SYSTEMS INTEGRATION

Today, perhaps more than ever before, it is essential that companies be efficient and effective with their products and services. There are many drivers in organizations for needing integrated systems. The ability to respond quickly to market conditions is a key part of protecting your customer base against the incursions of a global set of hungry competitors. It is also the key to growing or retaining that customer base. In other words, the inability to meet the market demand effectively can have unfortunate consequences. Having too much or not enough inventory, or having the inventory at the wrong place and the wrong time, can have a disastrous impact on a company's profitability—and even survivability. Integrated systems allow companies to accomplish something that has alluded most to date: the linking of demand- and supply-side functions in a way that enables a quick and flexible response to changes in demand. Developing processes to support integrated systems is not an easy task, but it can be done, as evidenced by industry leaders like Dell, Amazon, and others that have already put integrated systems in place.

TABLE 2-1 System Integration Steps

Step 1	Resource categorization	Take an inventory of the various hardware and software resources focusing on vendors, operating systems platform, IS architecture used in these resources.
Step 2	Compliance and standards	Check whether the database and other technologies used in various applications are such supporting standards as JDBC/ODBC compliance for databases.
Step 3	Legacy systems support	Develop a policy in support of older legacy applications.
Step 4	Middleware tools	Think of middleware tools because most organizations will not dispose of their old system right away for systems integration. Middleware tools are essential for integration in the short term—if existing applications must be used by the organization.
Step 5	Authentication and authorization policies	Develop a single sign-on policy for application and data access because all employees and external partners will need access to an integrated system from anywhere, anytime.
Step 6	Centralized IT services and help desk support	Instituting IT support for an integrated systems environment is necessary to avoid support and maintenance problems with the integrated system. Centralization does not mean that they are all physically in one location. The IT staff can be all over the organization, but they need to be able to support all applications and platforms with a centralized IT help desk support.
Step 7	Backup, recovery, and security policies	Planning data and disaster recovery for organization's data in an integrated system IT is crucial for building the trust and confidence for the new system. A good backup and recovery system is essential if there is a system failure or a major disaster.
Step 8	Hardware and software standardization policies	Develop organization standards and policy on acquisition of new hardware and software which are aligned with organization IT strategy.