ERP IMPLEMENTATION FAILURE: A CASE STUDY

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While it is true that successful implementation of an enterprise resource planning (ERP) system is a task of Herculean proportions, it is not impossible. If your organization is to reap the benefits of ERP, it must first develop a plan for success. But "prepare to see your organization reengineered, your staff disrupted, and your productivity drop before the payoff is realized."[1] Implementing ERP must be viewed and undertaken as a new business endeavor and a team mission, not just a software installation. Companies must involve all employees, and unconditionally and completely sell them on the concept of ERP for it to be a success.[2] A successful implementation means involving, supervising, recognizing, and retaining those who have worked or will work closely with the system. Without a team attitude and total backing by everyone involved, an ERP implementation will end in less than an ideal situation.[3] This was the situation for a soft drink bottler that tried to cut corners and did not recognize the importance of the people so heavily involved and depended on.

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*E*NTERPRISE RESOURCE PLANNING (ERP), created to conquer the shortcomings of MRPII (manufacturing resource planning), is a system that involves the planning and managing of the entire organization's resources in the most efficient, productive, and profitable manner. Unlike an MRP structure, ERP systems are information systems that allow an organization to run a synchronized configuration that strategically connects all aspects of a business. ERP allows an organization to gain competitive advantages by saving resources and responding to the ever-changing business environment.[4] Ideally, ERP eliminates redundant data entry and other inefficiencies that accompany departmentalized transaction processing schemes.[5] Communication between disparate structures, including hardware and software, is made possible in an ERP environment. Systems that were once incompatible can now be connected in order to share data and "tap into hidden information."[4] That hidden information, which is vital to strategic planning and maintaining a competitive edge, is now provided with less effort and in real-time.

Competitive factors, such as an ever-increasing number of mergers, acquisitions, and globally aggressive rivals, have helped ERP gain recognition. With shorter product life cycles and competition presenting itself in innovative ways, the advantages gained through the effective and efficient use of an entity's resources often prove to be an excellent investment. A successfully deployed ERP system can increase customer satisfaction, reduce inefficient spending, strengthen sales and forecasts, reduce inventory turn-around times, and enhance employee productivity and satisfaction.[1,4] Enticing as these benefits might sound, they should be prefaced with a word of caution: the challenges of implementation can cause a beneficial system such as this to be more detrimental than the legacy system it is replacing.

This article examines the ERP endeavor of a major soft drink bottler. This bottler, which implemented a major ERP system completed the implementation, but not without losing significant personnel and system functionality. After committing millions of dollars to purchase ERP software, the soft drink maker tried cutting corners during implementation. Relying too

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heavily on its own people instead of consultants, the bottler expected too much from its already-taxed employees. Trying to minimize setup costs and reduce expenses, the company overlooked many of the planning team's recommendations regarding the project. This ERP implementation created high turnover and communication problems, which led to the termination of key people and animosity among employees. All of these factors, in turn, led to a system that was grossly underused, and in the beginning, a hindrance to the overall business.

The purpose of this article is to offer a cursory understanding of ERP and enumerate some of the advantages and disadvantages. It then examines a major soft drink bottler and the issues that led it to consider ERP. It also discusses the trials and tribulations of this ERP initiative and offers suggestions for an organization that may be considering implementing an ERP system.

ENTERPRISE RESOURCE PLANNING

Although implementing an ERP system is no easy undertaking, most organizations that have accomplished it successfully will attest to the many benefits it has to offer. Among those reaping the benefits are Fujitsu, General Motors, Boeing, IBM, and Coke.[6] According to some, the ERP industry, eventually reaching $1 trillion, will soon be a part of "70 percent of the Fortune 1000 firms."[7] ERP is not limited to just these organizations. Many other organizations, both large and small, have or will implement ERP systems in an attempt to gain a strategic position by focusing on business processes and removing departmental separation that inhibits effective and efficient communication. With these barriers removed, ERP systems promise to provide many advantages to companies.[6]

Advantages of ERP

ERP can improve employee satisfaction through removing redundancy and tediousness from day-to-day activities. It allows more time for value-added duties, which in turn should lead to a more fulfilling job for employees. Employees can become more involved in decision making and, with the right training and guidance, can become empowered to make those decisions without the close, watchful eye of their supervisor. If employees are challenged and not bored on the job, they will be more likely to stay with that job, become more experienced, and therefore become more of an asset to the company.[8] This experience and knowledge helps the company gain a competitive advantage through lower turnover and lower training costs.[7] Turnover and training are big expenses to companies, especially with the technical skills that are required to perform many jobs.

