Chapter 1 : Accounting information system - Wikipedia

Realizing the importance of accounting information systems and internal controls in today's business environment, the updated 3rd edition of Accounting Information Systems makes the world of systems and controls accessible to today's student. It enhances opportunities for learning about AIS and its day-to-day operation and is written for.

History[edit] Traditionally, accounting is purely based on manual approach. Experience and skilfulness of an individual accountant are critical in accounting processes. Even using the manual approach can be ineffective and inefficient. Accounting information systems resolve many of above issues. AISs can support an automation of processing large amount of data and produce timely and accuracy of information. Early accounting information systems were designed for payroll functions in s. Initially, accounting information systems were predominantly developed "in-house" as legacy systems. Such solutions were expensive to develop and difficult to maintain. Therefore, many accounting practitioners preferred the manual approach rather than computer-based. Large organisations would often choose ERP systems. As the need for connectivity and consolidation between other business systems increased, accounting information systems were merged with larger, more centralized systems known as enterprise resource planning ERP. Before, with separate applications to manage different business functions, organizations had to develop complex interfaces for the systems to communicate with each other. In ERP, a system such as accounting information system is built as a module integrated into a suite of applications that can include manufacturing, supply chain, human resources. These modules are integrated together and are able to access the same data and execute complex business processes. Today, Cloud-based accounting information systems are increasingly popular for both SMEs and large organisations for lower costs. With adoption of accounting information systems, many businesses have removed low skills, transactional and operational accounting roles. An example of architecture[edit] An AIS typically follows a multitier architecture separating the presentation to the user, application processing and data management in distinct layers. The presentation layer manages how the information is displayed to and viewed by functional users of the system through mobile devices, web browsers or client application. The entire system is backed by a centralized database that stores all of the data. This can include transactional data generated from the core business processes purchasing, inventory, accounting or static, master data that is referenced when processing data employee and customer account records and configuration settings. The application layer retrieves the raw data held in the log database layer, processes it based on the configured business logic and passes it onto the presentation layer to display to the users. For example, consider the accounts payable department when processing an invoice. With an accounting information system, an accounts payable clerk enters the invoice , provided by a vendor , into the system where it is then stored in the database. When goods from the vendor are received, a receipt is created and also entered into the AIS. Once the match is complete, an email is sent to an accounts payable manager for approval. From here a voucher can be created and the vendor can ultimately be paid. Advantages and implications[edit] A big advantage of computer-based accounting information systems is that they automate and streamline reporting , develop advanced modelling and support data mining. The accounting information system pulls data from the centralized database, processes and transforms it and ultimately generates a summary of that data as information that can now be easily consumed and analyzed by business analysts, managers or other decision makers. These systems must ensure that the reports are timely so that decision-makers are not acting on old, irrelevant information and, rather, able to act quickly and effectively based on report results. Consolidation is one of the hallmarks of reporting as people do not have to look through an enormous number of transactions. For instance, at the end of the month, a financial accountant consolidates all the paid vouchers by running a report on the system. With large corporations that generate large volumes of transactional data, running reports with even an AIS can take days or even weeks. After the wave of corporate scandals from large companies such as Tyco International , Enron and WorldCom , major

