



White Papers on Current Issues

The 12 Cardinal Sins of ERP Implementation

Enterprise Resources Planning (ERP) Definition

Enterprise Resources Planning (ERP) is an outgrowth of Materials Requirements Planning (MRP) initiated in the 1970's as a new computer-based approach to planning and scheduling of material requirements and inventory, featuring the time-phased order point. MRP evolved to MRP II (Materials Resources Planning) the "closed loop" process, to Business Requirements Planning (BRP) and eventually to ERP. As MRPII came into vogue in the late 1970's and early 1980's, software companies began to develop software packages around MRPII concepts.

Taking dramatic steps to become agile is necessary to be a manufacturing or distribution contender in the next decade. Organizations must focus on moving information and products quickly through the entire supply chain, distribution, assembly, manufacture, and supply. All physical events must be enacted swiftly, accurately, and effectively. The faster that parts, information and decisions flow through an organization, the faster it can respond to customer needs and orders.

At the same time, research of integrated databases was in progress at a university, and out of that research emerged data base management systems (DBMS). One of the earliest successful commercially produced data base management systems was IDMS (for IBM-based systems) and DBMS (for DEC-based systems) produced by Cullinane, whose product name was later changed to Cullinet. IMS, a structured data base management system for high transactions, was another data base management system produced by IBM.

The idea of the integrated database as the engine for fully integrated software was probably one of the greatest outgrowths of Ollie Wight and Dave Goddard's MRP. Eventually, the acronym ERP was conceived to represent what had already been developed by software companies.

The early software packages were developed by way of a transactional approach, and were highly unfriendly to a user. With the advent of the personal computers, the development of Microsoft's Windows NT, and the mid-range IBM AS/400 computer, client-server systems began to emerge. Windows, used as the base operating system, allowed software packages to become more and more user-friendly.

Today, ERP systems have proliferated extensively, and have reached a stage where development has become industry specific. Thus it is plausible to search for an ERP package developed for one's specific industry idiosyncrasies.

The Issues

The biggest single issue in ERP is the failure of a successful implementation. It is mind-boggling to continually encounter companies who make major ERP gaffes in this day and age, especially since most of the trials and tribulations of MRPII implementation were suffered and learned from in the early 1980's with alpha, beta and gamma releases.

So what constitutes failure? Several things come to mind:

- (1) Not making the promised return on investment,
- (2) Inordinately extending the implementation schedule and start-up date,
- (3) Running over budget by unconscionable variances,
- (4) Grinding the organization to a crawl pace, or the severest of all consequences,
- (5) Stopping production and/or not delivering orders to your customers.

Industry statistics show that >60% of ERP implementation starts historically fail. Does this mean that you are doomed from the start? Of course not, if you learn from the mistakes of others. So the pertinent questions are: what are the main causes of ERP failure and what can be done to prevent this from happening to you?



The 12 Cardinal Sins of ERP Implementation

There are twelve major reasons for why companies get bogged down or fail in implementing ERP.

(1) Lack of Top Management Commitment

The propensity of top management to delegate the oversight of an ERP implementation to lower management levels often results in (1) being "out of touch" with critical events, or (2) the lack of understanding of the scope, size, and technical aspects of the project, and subsequently, the proper commitment of time and resources required for a successful implementation. The result is a failure waiting to happen.

(2) Inadequate Requirements Definition

Surveys have shown that inadequate definition of functional requirements accounts for nearly 60% of ERP implementation failures. This is simply a matter of not comprehensively and systematically developing a quality set of functional requirements definitions. This leads to the second greatest cause of ERP implementation failures: poor package selection.

(3) Poor ERP Package Selection

Poor package selection occurs when a company has inadequately developed functional requirements definitions. It also occurs when staff members assigned to ERP projects do not take the time to run the screens of the new system, as they would during their daily work tasks, to find out if the software package features are adequate for their needs.

Another reason we have found is executives familiar with an ERP system from a last job they held, implement the same system in their new company without defining functional requirements. We have also encountered companies who made major gaffes by selecting a package at the top levels of a company without intimately knowing its characteristics. What often results from this is the ERP package doesn't fit the organizational needs, or that the package selected takes longer to process daily work tasks.

(4) Inadequate Resources

The third greatest reason for ERP implementation failures is inadequate resources. Many companies will attempt to "save dollars" by doing everything on an overtime basis, whether or not there are adequate skills within the company, extending individual work loads to 150%. This approach can be a "kiss of death" for the program. Time and time again we run across this mistake in ERP implementations. The financial and emotional drain of what seems sometimes to be perpetual extensions, reschedules and delays of implementations takes its toll. People burn out after having put in extensive hours over a long period of time.

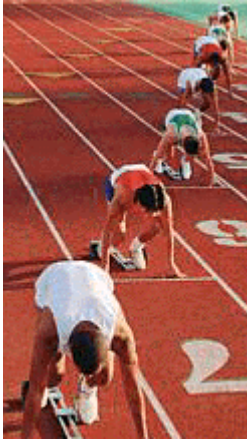
(5) Resistance to Change/Lack of Buy-in

The lack of a change management approach as part of the program can prevent a program from succeeding. Resistance to change is quite often caused by (1) A failure to build a case for change, (2) Lack of involvement by those responsible for working with changed processes (3) Inadequate communication (4) Lack of visible top management support and commitment, and (5) Arrogance. A lack of buy-in often results from not getting end-users involved in the project from the very start, thereby negating their authority and ownership of the new system and processes.