With benefits such as enhancing employee satisfaction and extending competitive advantage, the use of integrated systems is becoming widespread in many industries, including the manufacturing industry. Coca-Cola bolstered its success by providing real-time decision tools to its sales force while in the field. It placed marketing, promotional, and ad information at the fingertips of its sales force to ensure that retailers have the right product at the right time, which in turn has enhanced Coke's revenue stream.[9] ERP also targets less compatible departments, such as accounting, production, and logistics, and streamlines their ability to share data. The result is improved transaction processing, which in turn leads to improved decision making.[5,9]

ERP systems, incorporating this better decision making, focus on the core business functions that have a long history of success. It perfects those basics and provides a uniform way for companies to integrate them into their own corporate environment.[7] ERP also breaks down barriers between departments and allows the fluid movement of critical data between functions. This fluid movement of critical data allows organizations to reap many tangible and intangible benefits alike. Fujitsu, General Motors, and Boeing, to name a few, have experienced reduced cycle times for closing financials, streamlined global financial reporting, and internal resolutions to supply chain issues.[6] Improvements such as these lead to an improved business environment. "Incentives for adopting enterprise software vary, but one common thread is anticipated business improvement."[6] These incentives and an overall improvement in their business are what entice companies to undertake the huge task of ERP implementation. However, ERP is not without its disadvantages.

Disadvantages of ERP

To say that ERP does not have disadvantages would be a false statement, at a minimum. However, most of the pitfalls relate directly to the implementation and the organization itself, and can usually be avoided. Without the proper planning and organization, an ERP project is sure to fail.[1] Dialogue about the client's expectations, the products capabilities, and the cli-

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ent's overall commitment to the project are at the top of the list of items to cover when discussing an implementation.[1] Without a thorough understanding of all these factors, the undertaking could be tragic. Hershey and Whirlpool are two major corporations that have had a bad experience with ERP implementations. In 1999, Hershey had problems distributing its products because its new system targeted to handle filling and shipping orders was not functioning properly.[10] Whirlpool also experienced major setbacks with its ERP system, which was implemented to improve the shipping and invoicing processes within the company. Both of these companies experienced problems that probably could have been avoided if certain aspects of the implementation had been handled differently and according to consultants' recommendations.

Although each individual ERP package may have its downfalls or customization problems, the bulk of ERP problems stem from an implementation that is not handled properly. Hershey's problems surfaced when it tried to coordinate SAP and its customer relationship management system. In Whirlpool's case, the company ignored warnings from SAP that its supply-chain model would not be fully ready for the "go-live date."[10]

Other cases of implementation failure result from users trying, theoretically, to fit a square peg into a round hole. They try to map a system that did not function properly to begin with into the new structure of the ERP system. For ERP to work precisely the way it was intended, the organization must make modifications to their processes, and not try to modify the software to fit the organization. Although some modifications are permissible, the whole idea of ERP, and business process remodeling, works better with fewer changes being made to the original packaged software.[6]

Organizations and managers alike must remember that when undertaking a major implementation venture, employees and constituents of a project must be treated as if they are just as valuable as the software itself. If this mentality is not adopted, the company might be better off saving its money and not initiating the project. ERP software is worthless without the proper people to implement, use, and maintain its functionality.[2,7]

As in most of the ERP implementations efforts that fail, the soft drink maker's situation involved multiple reasons for disappointment. However, the areas highlighted in this article are primarily related to personnel issues. Im-

proper employee involvement, lack of training, inconsistent management support, and a lack of good communication were all issues with the bottler's implementation effort. Expecting an employee to perform at an extremely high level, with no additional incentive or recognition, throughout such a long implementation is asking way too much. Lower-level employees, unlike their manager counterparts, need regular reinforcement to know they are performing as anticipated and to their manager's expectations. Without routine reinforcement and expected encouragement, it is easy for individuals to lose their dedication and stamina on a project of the magnitude of an ERP implementation effort.