emphasis was put on enforcing public companies to implement strong internal controls into their transaction-based systems. Implementation[edit] Many large and SMEs are now adopting cost effective cloud-based accounting information system in recent years. Looking back years ago, most organizations, even larger ones, hire outside consultants, either from the software publisher or consultants who understand the organization and who work to help select and implement the ideal configuration, taking all components into consideration. The steps to implement an accounting information system are as follows: Detailed Requirements Analysis where all individuals involved in the system are interviewed. The current system is thoroughly understood, including problems, and complete documentation of the system—transactions, reports, and questions that need to be answered—are gathered. User needs that are not in the current system are outlined and documented. Users include everyone, from top management to data entry. The requirements analysis not only provides the developer with the specific needs, it also helps users accept the change. Systems Design synthesis The analysis is thoroughly reviewed and a new system is created. The system that surrounds the system is often the most important. What data needs to go into the system and how is this going to be handled? What information needs to come out of the system how is it going to be formatted? If we know what needs to come out, we know what we need to put into the system. The program we select will need to appropriately handle the process. The system is built with control files, sample master records, and the ability to perform processes on a test basis. The system is designed to include appropriate internal controls and to provide management with the information needed to make decisions. It is a goal of an accounting information system to provide information that is relevant, meaningful, reliable, useful, and current. To achieve this, the system is designed so that transactions are entered as they occur either manually or electronically and information is immediately available online for management. Once the system is designed, an RFP is created detailing the requirements and fundamental design. Vendors are asked to respond to the proposal, to provide demonstrations of the product, and to specifically respond to the needs of the organization. Ideally, the vendor will input control files, sample master records, and be able to show how transactions are processed that result in the information that management needs to make decisions. An RFP for the information technology infrastructure follows the selection of the software product because the software product generally has specific requirements for infrastructure. Sometimes, the software and the infrastructure is selected from the same vendor. If not, the organization must ensure that vendors will work together without "pointing fingers" when there is an issue with either the software or the infrastructure. Documentation As the system is being designed, it is documented. The documentation includes vendor documentation of the system and, more importantly, the procedures or detailed instructions that help users handle each process specific to the organization. Most documentation and procedures are online and it is helpful if organizations can add to the help instructions provided by the software vendor. Documentation and procedures tend to be an afterthought but is the insurance policy and the tool used during testing and training—before launch. The documentation is tested during the training so that when the system is launched, there is no question that it works and that the users are confident with the change. Testing Before launch, all processes are tested from input through output, using the documentation as a tool to ensure that all processes are thoroughly documented and that users can easily follow the procedures: They know it works and that the procedures will be followed consistently. This is done in a test system not yet fully populated with live data. The documentation and procedures may be modified during this process. All identified transactions must be tested during this step. All reports and online information must be verified and traced through the audit trail so that management is ensured that transactions will be handled consistently and that the information can be relied upon to make decisions. Training Before launch, all users need to be trained, with procedures. This means a trainer using the procedures to show each end user how to handle a procedures. The procedures often need to be updated during training as users describe their unique circumstances and the "design" is modified with this additional information. The end user then performs the procedure with the trainer and the documentation. The end user then performs the procedure with the documentation alone. The end user is then on his or her own with the support, either in

person or by phone, of the trainer or other support person. This is before data conversion. Data Conversion Tools are developed to convert the data from the current system which was documented in the requirements analysis to the new system. The data is mapped from one system to the other and data files are created that will work with the tools that are developed. The conversion is thoroughly tested and verified before final conversion. Launch The system is implemented only after all of the above is completed. The entire organization is aware of the launch date. Ideally, the current system is retained and often run in "parallel" until the new system is in full operation and working properly. With the current mass-market software used by thousands of companies and fundamentally proven to work, the "parallel" run that is mandatory with software tailor-made to a company is generally not done. This is only true, however, when the above process is followed, the system is thoroughly documented and tested, and users are trained before launch. Tools Online resources are available to assist with strategic planning of accounting information systems. Information systems and financial forms aid in determining the specific needs of each organization, as well as assigning responsibility to principles involved. System upgrades follow a similar process and all users are thoroughly apprised of changes, upgraded in an efficient manner, and trained. Many organizations chose to limit the time and money spent on the analysis, design, documentation, and training, and move right into software selection and implementation. If a detailed requirements analysis is performed with adequate time being spent on the analysis, the implementation and ongoing support will be minimal. Organizations that skip the steps to ensure the system meets their needs are often left with frustrated end users, costly support, and information that is not current or correct. Worse yet, these organizations build the system three times instead of once. Career[edit] This section has multiple issues. Please help improve it or discuss these issues on the talk page. This section uses second-person "you" inappropriately. Please rewrite it to use a more formal, encyclopedic tone. April This section does not cite any sources. Please help improve this section by adding citations to reliable sources. Unsourced material may be challenged and removed. April Learn how and when to remove this template message Many AIS professionals work for consulting firms, large corporations, insurance companies, financial firms, government agencies and public accounting firms, among other types of companies. With technological advancement, traditional accounting practice will shift to accounting information systems practice.

Chapter 2 : Introduction To Accounting Information Systems

Realizing the importance of accounting information systems and internal controls in todays business environment, the updated 3rd edition of Accounting Information Systems makes the world of systems and controls accessible to todays student.

