



Enterprise Resource Planning for Financial Analysts

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ABSTRACT

In the present business environment, role of a financial analyst is considered to be very important and inevitable. Financial analyst as managers, consultants, advisors or auditors plays an important role in controlling, managing, and supporting the business. As the business needs are very complex in nature, the implementation of an ERP package needs financial analyst with functional skills for evaluation, Business Process Reengineering (BPR), Mapping of Business requirements, Report designing, ensuring Business controls, customization of the package for the specific requirements, Documentation etc., Sooner or later a financial analyst without the knowledge of ERP may feel as if he is a fish out of the bowl. By this article it is attempted to highlight various aspects of ERP and specific areas of ERP that are relevant for financial analysts.

KEYWORD

ERP	Finance
Organization	Enterprise
Planning	BPR
Design	Implementation

Preface

Enterprise Resource Planning is the latest high-end solution information technology has lent to business application. The ERP solutions seek to streamline and integrate operation processes and information flows in the company to synergize the resources of an organization namely men, material, money and machine through information. Initially implementation of an ERP package was possible only for very large Multi National Companies and Infrastructure Companies due to high cost involved. Today many companies in India have gone in for implementation of ERP and it is expected in the near future that 60% of the companies will be implementing one or the other ERP packages since this will become a must for gaining competitive advantage.

Evolution of ERP

In the ever-growing business environment the following demands are placed on the industry:

- Aggressive Cost control initiatives
- Need to analyze costs / revenues on a product or customer basis
- Flexibility to respond to changing business requirements
- More informed management decision making
- Changes in ways of doing business

Difficulty in getting accurate data, timely information and improper interface of the complex natured business functions has been identified as the hurdles in the growth of any business. Time and again depending upon the velocity of the

growing business needs, one or the other applications and planning systems have been introduced into the business world for crossing these hurdles and for achieving the required growth. They are:

- Management Information Systems (MIS)
- Integrated Information Systems (IIS)
- Executive Information Systems (EIS)
- Corporate Information Systems (CIS)
- Enterprise Wide Systems (EWS)
- Material Resource Planning (MRP)
- Manufacturing Resource Planning (MRP II)
- Money Resource Planning (MRP III)

The latest planning tool added to the above list is Enterprise Resource Planning.

Need for ERP

Most organizations across the world have realized that in a rapidly changing environment, it is impossible to create and maintain a custom designed software package, which will cater to all their requirements and also be completely up-to-date. Realizing the requirement of user organizations some of the leading software companies have designed Enterprise Resource Planning software which will offer an integrated software solution to all the functions of an organization.

Features of ERP

Some of the major features of ERP and what ERP can do for the business system are as below [Antweiler Werner and Trefler Daniel, 2002]:

- ERP facilitates company-wide Integrated Information System covering all functional areas like Manufacturing, Selling and distribution, Payables, Receivables, Inventory, Accounts, Human resources, Purchases etc.,
- ERP performs core corporate activities and increases customer service and thereby augmenting the Corporate Image.
- ERP bridges the information gap across the organization.
- ERP provides for complete integration of Systems not only across the departments in a company but also across the companies under the same management.
- ERP is the only solution for better Project Management.
- ERP allows automatic introduction of latest technologies like Electronic Fund Transfer (EFT), Electronic Data

Interchange (EDI), Internet, Intranet, Video conferencing, E-Commerce etc.

- ERP eliminates the most of the business problems like Material shortages, Productivity enhancements, Customer service, Cash Management, Inventory problems, Quality problems, Prompt delivery etc.,
- ERP not only addresses the current requirements of the company but also provides the opportunity of continually improving and refining business processes.
- ERP provides business intelligence tools like Decision Support Systems (DSS), Executive Information System (EIS), Reporting, Data Mining and Early Warning Systems (Robots) for enabling people to make better decisions and thus improve their business processes. [Gupta, Anil & Govindarajan, V, 2002]

Components of ERP

To enable the easy handling of the system the ERP has been divided into the following Core subsystems:

- **Sales and Marketing**
- Master Scheduling
- Material Requirement Planning
- Capacity Requirement Planning
- Bill of Materials
- Purchasing
- Shop floor control
- Accounts Payable/Receivable
- Logistics
- Asset Management
- Financial Accounting

Suppliers of ERP

There are many numbers of ERP suppliers who are very active in the

market. Some of the companies offering renowned international ERP products include:

- Baan
- CODA
- D&B
- IBM
- JD Edwards
- Marcarn

- Oracle
- Peoplesoft
- Platinum
- Ramco
- SAP
- SMI
- Software 2000

BPR and ERP

Business Process Reengineering is a pre-requisite for going ahead with a powerful planning tool, ERP. An in depth BPR study has to be done before taking up ERP. Business Process Reengineering brings out deficiencies of the existing system and attempts to maximize productivity through restructuring and re-organizing the human resources as well as divisions and departments in the organization. [Sahay S, Walsham G, 2002]

