Chapter 3

Benefits and Cost of an ERP System

LEARNING OBJECTIVES

After reading this chapter, you will be able to understand:

- Benefits of an ERP system
 - Strategic benefits
 - Operational benefits
 - Managerial benefits
 - Organizational benefits
- Intangible benefits
- Cost of an ERP system
- Cost-benefit analysis

3.1 INTRODUCTION

In the previous chapters, we learnt that an ERP system is a semi-finished product that has to be configured for the host company. We also learnt that an ERP project costs between 1 to 3 per cent of revenue of the host company if all modules of the ERP system are implemented. A company spends money on the ERP system because it expects to benefit from the system. An ERP system may deliver strategic benefits, operational benefits and managerial benefits. But a company would set an objective for implementing the ERP system and focus on the set objective. In this chapter, we will learn about these benefits in detail. A company can measure success of its ERP implementation by setting a quantitative objective and measuring the performance of the system against the objective. A quantitative benefit that the organization is looking for may be to reduce inventory by ten per cent, and a qualitative objective may be to increase customer satisfaction. Problems with qualitative objectives are those which cannot be verified. IT systems are known for bringing in many intangible benefits that may be difficult to measure directly. The objective of ERP should be aligned with the firm's competitive strategy. Benefits have to be weighed against the cost. An ERP project involves direct as well as indirect costs. Once we have a handle on the benefits and the costs, we can do a cost-benefit analysis to justify the project and get funding for the project.

3.2 BENEFITS

ERP may bring in many benefits that can be divided into four groups as shown in <u>Figure 3.1</u>. Let us look at the benefits that each of these groups offer.

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- ERP supports current and future business growth. The company can handle lot more transactions which are conducive to business growth. Since the data becomes easily available and the cycles become shorter, introducing new products and services are encouraged. The company can analyse data in timely manner at the desired grain level to identify niche geographical and functional areas.
- All business units get integrated. Moreover, if a company acquires another company, the newly acquired company may be integrated easily and faster through ERP system which facilitates business growth.
- Strategic planning needs timely and accurate picture of the organization. ERP
 system makes accurate picture available to the management in a timely manner that
 helps them come up with appropriate market strategy and identify new business
 process chains and areas.
- Streamlined and efficient processes help a company become cost leader in the market.
- ERP helps a company to provide customized products and services to its customers. World economy has moved from being a manufacturing economy to service economy. A manufacturing company now has to provide a solution to its client, not just a product. We see many such examples in India as well. A car distributor now worries about maintaining the car after its sale. The distribution centre or its collaborators follow up with customers to make sure that the car gets serviced on regular basis. The service is customized based on the customer data that ERP stores and provides. A manufacturer may shift their manufacturing strategy from make-tostore to make-to-order. Make-to-order will require linkages with suppliers, distributors and related business parties. ERP-II or extended ERP includes customer relation management and supply chain management to build external linkages. Suppliers, customers and your own marketing offices, manufacturing facilities could be spread globally. ERP is an international package and facilitates seamless (almost) integration of data across geographical limits. One can centralize world operations, manage global resources, deploy multiple tax rules and handle business transactions in multiple currencies and multiple time zones.
- ERP system may improve organizational and process flexibility.
- Customer/supplier satisfaction and relations can be enhanced by using ERP system.

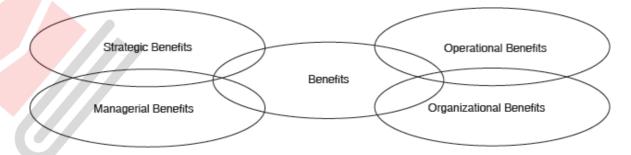


FIGURE 3.1 Benefits Offered by an ERP System to the Organization

- ERP system may help the organization to reduce marketing costs and improve market share.
- The organization may be able to establish itself as a leader in new technology.

 ERP system may help a company to gain competitive advantage and establish itself as market leader.