For the data to be useful, it must be complete, correct and relevant. On the other hand, examples of data that would not go into an AIS includes memos, correspondence, presentations and manuals. Before there were computers, AISs were manual, paper-based systems, but today, most companies are using computer software as the basis of the AIS. Quality, reliability and security are key components of effective AIS software. Managers rely on the information it outputs to make decisions for the company, and they need high-quality information to make sound decisions. AIS software programs can be customized to meet the unique needs of different types of businesses. The system could even be outsourced to a specialized company. For publicly-traded companies, no matter what software program and customization options the business chooses, Sarbanes-Oxley regulations will dictate the structure of the AIS to some extent. This is because SOX regulations establish internal controls and auditing procedures that public companies must comply with. Information Technology Infrastructure Information technology infrastructure is just a fancy name for the hardware used to operate the accounting information system. In addition to cost, factors to consider in selecting hardware include speed, storage capability and whether it can be expanded and upgraded. Perhaps most importantly, the hardware selected for an AIS must be compatible with the intended software. One way businesses can easily meet hardware and software compatibility requirements is by purchasing a turnkey system that includes both the hardware and the software that the business needs. Purchasing a turnkey system means, theoretically, that the business will get an optimal combination of hardware and software for its AIS. A good AIS should also include a plan for maintaining, servicing, replacing and upgrading components of the hardware system, as well as a plan for the disposal of broken and outdated hardware so that sensitive data is completely destroyed. Internal Controls The internal controls of an AIS are the security measures it contains to protect sensitive data. These can be as simple as passwords or as complex as biometric identification. An AIS must have internal controls to protect against unauthorized computer access and to limit access to authorized users which includes some users inside the company. It must also prevent unauthorized file access by individuals who are allowed to access only select parts of the system. An AIS contains confidential information belonging not just to the company, but also to its employees and customers. This data may include Social Security numbers, salary information, credit card numbers, and so on. All of the data in an AIS should be encrypted, and access to the system should be logged and surveilled. System activity should be traceable as well. An AIS also needs internal controls that protect it from computer viruses, hackers and other internal and external threats to network security. It must also be protected from natural disasters and power surges that can cause data loss. A third use for an AIS is that when a business is in trouble, the data in its AIS can be used to uncover the story of what went wrong. The cases of WorldCom and Lehman Brothers provide two examples. It took extraordinary effort to untangle these systems to obtain the necessary information. The Collapse of Lehman Brothers. The Bottom Line The six components of an AIS all work together to help key employees collect, store, manage, process, retrieve, and report their financial data. Having a well-developed and maintained accounting information system that is efficient and accurate is an indispensable component of a successful business. Trading Center Want to learn how to invest? Get a free 10 week email series that will teach you how to start investing. Delivered twice a week, straight to your inbox.

Chapter 3 : Maintenance | Testbankcorp

Book Description. This new edition continues to organize key AIS course content (e.g. ERP and relational databases, REA, controls) around four major themes: simplicity of writing and presentation (lower level), business processes, accounting and IT controls, and ethics as it relates to accounting systems.

With all of the media coverage on the Sarbanes-Oxley Act, small-business owners might think that implementing an internal control is more expensive and troublesome than it is worth. While a small family business does not need the extent of internal control that a large multinational company needs, appropriate internal control can improve business processes and boost profitability. Understanding the standard components of an internal controls system can help you choose the extent of internal control that is correct for your business. Control Environment The control environment is the overall attitude and tone of an organization toward internal control. Often talked about as "tone at the top," an effective control environment starts with management that is interested in such controls. Explicitly, a strong control environment is shown through management taking time to design and implement internal controls, monitor risk and communicate the results to employees. Risk Assessment Risk assessment means determining how relevant risks affect the business objectives of your company. Of course, mapping controls to risk requires that you identify these risks in the first place. This is where the risk assessment component of the framework comes in. A best practice is to perform an annual risk assessment during the company budget process. The information and communication part of the internal control framework is charged with making sure that information gets where it needs to be in the organization. While this includes information from company management getting to employees, it also includes information from employees making it to management. For example, implementation of a policy to report suspected fraud would be included in the information and communication part of the framework. Monitoring The monitoring part of the internal control framework is somewhat like an annual checkup for the control system. Even the best internal control systems should adapt to changes in the company or the business environment. To check for these changes, small businesses should conduct periodic evaluations of the entire internal control system and act on the results of these evaluations. Control Activities When most people think about internal control, control activities are what come to mind. These are the specific actions that management and employees take to maintain internal control. The company then designs a control to counter the risk. For this example, the company may implement that only one person uses a cash drawer on a shift. The rule of one person per cash drawer is the control activity in this situation. He is a certified public accountant, graduated summa cum laude with a Bachelor of Arts in business administration and has been writing since His career includes public company auditing and work with the campus recruiting team for his alma mater.

Chapter 4 : Accounting Information Systems: The Processes and Controls, 2nd Edition [Book]

Using simple process maps, document flowcharts, and data flow diagrams, this comprehensive yet easily comprehended book defines business processes and explains the foundational concepts of accounting information systems (AIS).

Chapter 5 : Accounting Information Systems - Functions and Parts of the System

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Chapter 6 : Internal Controls in Accounting Information Systems | theinnatdunvilla.com

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