

# [Free essay on what is erp system architecture](https://assignbuster.com/free-essay-on-what-is-erp-system-architecture/)

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## Module Review Questions and Module Practice

PART 1

Enterprise resource planning is software in business management that provides business process in real time. Therefore all the business processes that are core to the business are shown on the database that is centralized whenever a transaction occurs. The business activities that are core to the business in this case include; marketing and sales, management of inventory, service delivery or manufacture cost development and product planning. Enterprise architecture is the process whereby transformation of the business strategy and vision is carried out into effective enterprise change. This is done through creating effective communication and improving fundamental requirements and principles into a model that can be used to describe the future state of the industry and enables its evolution.

## Five major functional modules of ERP

The five functional modules of enterprise resource planning are production planning module that is focused on the maximization of the production capacity and material resources. The module also uses part of the data and sales forecasting. The second functional modules of ERP software is the purchasing module that aims at streamlining purchasing or procurement of the raw materials required for manufacturing purposes. The third functional module is the inventory control module whose objective is effectively to manage resource and product inventory. It manages inventory at different locations at the warehouse, store and the office. The fourth functional module is sales module that automates all aspects of sales which includes customer orders, invoicing and shipping of products. The fifth functional module of erp software is an accounting and finance module which as a critical aspect of the business to organize and collect financial data. Other functional modules include human resources module, marketing module, and manufacturing module.

## Necessities for ERP to be successful

For a successful implementation of erp, the following factors are necessary to ensure that the system is a success to the business. There must be consensus among the stakeholders on the need to change. To navigate their way to change institutions must decide that they want a change the company. The management must articulate the company’s plans to the employees for smooth implementation. The second factor needed for successful implementation is knowledgeable, talented, skillful and dedicated staff that cares for the company. Other factors include Aligned and supportive leadership, institutional teamwork and technical capabilities and support.

## Importance of good system architecture

Enterprise architecture has gained popularity in the recent past because organizations have established that ERP architecture is important to an organization in the following ways. Enterprise architecture provides a holistic approach in addressing the problems encountering the business; this is because enterprise architecture teams provide solutions that address the problems of the business across the board. Also, enterprise architecture provides solutions in a consistent manner to business problems. Solutions to the business are delivered in a more consistent and structured manner to tackle the problems of the business.   
IT Governance is another important aspect of enterprise architecture that aims at establishing governance across the enterprise and also assist in creating a directed and controlled corporation. It also acts as a framework for organizational structure, standards, management, practices among others. There is defined technical and business architecture where business and IT people revalidate the new processes being created. Lastly, the enterprise architecture establishes extensive system repository that encourage standardization across the enterprise.

## Discuss the different types of ERP architectures and list some of their benefits and limitations?

There are four types of ERP architecture system that include the three tier that is composed of application, and presentation layers. Scalability, reliability, and flexibility are the benefits of this system. Web based system is the second architecture system, and its benefits can enable remote users or third party organizations to use it. Service oriented architecture is the third type of Enterprise Architecture whose benefits are reuse of software services across the location of the company. However, the limitation of Service Oriented Architecture is that it is costly. The fourth system is cloud computing architecture that allows security and privacy to the organization. A service oriented architecture is different from web based design in that service oriented architecture is more of a methodology than a technology whose functionality is broken up into services or applications that can be of use in other modules across the organization.

## PART 2

Discuss a company, the type of system architecture they have, and how the architecture has helped them in ERP implementation?   
Nestle is one of the largest consumer goods company in the world that is based in Switzerland. In the year 2000, the company signed a multimillion dollar deal with SAP to provide an ERP system that would have long term benefits such as standardizing the business processes and also seeking to increase its returns. The system was also aimed at facilitating sharing of data between subsidiaries in relation to inventory and trading within subsidiaries. The architecture contracted has helped the company in the overall architecture, security architecture, infrastructure design, information architecture, operation and control architecture and application architecture. The overall aim of architecture is strengthening all areas of the business that include performance tracking of the company, back up of all the systems in the company and process scheduling policy. The process scheduling policy shows the processes and the time the processes shall be carried out as well as the strategies in case the activities fail to take place.

## Diagram

Source: http://dtwchan99. wordpress. com/2011/12/12/sap-business-objects-solution-architecture/

## Conclusion

In conclusion, ERP is essential in bridging the gap between the information and technology and the other parts of the business. IT is often an important component to integrate with the business to achieve success. ERP can make a modern business have an advantage in the industry. It aims at equipping the IT experts in the company with know how to understand the nature of the industry and how to align IT knowledge to the business course to achieve its objectives. The experts shall provide with a clear-cut guidance to come up with requisite solutions. The overarching motive of ERP is to have a central command, vision and centralized leadership matters to do with IT.   
Secondly, when a goon a good ERP is fast tracked the company ultimately save the costs and boost competitive advantage. It ensures that organization’s visions, roles and responsibilities, allocated resources and relevant processes are working. It ensures the real industry is built to deliver on the organization mission and vision. Eventually, when all the necessary ERP infrastructure is in place the pace of effecting change is increased in the business . the cost related to IT shall lower, the information required by top management to make vital decisions shall be retrieved in a record time. That means that the organization shall be organized, efficient and cost effective in its operation.   
Finally, with a good ERP system a company develops verifiable and consistent solutions to the problems facing our company. The solutions are documented and retrieved in a clear structure and come up with a reference point. This essential for evolving business demands and for basis for coming up with future consistent architectures.

## References

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