3.2.2 Operational Benefits

ERP help companies to improve data management, communication, decision making and reduce response time to queries. The companies that implemented ERP experienced operational benefits that can be largely classified into the following categories:

- Cost reduction: The following are the cost reductions:
 - Reduced labour cost: An ERP implementation will in the least automate and integrate business processes of an organization. Consequently, processes become efficient. Coupled with rationalization and reengineering, the process become even more efficient as the redundancy in processes and the redundant processes get eliminated. The required staff in customer services, production planning, order fulfillment, administrative processes, purchasing and financial management reduces.
 - Inventory cost reduction: The carrying cost reduces due to better material requirements planning, less efforts in inventory management and warehousing.
 - Administrative cost reduction: The paper work, printing effort, printing cost and moving papers around reduces. As an example, take the case of a company in Kanpur, Uttar Pradesh, India with a turnover of ₹ 60 crore that produces high-quality adhesives. According to the company's marketing manager after implementing ERP, their system has become very efficient even though they have not changed their processes. The integration and availability of data online has made a lot of difference —their sales have gone up by ₹1 crore in one month after they implemented Navision (ERP software). The reason being it was difficult to keep track of defaulters earlier. They buy 4,500 items from different vendors. In spite of their best efforts, they were not able to maintain three vendors for each item and bargain. At times, the purchase manager would create a crisis by saying that there is only one vendor in the market and there is shortage of the item that they supply. The management used to give them a go ahead for purchase at the vendor price because they did not want the production to suffer. A purchase order involved looking up many files for consolidating the information required including appropriate vendor, his address, request for quotation, vendor quotation, quality records of the vendor and his outstanding bills if any. The person responsible for placing an order had to contact many persons to get data. If a person is on leave, his data will not be accessible and it delays the process. The whole organization was people centric. The processes were dependent on people and not all the processes were documented. After ERP implementation, all processes are documented and the processes are built into the ERP system. Absence of a person does not cause any delay. It is simple to track overdue payments, defaulting vendors, non-performing sales and marketing executives. A person who was able to create two purchase orders in a day is now creating ten orders. Job of every person has been profiled. Employees are happy because they themselves do not depend on others for their performance.
- Cycle time reduction: There are many cycles that exist in an organization. These

- cycles involve customers, employees and vendors. ERP system has helped companies cut down cycle times.
- Customer support activities: These activities include order fulfillment time, billing, delivery and customer service activities become faster.
- **Employee support activities:** These activities include month-end closing, purchasing and reporting become fast.
- Supplier support activities: They have also become better. A company can combine multiple orders to get discounts from their vendors.

3.2.3 Managerial Benefits

In an organization, management is responsible for resource management, decision making and performance. The key ingredient to resource management and decision making is the data. The data helps management to manage their assets better. ERP helps in better production management due to the availability of the data required for production management. Management is better equipped for responding to changes that promotes proactive culture. The changes may be in the market, cost or business strategy. Planning and administrative procedures also improve. All these improvements lead to improvement in the service quality within the organization and to the customers. Manpower can be better utilized because job profiling for each employee can be easily done. The job allocation may also be changed according to the changing requirements. Monitoring is an important component of the management activity. One can sit in his own office and monitor the desired activities without having to worry about geographical proximity or distances. The activities that are closely monitored include financial performance, manufacturing performance, and overall efficiency and effectiveness of the management itself. In simple word, if one has access to timely and accurate data, management is sure to perform better in all its functions.

3.2.4 Organizational Benefits

The organization should experience the following benefits:

- ERP should facilitate business learning and broaden employee skills. The business processes get clearly defined that should help willing employees to enhance their business skills.
- Clearly defined and seamlessly integrated processes empower employees to be
 proactive problem solver. The overall responsibility and accountability improves.
 There is less of fire fighting, the role of management in routine activities decreases
 which results in better planning. An ERP system should help an organization in
 integrating clearly defined processes in a seamless manner. In some organizations,
 the number of management layers decrease and the organization becomes flatter.
- Another expected benefit is improved interpersonal communication, homogeneous business units that share common and consistent vision across the organization.
- ERP definitely cuts down on some mundane and repetitive activities.

The benefits have been summarized in Table 3.1.

3.2.5 Intangible Benefits

These are the benefits that cannot be easily quantified. Many of the benefits of ERP systems are intangible and there is no mechanism to measure these benefits in monetary terms. There is no way to account for intangible benefits into productivity measures. The information technology investments are no more a choice but necessary to survive in the market. The returns may not be direct and immediate. Here is a list of some intangible benefits of ERP systems.