With the previously mentioned pitfalls in mind, the following section examines, in detail, the soft drink bottler's ERP experience. The issues that led to a need for a new system are discussed, as well as examining the project itself and highlighting some lessons learned. Although the ERP system was implemented and the company was able to conduct business, many excellent, veteran employees were lost. As a result, the utilization of the system's abilities was far from maximized.

THE BOTTLER'S EXPERIENCE

Being one of the largest independent bottlers in the soft drink industry, keeping up with the latest bottling technology was the name of the game. Knowing that canning and bottling technology could make or break the bottom line, the bottler always maintained the latest and greatest equipment. On the other hand, information technology was something that had been swept under the rug for some time and not kept current.

Since its inception in 1935, the bottler had been acquiring territory and expanding the business. As a result, the need for better information grew. To keep up with company growth, new computer systems were added in different departments as the need beckoned. In doing so, care was not always taken to ensure compatibility. As the company continued to grow, the different stand-alone systems became more and more mismatched, and the need for an integrated system became extremely apparent.

Although further territorial growth was not really a consideration at the time, the addition of new products was always a reality. Consumers are always demanding more and the bottler wanted to be prepared. Not only were new product lines a factor, but the executives of the com-

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pany had continuously expressed their desire for timelier financial information and decision-making tools from the different departments. The existing systems, which were unique to each department, were unable to handle such requests. Any customized reporting was developed from a multitude of sources and compiled manually.

ERP, having gained recognition over the years, became the topic of discussion as alternatives were contemplated and the company tried to formulate a solution that would meet the needs of the individual departments, be compatible companywide, and facilitate the integrated communication that was desperately needed.

Due to the fact all these issues were significant enough to warrant an overall reengineering of business practices, the bottler decided to start researching viable options. A great deal of time and money was spent to research options, outline necessary attributes, and perform feasibility studies. Employees spent several months completing a study to justify expenditures for the new system. These studies, along with the inherent need for a new, integrated system, led to the decision to implement ERP.

The Decision to Implement ERP

After a great deal of research and discussion, an executive steering committee, with the guidance of outside consultants and the consensus of the information technology (IT) department, decided to implement an ERP system. The new system would be capable of handling company growth, communicating between departments, and producing customizable, robust reports. The ERP vendor that was "slicing and dicing" capabilities for reporting that accompanied the software.

This ERP vendor offered other features that were attractive to the soft drink bottler. The financial module, with its abilities to track profit, forecast sales, and manage cash flow, was also a feature the executives liked. They also liked the fact that the human resources and payroll modules would feed benefit, compensation, and time and labor information to the profit reports. Management appreciated the fact that production scheduling, cost of goods, and inventory would all automatically update the income statement. Once sold on the overall package, the executive committee gave the green light to go ahead with ERP implementation.

Project Initiation

Although the ERP product seemed to be the solution to all its problems, the bottler still had an enormous amount of work to do. No matter the size of the company, implementing an ERP system is not a trivial project. The bottler chose not to take the advice of the independent consultants it had hired during the ERP product evaluation and recommendation phase, and chose its own path for the implementation effort. This lack of faith in the consultants' advice made the implementation process even more challenging.

For the bottler, with a young, inexperienced professional staff and a very limited IT staff, the undertaking was more than everyone bargained for. Too much time-consuming and technical work was assigned to employees who did not have ERP expertise or the proper training. In addition to this lack of expertise, employees were not provided assistance when it came to keeping up with their regular job duties. Recommendations, once again from the independent consultants, suggesting part-time help be provided to employees involved in the project, were ignored. The bottler had a history of a "do-it-yourself" philosophy for all projects undertaken in the organization. Due to the enormous workload of the ERP implementation effort, a great deal of strain was placed on the employees involved in the project.

Communication issues, including employee encouragement concerns, also added to the burden of the human resources problem. Due to breakdowns in the channels of communication, and the lack of management support, many constituents, including high-level employees, resigned. Some were voluntary; many others were not.