Business Process Engineering evolves the following Steps:

- Study the current system
- Design and develop new systems
- Define Process, organization structure and procedure
- Develop customize the software
- Train people
- Implement new system

The principle followed for BRP may be defined as USA principle (Understand, Simplify Automate) i.e., Understanding the existing practices, Simplifying the Processes and Automate the Process. Various tools used for this principle are charted below:

- **Understand Simplify Automate**
- **Diagramming Eliminating EDI**

- **Story-boarding Combining ERP**

- **Brain storming Rearranging**

business process itself or customize the ERP system so that it suits the business process. Deciding this is paramount to ERP implementation. BPRERP has lot of conflicts. The pros and cons of each of them are explained in the following paragraphs:

Change and BPR

BPR is inevitable not only for ERP but as far as any business process is concerned. BPR becomes the first step in the process of ERP implementation. Business process reengineering is taken to conduct feasibility study and other restructuring exercises. Nothing can be done to prevent change. The best way to manage change is to adopt it. Time and again it has been proved that imposing change of any magnitude all on a sudden is not the proper way. There needs to be a proper method to bring about it. Business process reengineering is one scientific study that helps organizations largely to analyse the viability of not only ERP but any other dynamic change. BPR ERP is interrelated. [Verma, S, 1998]

BPR does not necessarily stop with the process of identifying the possibility. It also suggests a series of steps that needs to be executed, for ERP to find a place in the organization. BPR is the first step that comes prior to ERP implementation. The reason is simple. Many parameters are taken while preparing ERP. This includes the assumption of Predefined functions. Hence ERP software will be preconceived to perform those set of functions. On the other hand companies expect ERP to function in such a way that it coincides with the regular business process. BPR ERP can be the biggest challenge for the vendor and the company as such. BPR ERP forms an important part of ERP study.

Solving BPR-ERP Clash

There are two alternatives that will help the companies to combat this menace. The company can either restructure the

Implementing ERP Software to Suit Business Needs

When the company demands particular ERP software they have to make compromises on the budget because reworking modules and supplying an ERP Software would definitely be a costly affair. This is because of the complications involved in doing the same. Apart from finance this also calls for persons with greater working knowledge to design the systems. This means the process is not going to be unambiguous. The process will also require frequent updations. This is going to be difficult taking into account the several changes that has already been inflicted on the system to make it business friendly.

Restructuring the business process to be ERP Friendly:

This method also requires lots of monetary outlay because of the major change in business process. The customers will not be receptive to changes in business process. It is possible to train the employees but whereas in the case of customers they cannot be expected to stay in tune in tune with the whims and fancies of the organization. It is possible to train the employees. The likelihood of them to adapting to the change at the immediate outset is very much limited. This will cast a spell on the revenue of the business and unless ERP does not make it good in the later days the voluminous investment cannot be justified. [Christie W, 2001]

Selection of ERP

Once the BPR is completed the next task is to evaluate and select a suitable package for implementation. Evaluation of the right ERP package is considered as more crucial step. Evaluation and selection involves:

- checking whether all functional aspects of the Business are duly covered
- checking whether all the business functions and processes are fully integrated
- checking whether all the latest IT trends are covered
- checking whether the vendor has customizing and implementing capabilities
- checking whether the business can absorb the cost
- checking whether the ROI is optimum

Implementation of ERP

Implementing an ERP package has to be done on a phased manner. Step by step method of implementing will yield a better result than big-bang introduction. The total time required for successfully implementing an ERP package will be anything between 18 and 24 months. [Chase, Richard B., and Nicholus J. Aquilano, 2006]

The normal steps involved in implementation of an ERP are as below:

- Project Planning
- Business & Operational analysis including Gap analysis
- Business Process Reengineering
- Installation and configuration
- Project team training
- Business Requirement mapping
- Module configuration
- System interfaces
- Data conversion
- Custom Documentation
- End user training
- Acceptance testing
- Post implementation/Audit support

The above steps are grouped and sub-divided into four major phases namely

- 1) Detailed discussions,
- 2) Design & Customization,
- 3) Implementation and
- 4) Production

Benefits of ERP

The benefits accruing to any business enterprise on account of implementing are unlimited. According to the companies like NIKE, DHL, Tektronix, Fujitsu, Millipore, Sun Microsystems, following are some of the benefits they

achieved by implementing ERP packages:

- Gives Accounts Payable personnel increased control of invoicing and payment processing and thereby boosting their productivity and eliminating their reliance on computer personnel for these operations.
- Reduce paper documents by providing on-line formats for quickly entering and retrieving information.
- Improves timeliness of information by permitting, posting daily instead of monthly.
- Greater accuracy of information with detailed content, better presentation, fully satisfactory for the Auditors.
- Improved Cost Control
- Faster response and follow up on customers
- More efficient cash collection, say, material reduction in delay in payments by customers.
- Better monitoring and quicker resolution of queries.
- Enables quick response to change in business operations and market conditions.
- Helps to achieve competitive advantage by improving its business process.
- Improves supply-demand linkage with remote locations and branches in different countries.
- Provides a unified customer database usable by all applications.
- Improves International operations by supporting a variety of tax structures, invoicing schemes, multiple currencies, multiple period accounting and languages.
- Improves information access and management throughout the enterprise.
- Provides solution for problems like Y2K and Single Monetary Unit (SMU) or Euro Currency

Significance of ERP Implementation

Companies have to clearly know what enterprise resource is planning before thinking of implementing them. The catch word of ERP implementation is speed. The faster it is implemented the quicker and better are the advantages and delivery in terms of results. This early process has another hold. The returns are sought at a shorter period. This deviation from the conventional practice has become the order of the day as far as many companies are concerned. Formerly Business process reengineering played a vital role with respect to implementation. It is important to know the components of Enterprise resource planning .Merely defining enterprise resource planning will not help in this.

This naturally paved way to development of gaps between the actual results and the one derived during the process of foreseeing. Tuning ERP as per the whims and fancies of the practices followed in the company became a routine affair. This led to logging and dragging beyond the time limits permitted. It was monetarily pinching and played havoc in the customer's trust. It is also necessary to understand that mere ERP planning does not guarantee the benefit of ERP. It has to be implemented as planned after understanding the components of enterprise resource planning.

In spite of having improved the implementation issues what remains static and unfettered is the manner in which companies go ahead with ERP implementation. In fact they don't even check the desirability of going into ERP. Some issues that an organization has to address after defining enterprise resource planning are:

- Popular information systems
- Likelihood of fluctuations in the choice of technology
- The ability of market players to stay in tune with it
- The ways and means to implement a business applications like ERP

- To benefit from the same so as to gain a competitive edge
- Their usage and services
- The necessity for innovating software applications

If an organization is able to answer these questions without any ambiguity and substantiate the results then it can be said that it has a path or up focus in taking ERP. The questions mentioned above are crucial and will even decide the business model of the company. ERP implementation is a vital in the whole process of ERP. They can take place only if one understands "What is enterprise resource Planning" and defining enterprise resource planning in their organization. [Bruce, Harry J, 2005]

Current Approach

It is essential to have an overview of the current approach. The current approach is claimed to be relatively successful. The current approach more popularly referred to as "baan" has two underlying principles:

The idea which concentrates on molding the business: This category is prominent when the organizational unit calls for a radical restructuring process by all means. This process will be carried in all aspects of the business .Some of them include strategic maneuver, operation of trade and the circumstances that call for change and adaptability. Defining enterprise resource planning in context to the concerned organization will help to decide on this issue.

The plan which lays more emphasis on technical parameters: Here business takes the back seat. The thrust lies on technical dimensions. This does not ignore the commercial viability as such but they occupy seat only in the due course of time more so when operations are triggered in full stream and not at the initial stage itself. The advantage with this type is that it does not call for an immediate modification of the business structure. However it is essential to know the components of enterprise resource planning.

ERP Implementation Life Cycle

The process of ERP implementation is referred as d as "ERP Implementation Life Cycle". The following are the steps involved in completing the lifecycle.

Shortlist on the basis of observation

Selecting an ERP package for the company can nevertheless be compared with the process of "Selecting the right Person for the Right Job". This exercise will involve choosing few applications suitable for the company from the whole many.

Assessing the chosen packages

A team of Experts with specialized knowledge in their respective field will be asked to make the study on the basis of various parameters. Each expert will not only test and certify if the package is apt for the range of application in their field but also confirm the level of coordination that the software will help to achieve in working with other departments. In simple terms they will verify if the synergy of the various departments due to the advent of ERP will lead to an increased output. A choice is to be made from ERP implementation models. [Greene, James H, 2005]

Preparing for the venture

This stage is aimed at defining the implementation of ERP in all measures. It will lay down the stipulations and criteria have to be met. A team of officers will take care of this, who will report to the person of the highest hierarchy in the organization.

