Chapter 1 : Enterprise Resource Planning - ERP Definition | Investopedia

Enterprise resource planning (ERP) is the integrated management of core business processes, often in real-time and mediated by software and technology.

An accounting oriented information system for identifying and planning the enterprise-wide resources to make, ship and account for customer orders. Basically, an ERP combines several traditional management functions into a logically integrated system and facilitate the flow of information across these functions. It is designed to model and automate basic processes across the organization over a centralized database and eliminates the need of disparate systems maintained by various units of the organization. Figure below shows how information is integrated into a typical organization using an ERP system. ERP system is thus a mirror image of the major business processes of an organization. These systems were often incongruent, hosted in different databases and required batch updates. It was difficult to manage business processes across business functions e. ERP system grew to replace the islands of information by integrating these traditional business functions. The successful implementation of an ERP system will have many advantages, as indicated below: Business Integration and Improved Data Accuracy: If data is entered in one module such as receiving, it automatically updates other related modules such as accounts payable and inventory. This updating occurs at real time i. Since, data needs to be entered only once at the origin of the transaction, the need for multiple entries of the same data is eliminated. The centralized structure of the database also enables better administration and security provisions, which minimizes loss of sensitive data. The various decision support tools like planning engines and simulations functions, form an integral part of an ERP system that helps in proper utilization of resources like materials, human resources, and tools. Constrained based planning help in drawing appropriate production schedules, thereby improving the operation of plant and equipment. As a part of MIS, an ERP system, contains many inbuilt standard reports and also a report writer that produce ad hoc reports, as and when needed. Improved Efficiency and Productivity: In addition to provision of improved planning, ERP system provides a tremendous boost to the efficiency of day to day and routine transactions such as order fulfillment, on time shipment, vendor performance, quality management, invoice reconciliation, sales realization, and cash management. Cycle time is reduced for sales to cash and procurement to pay sequences. Establishment of Standardized Procedures: ERP system is based on processes of international best practices, which are adopted by the organizations during implementation. Department silos are purged, and maverick practices are done away with. Because of top-down view available to management, chances of theft, fraud and obsolescence are minimized. Due to the globalized environment, where production units, distribution centers, and corporate offices reside in different countries, organizations need multi-currency, multi-language and multi-accounting modes, in an integrated manner. These provisions are available in most of the ERP systems, particularly in products offered by tier 1 and tier 2 vendors. ERP vendors are also quick to adopt latest technologies, from mainframe to client server to the internet. Unlike a bespoke system, Upgrading to latest technology for a running ERP system is uncomplicated, involving mostly adoption of service packs and patches. Conclusion Although ERP provides many advantages; its implementation is a strategic decision, involving significant resources both financial and human , proper evaluation and business process re-engineering. There must be a commitment from all levels. A failed implementation may lead to bankruptcy of an organization.

Chapter 2 : Enterprise Resource Planning - ERP Selection Help

Enterprise resource planning (ERP) is business process management software that allows an organization to use a system of integrated applications to manage the business and automate many back office functions related to technology, services and human resources. ERP software typically integrates all.

Tweet When you search for "ERP" on the web, the sheer amount of information that comes up can be overwhelmingâ€"not to mention a little confusing. These differences, however, underscore the flexibility that can make ERP such a powerful business tool. To get a deeper understanding of how ERP solutions can transform your business, it helps to get a better sense of what ERP actually is and how it works. For that, you need to take a step back and think about all of the various processes that are essential to running a business, including inventory and order management, accounting, human resources, customer relationship management CRM , and beyond. At its most basic level, ERP software integrates these various functions into one complete system to streamline processes and information across the entire organization. The central feature of all ERP systems is a shared database that supports multiple functions used by different business units. In practice, this means that employees in different divisionsâ€"for example, accounting and salesâ€"can rely on the same information for their specific needs. Instead of forcing employees to maintain separate databases and spreadsheets that have to be manually merged to generate reports, some ERP solutions allow staff to pull reports from one system. For instance, with sales orders automatically flowing into the financial system without any manual re-keying, the order management department can process orders more quickly and accurately, and the finance department can close the books faster. Back then, the concept applied to inventory management and control in the manufacturing sector. Software engineers created programs to monitor inventory, reconcile balances, and report on status. Today, ERP has expanded to encompass business intelligence BI while also handling "front-office" functions such as sales force automation SFA , marketing automation and ecommerce. With these product advancements and the success stories coming out of these systems, companies in a broad range of industriesâ€"from wholesale distribution to ecommerceâ€"use ERP solutions. Moreover, even though the "e" in ERP stands for "enterprise," high-growth and mid-size companies are now rapidly adopting ERP systems. Software-as-a-Service SaaS solutionsâ€"also referred to as "cloud computing"â€"have helped fuel this growth. Cloud-based solutions not only make ERP software more affordable, they also make these systems easier to implement and manage. Perhaps even more importantly, cloud ERP enables real-time reporting and BI, making them even valuable to executives and staff seeking visibility into the business. As a result, companies of all sizes and a wide range of industries are transitioning to cloud ERP systems. More specifically, an ERP solution: Gives a global, real-time view of data that can enable companies to address concerns proactively and drive improvements.

