Course Learning Outcomes for Unit VI

Upon completion of this unit, students should be able to:

9. Examine advanced information systems solutions such as ERP (enterprise resource planning) and SAP (software application and products).
   9.1 Explain the value added to organizations by implementing advanced information systems solutions.
   9.2 Examine different advanced information systems solutions available for businesses.
   9.3 Analyze different features and functionality offered by advanced information systems solutions.

Reading Assignment

Chapter 9:
Achieving Operational Excellence and Customer Intimacy: Enterprise Applications

Chapter 10:
E-Commerce: Digital Markets, Digital Goods

Unit Lesson

Advanced Information Systems

What exactly are advanced information system solutions? Most people who have worked in an office setting have a good understanding of the processes that affect their everyday lives. They understand that the data they enter or scan is stored in a database, and certain processes they run may close out a monthly account, process a payroll run, or bill a customer. These types of processes, while they seem separate, are often very integrated.

In years past, organizations had large mainframes. These mainframes had to process transactions in batches, usually at night, and until that batch process happened, the screens you were viewing were not always completely correct. For example, you could place an order for a customer, but you would not see the order until the next day. Unfortunately, that also meant that you could not see the inventory reduction until the next day as well. This means you might place an order and there might not be any of that item left in stock at the time. A salesperson or customer service representative might have to go look at three or four different screens to get a good picture of the customer’s account health or to research a problem—even with this batching process. Once client-servers came to organizations, employees had to look at two completely different computers to research that same problem (until organizations could get all of their data and processes moved off of those old mainframes).

Now that businesses have grown so much, many of them have multiple product lines, systems, servers, and databases. In the past, managers would have to wait for big printouts of various reports to make business decisions. Enterprise resource planning (ERP) systems works to integrate all of those critical systems together so they can talk to each other. The applications that make up the enterprise software are created based on predefined best business practices. Think of it this way: When a business purchases a piece of equipment, that order is entered into accounting the same way for all businesses. If a customer makes a purchase, it should generally be handled the same way. When you hire someone, you have the same laws to follow. There may be some customization, but that is handled in the application as well (Laudon & Laudon, 2016).

From a managerial perspective, what is the value in enterprise systems?
This is the question we have to ask ourselves when adopting any sort of information systems solution, is it not? We do not just spend large amounts of money on something without understanding the value it offers us as a company. We have discussed the value of data in previous chapters. Among the other reasons enterprise systems bring us value, they also help us to have firm-wide information to make better decisions.

The bottom line is this: Advanced information system solutions can help organizations in many different ways, such as operating more effectively and efficiently, making better decisions, managing our goods more effectively, reaching our customers faster, and being more competitive and innovative. Anyone can see the value in that!

What Are Some Other Advanced Information System Solutions?

Supply chain management (SCM): Many large organizations (such as Walmart and Amazon) use supply chain management (SCM) to help their organization manage their suppliers and goods more efficiently. If you have thousands of suppliers and hundreds of thousands of orders, it would be impossible to keep up with everything. SCM software can manage all of this and allows for forecasting and decision making as well. Imagine that many of your suppliers are in other countries; this means you have a global supply chain that is even more complex to manage.

Customer relationship management (CRM): Customer relationship management (CRM) involves managing customers. Again, if you have 50,000 customers, how do you keep up with what they purchased? Sure, you can store that information in a database but would it be easy to manage those relationships? How would you keep up with the marketing incentives you have offered them? Better yet, what about the marketing incentives that you want them to pass on to their customers?

Systems application products (SAP): Systems application products (SAP) are a brand of enterprise resource systems. Oracle and Microsoft both have their own brands of enterprise resource systems as well. While all of these vendors offer very similar base functionalities, each of them compete against each other by bringing their own special capabilities to their enterprise resource system offerings.

E-commerce: Another type of advanced information systems involves e-commerce. The explosion of Internet purchasing is no surprise to anyone, but the technology involved in e-commerce is pretty unique. In the past, retailers had pretty tight control over everything. The options for consumers were not plentiful. Still, word of mouth was still prevalent so a business could suffer if it did not treat its customers well. Now, retailers have invited the world to comment on their websites. Sure, they can always delete bad comments, but knowledge is power. Have you ever had a bad experience at a store and wondered if it ever got past the customer service person that you complained to? E-commerce gives retailers global reach, which can be an advantage and a disadvantage. Advanced information systems have given retailers the ability to allow customers to interact with each other through social media-style functionality. Retailers can now personalize your viewing experience based on your web searches. This type of customer targeting was not possible before more advanced information systems were developed.

We have discussed business-to-consumer (B2C) e-commerce, but there have also been many types of e-commerce, e-commerce business models, and e-commerce revenue models developed. Social media is one of the most predominant focuses of marketing today. Another focus of late is m-commerce, which is mobile commerce.

One of the biggest boons to business-to-business e-commerce is the development of electronic data interchange (EDI). This service enables the transfer of data between two organizations. For example, an organization may receive an electronic bill from a supplier through EDI. Conversely, the organization can send a notice of payment back to the supplier via EDI. An organization can send all of its UPS shipping information to UPS in the form of an EDI file.

Would any of this be possible without advanced information system solutions? What do you think the future holds for information systems and technology as businesses grow bigger and bigger?
Reference


Suggested Reading

The following journal article is a great study on the critical success factors involved in the implementation of enterprise systems. You are encouraged to review this information.

In order to access the resource below, you must first log into the myCSU Student Portal and access the Business Source Complete database within the CSU Online Library.


Learning Activities (Non-Graded)

Assume that you have been hired as the new Social Media Manager for the e-commerce division of a retail chain. Create a seven to ten PowerPoint slide presentation to outline your strategic plan for integrating social media into the existing e-commerce business for the organization.

You may use various sources including your textbook and the CSU Online Library. Be sure to cite all sources used in a reference slide with proper APA formatting. Cover and reference slides do not count in the length requirement. You may also use the slide notes function.

As this is a non-graded activity, this work cannot be uploaded to Blackboard. If you would like your professor’s feedback on your work, send this document to them in an email with a note that you would like to receive feedback on your non-graded activity.