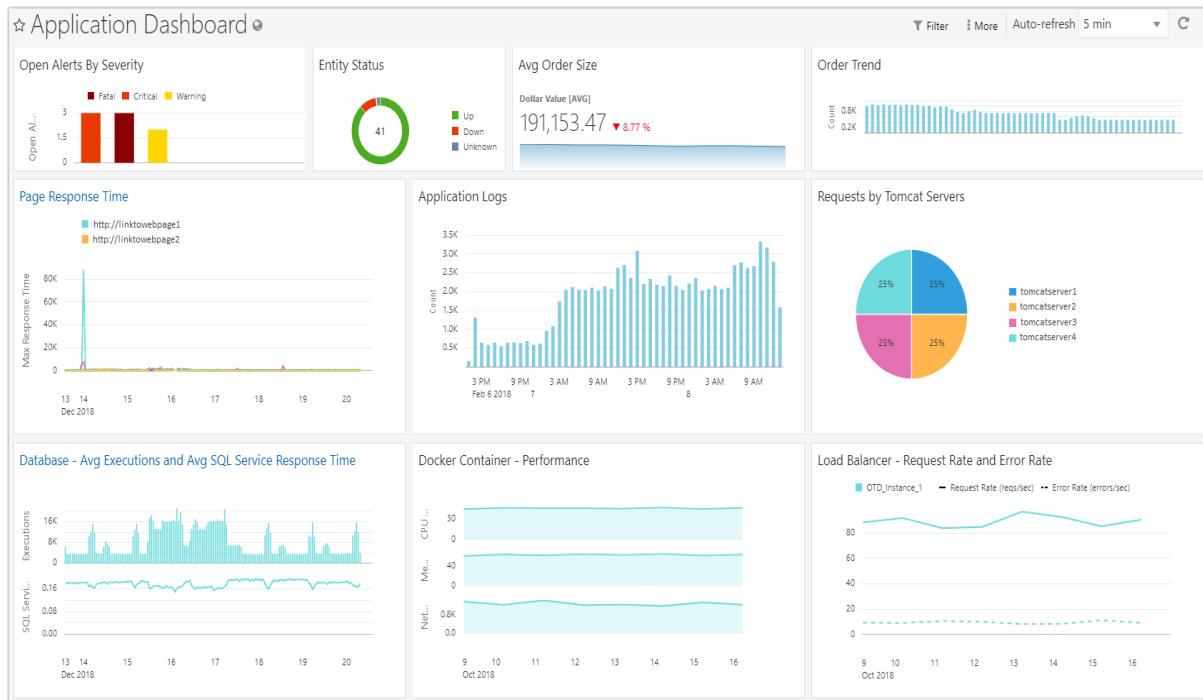
- Oracle ERP Analysis Decks are pre-built analytics reports and dashboards that provide organizations with real-time insights into their financial and operational performance.
- The decks cover a range of business areas, including financial management, supply chain management, human resources, and project portfolio management.
- The analysis decks are designed to help organizations quickly and easily analyze their data, identify trends, and make informed decisions.