Chapter 3 : Enterprise Resource Planning (ERP) Software and Solutions | Sage US

What is 'Enterprise Resource Planning - ERP' Enterprise resource planning (ERP) is a process whereby a company, often a manufacturer, manages and integrates the important parts of its business. An.

Best practices[edit] Most ERP systems incorporate best practices. Systems vary in how conveniently the customer can modify these practices. They can also help comply with de facto industry standards, such as electronic funds transfer. This is because the procedure can be readily codified within the ERP software and replicated with confidence across multiple businesses who share that business requirement. These systems are typically configured by systems integrators , who bring unique knowledge on process, equipment, and vendor solutions. Direct integrationâ€"ERP systems have connectivity communications to plant floor equipment as part of their product offering. This requires that the vendors offer specific support for the plant floor equipment their customers operate. ERP vendors must be experts in their own products and connectivity to other vendor products, including those of their competitors. Database integrationâ€"ERP systems connect to plant floor data sources through staging tables in a database. Plant floor systems deposit the necessary information into the database. The ERP system reads the information in the table. The benefit of staging is that ERP vendors do not need to master the complexities of equipment integration. Connectivity becomes the responsibility of the systems integrator. An EATM offers the benefit of being an offâ€"theâ€"shelf solution. Customâ€"integration solutionsâ€"Many system integrators offer custom solutions. These systems tend to have the highest level of initial integration cost, and can have a higher long term maintenance and reliability costs. Long term costs can be minimized through careful system testing and thorough documentation. Customâ€"integrated solutions typically run on workstation or server-class computers. Modular ERP systems can be implemented in stages. The typical project for a large enterprise takes about 14 months and requires around consultants. This reduces inventory storage and increases delivery efficiency, and requires up-to-date data. It is therefore crucial that organizations thoroughly analyze business processes before they implement ERP software. Analysis can identify opportunities for process modernization. It also enables an assessment of the alignment of current processes with those provided by the ERP system. Research indicates that risk of business process mismatch is decreased by: While this has happened, losses in one area are often offset by gains in other areas, increasing overall competitive advantage. ERP systems typically include many settings that modify system operations. For example, an organization can select the type of inventory accountingâ€" FIFO or LIFO â€"to use; whether to recognize revenue by geographical unit, product line, or distribution channel; and whether to pay for shipping costs on customer returns. Each independent center or subsidiary may have its own business models , workflows , and business processes. Given the realities of globalization, enterprises continuously evaluate how to optimize their regional, divisional, and product or manufacturing strategies to support strategic goals and reduce time-to-market while increasing profitability and delivering value. Manufacturing globalization, the economics of sourcing in emerging economies Potential for quicker, less costly ERP implementations at subsidiaries, based on selecting software more suited to smaller companies Extra effort, often involving the use of Enterprise application integration [47] is required where data must pass between two ERP systems [48] Two-tier ERP strategies give enterprises agility in responding to market demands and in aligning IT systems at a corporate level while inevitably resulting in more systems as compared to one ERP system used throughout the organization. Technical solutions include rewriting part of the delivered software, writing a homegrown module to work within the ERP system, or interfacing to an external system. These three options constitute varying degrees of system customizationâ€"with the first being the most invasive and costly to maintain. Key differences between customization and configuration include: Customization is always optional, whereas the software must always be configured before use e. The software is designed to handle various configurations, and behaves predictably in any allowed configuration. The effect of configuration changes on system behavior and performance is predictable and is the responsibility of the ERP vendor. The effect of customization is less predictable. Configuration changes survive upgrades to new software versions.

Chapter 4 : Enterprise resource planning - Wikipedia

The acronym ERP stands for enterprise resource planning. It refers to the systems and software packages used by organizations to manage day-to-day business activities, such as accounting, procurement, project management and manufacturing.

Chapter 5 : What is ERP | Enterprise Resource Planning Definition | SAP

An ERP system is made up of enterprise resource planning applications ("ERP modules") that talk to each other and share a database. This means you can eliminate information silos between departments and give everyone a single source of truth.

Chapter 6 : Enterprise Resource Planning (ERP) | Corporate Renaissance Group

ERP is an acronym for Enterprise Resource Planning, but even its full name doesn't shed much light on what ERP is or what it does. For that, you need to take a step back and think about all of the various processes that are essential to running a business, including inventory and order management, accounting, human resources, customer.

Chapter 7 : What is ERP - Enterprise Resource Planning? Webopedia

Enterprise Resource Planning - ERP. Enterprise Resource Planning, also known as ERP, is a management tool to integrate all departments and functions across a company onto a single computer system that meets company needs.

Chapter 8 : What is ERP (Enterprise resource planning)?

Redefining ERP and EPM. Companies both large and small rely on enterprise resource planning (ERP) and enterprise performance management (EPM) systems to manage accounting, financial planning and analysis (FP&A), revenue recognition, governance, risk management, compliance, procurement, projects, the financial close, and more.

Chapter 9 : Enterprise Resource Planning

Aptean Ross ERP is a next generation Enterprise Resource Planning system for growing, mid-market recipe- and formula-based manufacturers. Its specialized capabilities can reduce costs, increase efficiency,.