TABLE 3.1 Benefits to an Organization from an ERP System

Strategic Benefits

- · Business growth
- Business integration
- · Real time data availability
- · Best practices
- Better and personalized services to the customer
- Lower marketing cost
- Technology leader
- Competitive advantage

Operational Benefits

- Reduced labour cost
- Reduced inventory cost
- Reduced administrative cost
- Cycle time reduction
- Better customer support
- Better employee support
- Better supplier support

Managerial Benefits

- Improved resource utilization
- · Improved decision making
- Better performance
- Proactive management
- Improved planning
- Better job-skill mapping
- Better monitoring

Organizational Benefits

- Employee empowerment
- Employees can enhance their skill set
- Less management layer
- Efficient organization
- Automation of routine jobs
- Improved interpersonal communication
- Consistent vision across the organization
- Enhanced customer and vendor satisfaction
- Increased flexibility
- Improved resource utility
- Improved information accuracy
- Improved decision capability
- Better employee experience in the organization

The characteristics of intangible benefits are:

- Difficult to quantify
- Difficult to measure
- Difficult to put monetary value

3.2.6 What Benefits an Organization May Expect?

Benefits listed above are far too many to be realized by an individual company. Only some of these benefits are aimed at when an organization goes for an ERP implementation. The selection of groups of the benefits and sub-benefit should be done carefully. The objective of ERP should be aligned with the firm's competitive strategy. It is better to set quantitative objective; for example, the objective is to reduce inventory by five per cent in a year's time or to increase market share by two per cent, the data can be collected and analysed to show the performance. If, however, the objective is to increase customer satisfaction, then

it is difficult to measure satisfaction level. The same objective may be stated as to reduce the number of customer complaints by 10 per cent from existing 50 complaints per 10,000 customers in one year then it becomes a quantitative objective.

Whatever the objective is, the management has to extend its full support. A project of the magnitude of an ERP implementation cannot succeed without the support of top management. If the management is not convinced, the project will not get approved. However, if they lose interest after project has taken off, budget cuts or availability of proper manpower may become major threats to the success of the project. Project management itself is important. At organizational level, there are many concerns such as readiness of the organization and its people for ERP.

ERP systems are semi-finished products developed by others and require the host organization to change their processes according to ERP system.

3.3 COST OF AN ERP IMPLEMENTATION

One of the popular ways to assess cost of an ERP implementation is to benchmark the organization against a similar organization, if one is available. This method is referred to as analogy based cost estimation. The parameters that one can use to check similarity between two organizations are as follows:

- Number of users
- Number of sites
- Number of interfaces required
- Number of modules implemented
- Number of companies of the organization
- Electronic data interface
- Number of modifications required in the software
- Number of distinct reports to be generated
- Number of plants that the organization has

Experiments have shown that number of modules, interfaces, users and sites are the parameters that decide effort required for ERP implementation. The implication is that if these four parameters are similar, the effort and cost would be similar even if other parameters do not match.

Incidentally, there are no popular and well-established parametric algorithms for estimating cost of an ERP implementation. A regression model has been built in 2001 using data from 176 R/3 SAP implementations. The data were gathered from 1990 to 1998 in a multinational consultant organization. The projects span many industries and countries in all regions of the world. The data have been reported by project managers who themselves use the database to plan and estimate future projects. The company has a standard ERP methodology. Therefore, the data presumably have been reported in a consistent manner.

The following is the regression model for estimating effort in workdays:

 $ln(Effort) = 4.82 + 0.286 \times ln(No. of users) + 0.093 \times ln(No. of sites) + 0.314 \times ln(No. of interfaces) + 0.746 \times ln(No. of modules)$

The data that was used for building this model had missing data. Depending on the techniques used for handling missing data, the constant and coefficients varied as given in <u>Table 3.2</u>. We will plug in some numbers to get an idea of the efforts required. Let us say, number of users are 1,297, number of sites are 45, number of interfaces are 39, and number of modules to be implemented are 5.2. When we plug-in these numbers in the above equation, we get effort as 14,827 work days that translate to 494 person months. Referring to <u>Table 3.4</u>, this effort accounts for consulting and project team. One can convert the effort into cost by accounting for cost of each resource. One of the popular equations to convert person month to calendar month is the following:

TABLE 3.2 Range of the Constant and Coefficients for Different Techniques of Handling Missing Data

Constant	4.82–5.26
Coefficient for number of users	0.110-0.286
Coefficient for number of sites	0.067–0.153
Coefficient for number of interfaces	0.153–0.393
Coefficient for number of modules	0.457-0.822

Time in calendar months = $2.5 \times PM^{0.38}$.