ii. Oracle ERP Project Portfolio Management:-



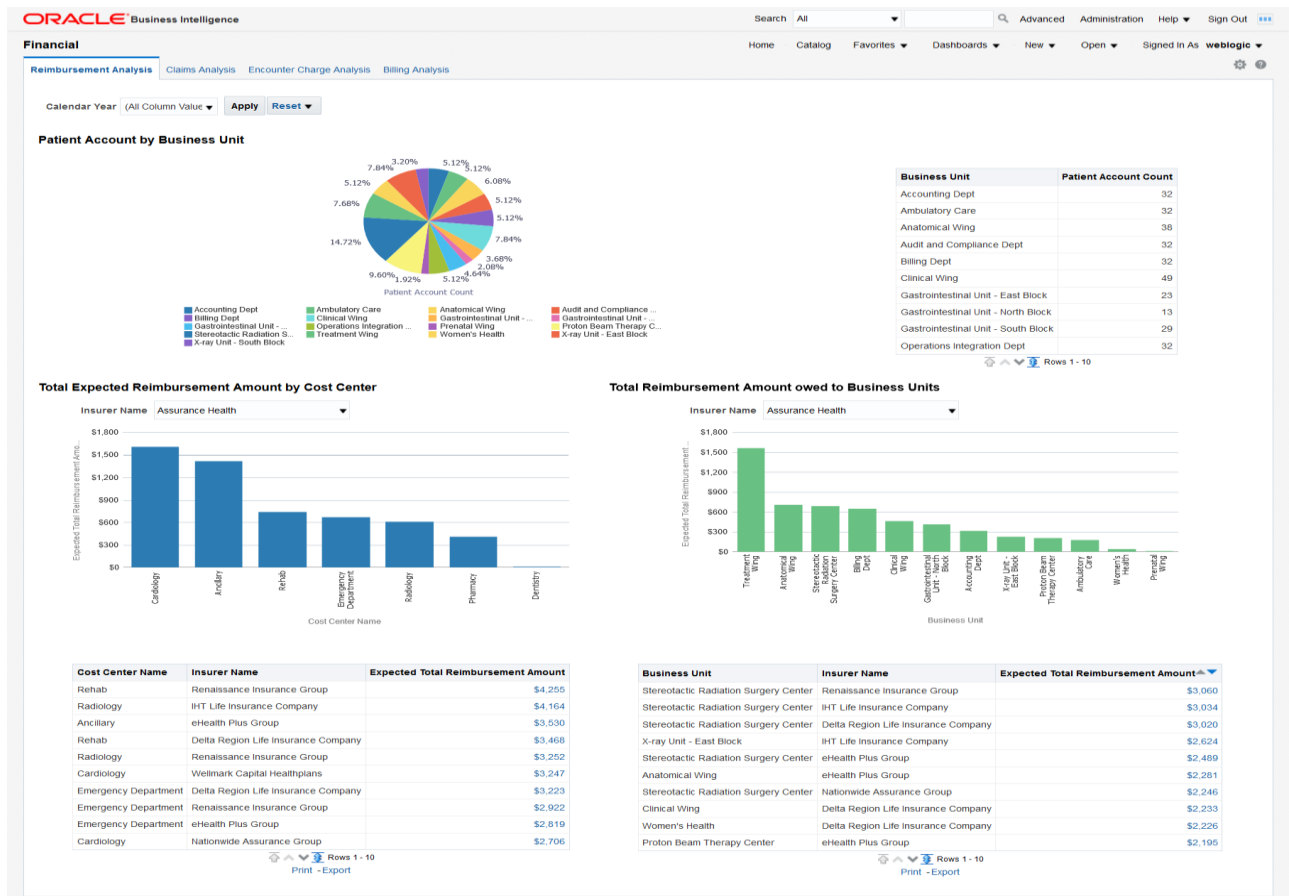
- Oracle ERP Project Portfolio Management is a solution that helps organizations to manage their project portfolios effectively.
- The solution offers features such as project planning, resource management, financial management, and collaboration tools.

iii. Oracle APM Dashboard:-



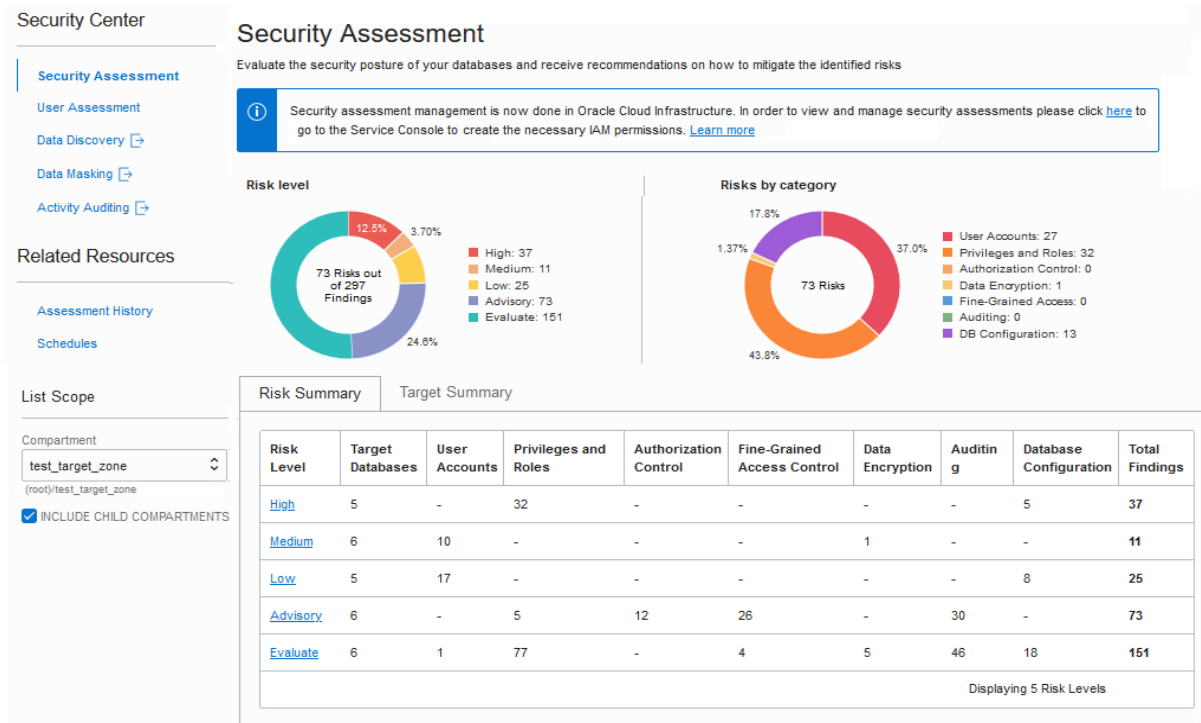
- The Oracle APM Dashboard is a tool that provides users with real-time visibility into the performance of their applications and infrastructure.
- It offers a unified view of application and infrastructure health, as well as user experience and business impact.
- It also offers customizable dashboards, alerts, and reports to help users monitor and manage their applications effectively.
- The solution helps organizations to improve project outcomes, reduce project risk, and increase project delivery efficiency.