(6) Miscalculation of Time and Effort

Another cause of ERP implementation failure is the miscalculation of time and effort it takes to accomplish the project. Companies who treat an ERP selection, evaluation and implementation comparable to buying a washing machine are doomed to failure.

Winners never give up. Mistakes are learned from, techniques are mastered, skills are honed, weaknesses are strengthened, barriers are overcome, and the athlete becomes a relentless competitor. A vision of crossing the finish line in first place drives the athlete until the sweet smell of success is realized.



Why is this important? Competing is taking on tough, new proportions. A global resegmentation of markets is emerging that is changing the world economy. U.S. manufacturers face stiff offshore competition in most markets. Companies failing to respond to the challenge will find themselves left behind eating someone else's dust.

(7) Misfit of Application Software with Business Processes

One of the main causes of ERP implementation failure is the misfit of application software with the company business processes. This failure -- to examine underlying business process flaws, and integrate the applications with the business processes accounts for a large percentage of ERP failures.

(8) Unrealistic Expectation of Benefits and ROI

Another significant cause for ERP implementation failure is the unrealistic expectation of benefits and return on investment. Software providers are notorious for overstating the benefits in terms of ROI, when the *total* costs of the project have been understated. Often left out of the total costs are costs of planning, consulting fees, training, testing, data conversions, documentation, replacement staffing, and the learning curve performance drop. When this happens, a company doesn't stand a chance of achieving the ROI it anticipated.

(9) Inadequate Training and Education

Another of the biggest causes of ERP implementation failure is inadequate education and training, which are almost always underestimated. ERP-related training is crucial, as most employees must learn new software interfaces and business processes which affect the operation of the entire enterprise. The corporate culture is impacted by changes in the company's business processes, and shortchanging this part of the ERP implementation leads to much pain and suffering downstream.

(10) Poor Project Design and Management

A major mistake is to short-cut critical events in the project plan, such as time for documentation, redefining and integrating processes, or testing before going live. Another common mistake is made when a company leaves out the self-examination of business processes and uses ERP to cover-up weaknesses. It is easier to buy software than to perform the more difficult task of identifying weaknesses and opportunities for improvement.

(11) Poor Communications

One of the causes of ERP implementation failure is poor project communications, beginning with announcing the reason for the up and coming effort, and continuing to advise the organization of the progress and importance of the ERP implementation to the company. But good communications also allow different parts of the organization to assess how they will be impacted by changes in processes, policies, and procedures. Communications are a vital part of managing change in a corporate environment.

(12) Ill-advised Cost Cutting

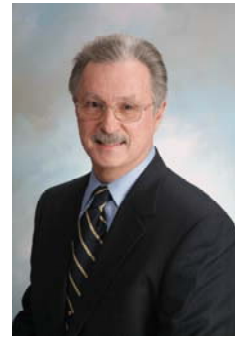
Another of the key causes of ERP implementation failure is ill-advised cost cutting. In an effort to avoid temporary conversion costs, some companies take a very risky route and go live at multi-plant sites simultaneously, subjecting all plants or some plants to a total shutdown. This is suicidal. Others attempt to unrealistically compress the schedule in order to save on expenses, only to eventually run over both schedule and budget. We feel that ROI should take a "back seat" when upgrading an important part of a company's infrastructure: the information system. Instead of justifying or driving the project primarily for financial gains, the implementation should be treated as an upgrade necessary to maintain or gain a strategic and competitive advantage.



World-class performance requires speed, quality, agility, and endurance. In a highly competitive race for world market domination, there are no silver or bronze medals. You win or you lose. This degree of performance doesn't simply happen. It requires years of commitment, conditioning, and a vision of a gold medal.

Author

Richard G. Ligus is President of Rockford Consulting Group, Ltd., located in Rockford, IL., with over 30 years experience in manufacturing, procurement, transportation and distribution. He specializes in developing and implementing manufacturing, distribution, and supply chain strategies. Rich is an author and a speaker, and has developed seminars with the American Management Association. He is certified by both the Institute of Management Consultants and The National Bureau of Certified Consultants.



Rich has a bachelor of science degree in mechanical engineering from the New Jersey Institute of Technology, and a master of business administration degree from Rutgers University. He is a member of CASA/SME, and has been listed in Jane's Who's Who in Aviation and Aerospace. He has been a speaker at IMTS, USCTI, APFA, NEPMA, MCAA, Hand Tools Institute, CASA/SME, and others. He has appeared several times on WREX-TV, Mid-Morning Magazine.

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We facilitate the development and execution of supply chain, manufacturing, procurement, logistics, information systems, distribution, and organizational strategies that reduce delivery time, reduce cycle times, reduce costs, streamline information flow, streamline the organization structure, reduce manufacturing time, quicken the decision making process, and build a cohesive management team.

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Rockford Consulting Group, Ltd.

- 7210 East State Street Century Plaza Suite 206 Rockford, IL 61108-2624 •
- Telephone (815) 229-2900 • Toll Free (800) 667-7495 • Telefax: 815-229-2612 •
- E-mail: rligus@RockfordConsulting.com • Internet: <http://RockfordConsulting.com>