Using this equation, we get 26 calendar months. Divide 494 by 26 to get the team size of approximately 20. The project would take over 2 years and 20 full time staff to complete it. The equation to calculate effort will not work for very small projects. This effort covers primarily the consulting effort that includes configuration efforts from the vendor or implementation partner.

An organization may not be able to rely on this model alone for estimating the efforts. But the model can be safely used to get an idea of the effort that would be required. No model gives an accurate estimate of the effort. Some of the data from a survey are given in tables 3.3 and 3.4. This survey was conducted in Sweden but the data obtained through this survey is universal. Implementing an ERP is very expensive and time consuming. The cost of implementation varies from 1–3 per cent of the turnover (Table 3.3). The cost of an ERP implementation is the same in India. Some data was collected and the cost of implementation was verified.

TABLE 3.3 Implementation Cost for ERP Project as a Percentage of Revenue

	Revenue (\$M)	Cost as Percentage of Revenue
<15		3.45
16–50		2.15

Revenue (\$M)	Cost as Percentage of Revenue
51–250	2.36
251–750	1.31
>750	0.38

TABLE 3.4 ERP Project Cost Components

Software	24.2%
Hardware	18.5%
Consulting	30.1%
Training	13.8%
Project Team	12.0%
Other	1.4%

Major cost components and their shares are shown in <u>Table 3.4</u>. Consulting is the largest cost component followed by the software. The cost associated with an ERP project may be divided into direct cost and indirect cost. Direct cost is what one can easily account for through an invoice or a bill whereas indirect costs are difficult to account for as there is no bill or invoice raised. Let us look at the direct and indirect cost heads.

3.3.1 Direct Costs

- **Hardware:** An ERP implementation would require a computer server to run the ERP server, as most of the ERP systems are based on client/server architecture.
- **Software:** ERP vendors usually charge for the software—client-side software and server-side software. In addition, they charge per user license fee which is essentially the number of logins you are allowed to create. Usually, number of concurrent users are much less, about one-third to half of the number of licenses. The cost of implementation and testing tools is covered by the license fee. But it is not a bad idea to verify with the vendor upfront.
- Consulting: An ERP implementation always requires an external consultant. Most of the non-IT organizations would not have core competence to handle ERP project. It is one of the major cost component.
- Add-on hardware and software: One may need additional hardware and software such as operating system, database, networking cables and router. ERP system stores every transaction in the database. At the end of the fiscal year, data is archived for which one may need a file server with plenty of disk space. One may also need an interface converter to facilitate communication between ERP database

server and the back-up file system. Network setup may require a router and cables. Network security, data backup server and disaster management system are additional add-ons that must be allocated funds. One may include these costs under hardware and software heads.

- Training costs: The vendor and implementation partner would train handpicked people from the organization who in turn train all end users in the organization. This train-the-trainer program also costs and should be accounted for.
- Project team cost: The resources (people) put on ERP project team would account for this cost head. Most of the companies use time sheets to account for the resource cost.
- Other: One can put all miscellaneous expenditure under this head. These may
 include costs such parallel run cost. In the last chapter, we mentioned that business
 continuity is an absolute must. The legacy systems may have to run in parallel till the
 ERP system stabilizes and goes live. The parallel run cost may be included under
 this head.

3.3.2 Indirect Cost

- Lost productivity cost: The management and employees of the organization while working on ERP project are away from their otherwise assigned duties. There may be a loss of productivity and this may be a major source of indirect cost.
- **Dedication to explore the potential of the system:** In the beginning, users spend time exploring the system. The cost of this time is another indirect cost component which is very difficult if not impossible to account for. If learning happens through trial and error, the cost can escalate even further.
- **Employee motivation:** This is an interesting indirect cost factor. After ERP system has gone live, if motivation level of the employees is low and they do not use the system, there is a huge indirect cost that the organization incurs. Various methods of ensuring user buy-in are described in <u>Chapter 4</u>.
- Changes in salaries: There may be a change in salaries of employees as a result of improved employee flexibility and staff turnover. These changes are always in the upward direction. The employees expect an immediate gratification. There are numerous interesting examples available. In one SAP project, the project manager decided to quit his job in the middle of the project and start his own consultancy firm. The company hired him at a much higher cost. In another instance, employees were given some incentive to learn and adapt the new IT systems that became a permanent perk. Some employees just move to another place instead of adapting new ways of working, costing a considerable amount to the company.