iv. Oracle Financial Management dashboard:-



- The Oracle ERP Financial Management Dashboard is a tool that provides users with real-time visibility into their financial performance.
- It offers a unified view of financial data from various sources, including accounts payable, accounts receivable, general ledger, and cash management.
- The dashboard allows users to quickly identify financial issues, drill down into detailed financial metrics, and take corrective actions to improve financial performance.

v. Oracle ERP Security Assessment:-



- Oracle ERP Security Assessment is a process of evaluating the security of an organization's ERP system, identifying potential security risks and vulnerabilities, and recommending measures to mitigate them.
- It involves a comprehensive review of the ERP system's configuration, access controls, authentication mechanisms, and data protection mechanisms.
- The assessment helps organizations to identify gaps in their security controls and ensure compliance with industry regulations.

CHAPTER – V

Findings, Suggestions and Conclusion

5.1 Findings:-

- After the study of ERP system and ERP Implementation, in the Fineshift Software Pvt. Ltd., it is found that ERP system aims to streamline the business and aims to automate the tasks.
- The Business process of Fineshift Software Pvt. Ltd. has been improved after implementation of ERP.
- After the study of input and output process of ERP it is found that data quality of Fineshift Software is at good condition.
- Here are some key benefits that are found after the study of different ERP modules for Fineshift Software Pvt. Ltd. :-
 - i. **Increased efficiency:** ERP implementation has streamlined business processes, automate manual tasks, and eliminate redundant data entry, leading to increased efficiency and productivity.
 - ii. **Improved data quality:** ERP implementation has improved data accuracy and consistency by providing a single source of truth for all business data, reducing errors and improving decision-making.
 - iii. **Enhanced financial management:** ERP implementation has provided better financial visibility and control, enabling organizations to manage cash flow, reduce financial risk, and comply with regulatory requirements.
 - iv. **Improved collaboration and communication:** ERP implementation has improved collaboration and communication among different departments and stakeholders, leading to better decision-making and problem-solving.
 - v. **Increased scalability:** ERP implementation has provided a flexible platform that can grow and adapt to changing business needs and requirements, enabling organizations to scale and expand their operations more easily.

5.2 Suggestions:-

- i. **Regular system updates:** It is important to keep the ERP system up to date with the latest software patches, updates, and new releases. This will ensure that the system is running smoothly and efficiently, and that it is secure and compliant with the latest regulations.
- ii. **Training and support:** Provide regular training and support for employees who use the ERP system. This can include training on new features and functionality, as well as on-going support to help employees troubleshoot problems and find solutions.
- iii. **Integration with other systems:** Consider integrating the ERP system with other systems and applications used by the organization. This can help streamline business processes and workflows, reduce data entry errors, and improve data accuracy and consistency.
- iv. **Customization and configuration:** Customize and configure the ERP system to meet the specific needs and requirements of the organization. This can include creating custom reports and dashboards, configuring workflows and approvals, and creating custom fields and data structures.
- v. **Data analytics and reporting:** Use data analytics and reporting tools to gain insights into business performance and identify areas for improvement. This can help organizations make data-driven decisions and optimize business processes.
- vi. **User feedback and input:** Solicit user feedback and input to identify areas for improvement and make changes to the ERP system that better meet the needs and requirements of the organization.

Overall, ERP improvement requires on-going attention and investment to ensure that the system continues to meet the changing needs and requirements of the organization. By implementing these suggestions, organization can optimize their ERP systems to improve efficiency, accuracy, and decision-making.

5.3 Conclusion:-

After the study it is concluded that ERP implementation can be a complex and challenging process, but it can also provide significant benefits for organizations. By implementing an ERP system, Fineshift Software Pvt. Ltd. has streamlined business processes, automated manual tasks, and improved data accuracy and consistency, leading to increased efficiency, better decision-making, and improved customer service.

However, ERP implementation requires careful planning, involvement of all stakeholders, effective change management, thorough testing and validation, and continuous improvement. It is important to define clear goals and objectives for the project, choose the right ERP system, involve all stakeholders, plan for change management, test and validate, monitor and measure, and continuously improve.

Successful ERP implementation has provided significant benefits for the Fineshift Software Pvt. Ltd., including increased efficiency, improved decision-making, and better customer service. However, it is important to carefully plan and execute ERP implementation to ensure that the system meets the specific needs and requirements of the organization, and those users are properly trained and supported. By following best practices and implementing on-going improvements, organizations can optimize their ERP systems to achieve their business goals and objectives.

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