Gap Analysis

This stage helps the company to identify the gaps that has to be bridged, so that the company's practice becomes akin to ERP environment. This has been reported as an expensive procedure but it is inevitable. The conglomerate will decide to restructure the business or make any other alterations as suggested by GAP analysis in order to make ERP user friendly. A choice is to be made from ERP implementation models. [Jetter, Otto, 2006]

Designing the System

This step requires lot of meticulous planning and deliberate action. This step helps to decide and conclude the areas where restructuring have to be carried on. A choice is to be made from ERP implementation models.

In-house Guidance

This is regarded as a very important step in ERP implementation. The employees in the company are trained to face crisis and make minor corrections as well because the company can neither be at liberty nor afford the bounty to avail the services of an ERP vendor at all times.

Checking

This stage observes and tests the authenticity of the use. The system is subjected to the wildest tests possible so that it ensures proper usage and justifies the costs incurred. This is seen as a test for ERP implementation.

The real test

At this stage the replacement takes place viz the new mechanism of operation and administration takes over the older one.

Preparing the employees to use ERP

The employees in the organization will be taught to make use of the system in the day to day and regular basis so as to make sure that it becomes a part of the system in the organization.

Post Implementation

The process of implementation will find meaning only when there is regular follow up and proper instruction flow thereafter and through the lifetime of ERP. This will include all efforts and steps taken to update and attain better benefits once the system is implemented. Hence an organization has to perform ERP implementation safely and correctly.

Financial Analyst (FA) and ERP

A pertinent question one financial analyst may ask is "How does an ERP matter for me?". As mentioned earlier the role of a financial analyst in any business either as a Consultant, Auditor, Advisor or Manager is inevitable.

FA as a Consultant:

Implementation of ERP solutions is one of the largest drivers of growth in the consultancy business. The introduction of such a large and complex software like ERP, which enables an organization to integrate their manufacturing, finance and marketing operations at all levels, is in itself a challenge, since it calls for technical and functional skills and a change in user mindsets. And therein comes a role of a consultant. CA as a Consultant will play a major role in implementation of an ERP solution. [Zipkin, Paul H, 2006]

FA as an auditor:

Assuming a situation where the client has implemented an ERP solution. If the auditor is aware of ERP he can make use of the features of ERP and thereby:

- Ensures that the internal controls and checks are consistently maintained.
- Ensures that the provisions of Income tax or other fiscal laws are not ignored e.g., one can control the payment of cash in excess of Rs.10000 for expenses or Rs.20000 as loans and advances, The TDS deductions and payments are automated etc.,
- Ensures that the Accounting Standards are consistently followed across the company.
- Improves the quality of the reporting.

FA as an Advisor:

As an advisor to a company a financial analyst can participate in various stages of ERP implementation. It goes without saying that advising without the knowledge of the current trends and modern management techniques will prove to be a wrong advice and may have a negative impact on the growth of the client.

FA as a Manager:

By now one should know that the ERP is a high end sophisticated software solution that reduces the pressure and work load of the Managers and provides accurate, timely information for taking appropriate business decisions. Financial analyst as managers with knowledge of ERP will be able to achieve their targets and goals by proper implementation of ERP system in their organization. In fact Managers are expected to translate the business rules

and requirements for mapping them into ERP software. Managers as representatives of the Organization have to coordinate with Vendors, Consultants, Auditors etc., for a proper implementation of ERP package.

Conclusion

The growing information needs of an enterprise make it imperative to improve or replace old systems. Especially under the present Indian business environment, where the globalization has been initiated, full convertibility is coined, Infrastructure Projects are nearing completion, and it is expected that the whole business system will undergo a major shift. Thus by being a proficient ERP consultant, financial analyst will prove their commitment to the business world and modern management.

Reference

- i. Antweiler Werner and Trefler Daniel: ERP: A view from trade, The American Economic Review, March 2002.
- ii. Gupta, Anil with Govindarajan, V., "Building Global Presence Through Enterprise Resource Planning," The Financial Times, January 30, 2002.
- iii. Sahay S, Walsham G, 'Information Technology in Companies: A Need for Theory Building' Business Standard, 14 Oct. 2002
- iv. Verma, S, "Room for ERP", Business India, 12 January, 1998.
- v. Christie W, 'Concept Behind ERP', Economist, November 2001.
- vi. Chase, Richard B., and Nicholus J. Aquilano. ERP & Its Implementation, 6th ed. Prentice Hall, 2006
- vii. Bruce, Harry J. ERP Handbook, Tata McGraw Hill, 2005.
- viii. Greene, James H. Enterprise resource palling, 3rd ed., New York, McGraw Hill, 2005.
- ix. Jetter, Otto, ERP and BPR, Upper saddle River, NJ, Prentice Hall, 2006.
- x. Zipkin, Paul H. Foundations of ERP Management, New York, Mc Graw Hill, 2006.