With the already-looming challenges, the project was off to a shaky start. Choosing the proper project team and carefully planning its involvement would be the next major issue at hand. Even with other challenges, choosing the right employees to involve can make or break a project. The right employees can successfully overcome communication barriers and other minor obstacles. Keep in mind, however, that even the best planned project can be sabotaged without proper selection of employees.

Team Members and Their Involvement

The selection of ERP project team members lead to additional project and personnel issues. Although the consultants stressed the importance

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of quality representation, the bottler did not select the best candidates for the job. Some of the people who were selected to work on the project had only been with the company for a few months and were new to the manufacturing environment altogether. In fact, most team members were fresh out of school with degrees in management information systems. While this may be a good criterion for choosing project team members, it should not be the only selection criterion.

These team members were barely trained in their day-to-day job activities and were not experts in the business practices within their department. Although other employees were not as well-rounded in their educational background, they would have been much better candidates to be involved with the ERP implementation effort. It is merely in the company's best interest to choose the employees who are the most familiar with the processes they will be reengineering.[11]

While selecting the best and most knowledgeable employees may mean doing without their normal contributions for awhile, a company must be willing to make that sacrifice. The importance of involving the right people in the implementation cannot be stressed enough. This does not mean burning out people and expecting them to work 80- or 90-hour weeks either. It does mean hiring temporary help, or calling on other employees to take up some of the slack. Employees should not be expected to work long hours on both the ERP implementation effort and their regular duties. The team members should not be expected to perform at breakneck speed, nor be given more than normal implementation responsibilities in order to keep tedious, time-consuming tasks away from consultants. This is exactly what the consultants are there for. An inhuman pace, on a project like this, is unreasonable and will more than likely lead to the failure of the ERP implementation effort.

Not only were employees stressed out by the number of hours they were required to work, but they were frustrated by what was expected of them and the lack of appreciation they were receiving. Employees were not offered incentives or recognition at important milestones — or upon completion of the project. Management scoffed at the idea when it was mentioned. Creative incentives, in some way, shape, or form, would have gone a long way to pacify most, if not all, ERP team members. It is only human nature to want reinforcement of a job well done. It is especially

important when the job is spread over so many months, as it is in an ERP implementation effort. Employers should focus on the communication process with the employees, recognizing their hard work and achievements. This effort helps to facilitate a much smoother implementation effort.

Communication Challenges

In addition to the lack of management support, other communication issues plagued the project. Certain project leaders and upper management did not see the importance of sharing certain aspects of the project across modules and departments. When they did, they were not consistent about the format of the information. Important details regarding the way the new system would handle day-to-day actions were not revealed until insurmountable problems arose. When the problems were revealed, it was often too late and someone was being blamed for the additional time and money it was going to cost the company. Effective communication, in a team setting such as this, requires a fervent effort by everyone; and without its presence, important details will be overlooked.[11]

In the soft drink maker's situation, a lack of communication and uneasiness led to high turnover and great resistance to change. Due to lack of conveyance about upcoming training and expectations, many employees felt overwhelmed and left the organization. They just assumed they would not get training. Therefore, they were afraid they would not be able to perform their jobs. Along with clear communication, employees need to be pacified about the level of change their job is going to undergo. Change, to those not readily involved, can be very overwhelming. It can make employees very anxious about their jobs, and especially their future.[12] To ease this fear and anxiety, a clear channel of communication should be kept open at all times. Employees who are not readily involved in the project should be updated about the progress and changes being made. They should understand that they are welcome to make suggestions and ask questions at any point in the implementation effort. It will eventually be their system and they should understand that concept at every point during the implementation process.

Although personal adversity is not always the end result, as it was for one individual at the bottler, ineffective communication does cost precious time and money for all involved.

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When a communication breakdown came to a head at the bottler, it resulted in the firing of the project leader. The head of the IS department was terminated because of a verbal miscommunication between himself and another department head. Effective, thorough communication that is documented and administered through the proper channels can alleviate many headaches and save valuable, costly resources, particularly human resources.