After the go-live stage, the following two budgets will be required:

- Running cost: The system would require system-support staff and infrastructure to run. One would include the running cost of the system under this head. A thumb rule is to make it 20 per cent of the total project cost.
- Upgrades and maintenance: For software products, maintenance involves three
 types of activities, namely—corrective, perfective and adaptive. Corrective
 maintenance refers to removing any bug that may get discovered by the users. ERP
 vendor releases new versions at regular intervals and may discontinue support for

older versions. Some technology upgrades may also be required to possibly handle larger transaction volumes or to make system faster. These costs must be accounted for and included in the maintenance cost. A new upgrade is generally adaptive and perfective both. The host company would go for an upgrade to improve their existing information systems.

3.4 COST-BENEFIT ANALYSIS

Various studies have been done to figure out the benefits that companies expect from ERP systems if they are in the process of implementing an ERP system and benefits they have been to realize if they have already deployed the system. The following tangible benefits have been highlighted:

- Inventory reduction
- Personnel reduction
- Productivity improvements
- Order management improvements
- Financial close cycle reduction
- IT cost reduction
- Procurement cost reduction
- Cash management improvement
- Revenue/Profit increases
- Transportation/Logistics cost reductions
- Maintenance reductions
- On-time delivery

A table similar to the Table 3.5 is created and expected benefits are documented.

The cost of the project is expected to be around ₹ 5,00,000,00 (1 per cent of the sales). Recall that the cost-benefit analysis is done prior to the commencement of the project when actual cost of the project is not known. In any software project, the initial estimates can be off by a factor of 4.10 The annual running cost of the project will be close to 20 per cent of the project cost. Table 3.6 gives the cost-benefit analysis for this particular example.

The ROI is 12.6 per cent for this ERP project. Most of the companies would get a return of 5-25 per cent on their investment (<u>Table 3.7</u>). 11

TABLE 3.5 Benefit Analysis

Business Area	Associated Figure	Associated Figure (in $\overline{\epsilon}$)	Benefit (in ₹)
Sales		500,000,000	
Possible increase in sales	5% of sales	25,000,000	
Gross margin	50%		
Benefit			12,500,000
Inventory Carrying Cost			
inventory holding cost	0.8% of inventory value		
Raw material inventory value	5% of sales	25,000,000	
Possible reduction in raw material inventory value	25%	6,250,000	
Benefit			50,000
Current work-in-progress and intermediate storage value	2.5% of sales	12,500,000	
Possible reduction in work-in-progress and intermediate storage value	50%	6,250,000	
Benefit			50,000
Current finished goods stock nventory value	12.5% of sales	62,500,000	O
Possible reduction in finished goods stock inventory value	25%	15,625,000	
Benefit			125,000
Capital saving due to reduced nventory	25% inventory reduction	7,031,250	
Cost of capital	12%		
Benefit			843,750
Procurement Cost		7.0	
Cost of material purchased	30% of sales	150,000,000	
Procurement cost	2%	3,000,000	
Reduction is procurement cost	50%	1,500,000	
Benefit			1,500,000
_abour Cost			
Cost	10% of sales	50,000,000	
Possible reduction direct labour cost	2%	1,000,000	
Benefit			1,000,000
Shorter Debit/Credit Cycles			
Annual benefit	0.05% of sales	250,000	250,000
Total Benefits			16,318,750

TABLE 3.6 Cost-benefit Analysis for the Example

Head	Cost (₹)	Benefits (₹)
Total annual saving		1,63,18,750
On-going cost	1,00,00,000	
Net annual benefit		
One time cost	5,00,00,000	
One time cost saving		4,57,500
Net capital cost	5,00,00,000	

TABLE 3.7 Return on Investment (ROI) and Percentage of Organization That Achieved Specified ROI

Estimated Return	Per cent
<5	16.5
5–15	38.0
15–25	30.4
25–50	11.4
>50	3.7

CONCLUSION

There are different types of benefits that an ERP system may potentially deliver. These benefits can be categorized in strategic benefits, operational benefits, managerial benefits and organizational benefits. There are many benefits that are intangible and difficult to quantify. It is important to identify intangible benefits as well. An ERP system cannot deliver all the benefits. An organization should set objectives and benefits that it expects from the ERP system. It is important that the benefits are defined in quantitative terms so that it can be verified.

For estimating the cost of an ERP project, the general practice is to benchmark an organization with a similar organization who has already implemented an ERP system. The parameters used for checking similarity are number of users, sites, interfaces and ERP modules being implemented. There is no popular or standard algorithmic way of estimating the cost of an ERP project. Major direct cost heads include hardware, software, training cost and consultancy cost. An ERP project involves direct as well indirect costs. A sense of implementation time, return on investment and life span would help a project manager in managing an ERP project.

CASE STUDY

In this chapter, two topics—benefits and cost are discussed, and RetailS is used for discussing the benefits.

Benefits of Using ERP for RetailS

Strategic benefits: Prices and their validity

There is a sale price associated with each item RetailS deals in. Associated with each item that RetailS deals in, there is a sale price. The management fixes prices for the known items. These prices are generally valid for a month. In certain cases, the prices may fluctuate in positive or negative directions about which only the management knows. It is the responsibility of the management to update the price list. Since the management team consists of only three people and they are multitasking, it is not unusual for them to forget to update the price list. Sometimes, the

monthly update of the price list is also not done. The sales staff may use the old list and cause loss to RetailS or overprice the customer that may result in loss of the customer, or his goodwill or both.

The sales price is dependent on the purchase price. The management negotiates the purchase price with the vendors before creating the sales price list.

The management wanted an IT system that will send a reminder to the management after a month to update the price list. The IT system should also prevent the sales staff to use a stale price.

• Strategic benefits: Reduce errors

There are multiple parameters associated with a product that RetailS deals in. A mistake or omission of one of the parameters may result in delay, cancellation or rejection of the entire order. IT system can force the staff to check every parameter.

Every order involve details that need to be carefully defined. For instance, the payment terms have to be defined and agreed upon by RetailS and the customer. Any omission or mistake may cause delay or confusion in the payments. IT system can help RetailS to create a master list of possible payment terms to avoid any errors.

Strategic benefits: Follow up

RetailS needs to frequently follow up with their customers, vendors and shipping agents. A customer is contacted multiple times during the process of a sale that also requires staff to contact the vendors multiple times as well. IT system can generate a reminder to the concerned staff for a follow up activity.

• Managerial benefits: Trade secret

RetailS succeeds in their business by identifying customers, providing them the items of required quality at agreed upon prices in a timely manner. All this is possible if the vendors supply them quality items at a reasonable cost and on agreed time. RetailS has to protect price information from their existing competition and from the potential competition that may even shoot up from within RetailS. The information should be available in a very selective manner to the employees. IT system can help RetailS to make only the required information available to an employee.

Managerial benefits: Reports

IT systems can provide required reports to the management about the organization in real time in desired format.

Budget

Here is an attempt to budget the ERP project for RetailS. The data collected from various sources indicates that an ERP implementation costs around 1 per cent of the turnover of the company. For RetailS, this figure turns out to be ₹50,000,00 because their turnover is ₹50 crore. As mentioned earlier, RetailS is a very efficient company and this figure is way

too high for an ERP project for a company that has less than 30 employees. Little calculation would show that if RetailS spends ₹50,000,00 on an ERP project, it would be spending ₹1,70,000 per employee on ERP project.

Accordingly, we expected to be able to find a solution for about ₹ 5,000,00. Since the cost of the project was estimated to be ₹ 5,000,00, RetailS did not feel the need to do any cost-benefit analysis. They had the infrastructure already and no new hardware was required. Their only indirect cost was the productivity loss when employees were getting trained. The strategy deployed by RetailS was to account the expenditure and not worry about doing the cost-benefit upfront.

EXERCISES

Test Your Understanding

- 1. Briefly describe various types of benefits that an ERP system may deliver.
- 2. What are the differences between tangible and intangible benefits? Give examples.
- 3. Why is it important to set quantitative objective for an ERP project? Give some examples of qualitative as well as quantitative objectives.
- 4. What are various cost factors involved in an ERP project? Explain each briefly.
- 5. How would you estimate cost of an ERP project?

Apply Your Understanding

- 1. Is there a relationship between the type of industry of the organization implementing ERP system and the types of benefits it expects from ERP system? You may take two different industries such as service and manufacturing industry and answer the question.
- 2. In the last chapter, you chose an organization to work with. Collect relevant information and estimate the cost for ERP project for your organization. If ERP system has already been implemented, the management may verify your estimates. Otherwise, check their willingness to invest the specified amount in ERP system. What are the lessons learnt?