Not only is communication important, but it is critical that the company as a whole feels that the project is worthwhile. "Convincing employees that the changes will ultimately benefit the company should start with an expressed endorsement from someone at the highest level of management. This person is often called the champion or sponsor of the project."[13] He must support not only the project, but all of the individuals involved as well. If employees and project members see this explicit expression of support, they will be much more likely to buy into the implementation and work toward the common goals of the organization.[14,15] When you ask employees to change the way they have carried out their job for the past ten to twenty years, you are not only asking them to change the method of working, "you are challenging their principles, their beliefs and the way they have done things for many, many years."[16] Supporting this change properly is the only way to ensure success.

Looking back at the trials and tribulations of this bottler can provide insight. The pitfalls that it succumbed to can be avoided with superb planning and excellent communication. Taking a look back at those issues, we will highlight the lessons learned and how they can be applied to make an implementation a successful and good experience for all involved.

ERP IMPLEMENTATION LESSONS LEARNED

Although it is not easy, ERP implementation should take an organization to the next level of competency. It should not cause turmoil and high employee turnover, as it did in this particular situation. With the lessons learned at this bottler's expense, perhaps the next company undertaking ERP implementation can ensure that valued employees are not lost in the process.

Employee Involvement

A company undertaking a task as enormous as an ERP implementation effort should really stop and think about what it is going to be asking of its employees. It should carefully evaluate its current staff and analyze its needs for such a project. It should inquire about the employees' desire to be involved and get their input as far as how to make that involvement more satisfying. The employer should not expect astronomical performance and should be reasonable about its requests. Asking an employee to maintain his regular full-time duties while significantly participating in an ERP implementation effort is just not realistic. Not only is such heavy involvement extremely demanding, it is not in the employer's best interest. When an employee is asked to participate in an ERP implementation project, it is because he is good at what he does and he knows the company well. A company should not jeopardize retaining talented employees because it is too frugal to hire someone, part time, to take up the slack of the person's regular job during the ERP implementation effort. After all, once a company has decided to implement ERP, hiring temporary help to maintain daily activities should be a minor, no-excuses expense.

Recognition and Retention

In addition to the help in carrying out normal activities, employees must also be given the incentive to apply themselves for such a long endeavor. The success of the long, daunting task of an ERP implementation can only be increased by incentives. Albeit a factor, compensation is not cited high on the list of such incentives.[8] Employees are satisfied and remain with an employer for many different reasons. Some say corporate culture, which is among the top reasons for employee longevity, ranks well above money. Other factors include having a sense that their work matters to the company, feeling valued by their employer, and spending time with their families.[8] In the case of the soft drink bottler, none of these factors — money or otherwise — were even given a second thought. Some members of the management team made it clear to team members that they felt the ERP implementation was a waste of both time and money, let alone deserving of a reward. The team members, on the other hand, thought it was overwhelming and frustrating to be working so hard on something that was not going to earn them as much as an additional day off. Employees were struggling, pouring so much energy and effort into something that was going to take so long and not provide even a morsel of reward.

Management Support

In addition to providing job assistance, an employer should be more than supportive of its employees' efforts in the ERP implementation effort. Employers should come up with creative ways to reward those players who are putting forth such a tremendous effort. The reward need not be monetary in nature. Employees are not enticed by money alone. Employers should pay close attention to what their employees are trying to tell them. Most of the time, the employees will give clues or suggestions as to what could make them happier in their jobs and make them more likely to stay. As mentioned, there are many rewards that people deem more important than money. Keeping a current employee happy, and retaining him within the company after spending so much time and resources in training, is far less expensive than hiring and training new employees.

CONCLUSION

With all of these things in mind, and considering that well over half of all ERP implementations efforts end in failure, excellent planning, incorporating employee involvement, and good communication should be at the top of any organization's list when considering an ERP implementation effort. Although success is not guaranteed by involving the proper employees and treating them with the respect and recognition they deserve, it is definitely a major part of the equation. Without dedicated people to implement and apply the system, the company will be wasting its money on purchasing an ERP package that will never be used to its fullest capabilities.

Although an ERP implementation effort can be completed by consultants, problems will arise if the proper individuals are not available to support it. Consultants should work closely with employees and be their expert eyes and ears, but should not do all the work and then hand over the finished product. Without the understanding of how the system is implemented, and how to maintain the efficiencies and functionality of that system, it will be useless to the organization. The trained employees who grow with the system, and make the system expand and evolve with the company, will be the true assets of the company and more than worth the investment. ▲

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