Review Article

# ERP Implementation and Successful Post Sustainment

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Abstract - The ERP (Enterprise Resource Planning) implementation process includes installing software for better work operations. When a new system is configured with lean processes, users are trained, and financial records are kept on the system – the overall productivity increases tenfold. But since you are changing your organization's whole dynamics with this lengthy and tedious process.

**Keywords -** ERP Implementation, ERP System, ERP sustainment

# I. INTRODUCTION



Image Title: ERP Implementation Alt. Image Title: Training Image Description: Two people looking at a computer screen

Before we understand the process, the focus should be on selecting the appropriate software that suits your business. *After* the software has been implemented, users expect their operations to be streamlined, understanding the software should be simple, and the software should also be adaptable if requirements change.

Once you have software that fits all your needs – the next step should be ERP implementation. It is surprising when you consider that 75% of all ERP implementations *fail*. This is a scary statistic for many organizations. Corporations often spend a lot of time and resources to ensure their employees thoroughly understand the implemented

software. With that being said, there are some vital factors that you need to consider when you are implementing ERP software into your organization. These factors ensure that the implementation process is smooth and the software remains sustainable for the following years.

# A. Goals and Objectives

Organizations expect processes will be a lot more streamlined, and the overall efficiency of their business will increase when an ERP system is implemented. Because ERP is a composition of little elements that cater to your business's needs, these goals seem logical. Nowadays, ERP has become a widespread industrial software used in almost every sector.

Improved operations are the first goal an ERP consultant always hopes for when implementing an ERP system in an organization. After the software has been implemented, the organization should have defined ways of saving money. The more specific your goals are, the better. To ensure all of your goals are accomplished, try finding an ERP partner relevant to your industry. No one will understand your concerns like a consultant built for your industry.

However, when you discuss your expectations with the

Consultants pay attention when telling you what can be possible and what will not be possible. If their recommendations do not suit you, try looking for a different consultant. Also, make sure your consultant visits you regularly (or calls you regularly). Discovery and understanding of the client's needs are important

will not necessarily affect the services you offer or change your products, but they will make management easier. That is why, after parting of the job for the consultant!

Secondly, the money you are willing to spend should also be in your mind. The ERP system you are willing to buy and implement is an investment you make into your business. It invests in the ERP software; you have to rely on the software to cover the cost. Streamlines operations, reduced delivery cycles, and new customers bring your business added revenue.

All of this happens because an ERP system was adopted,



and the people in your organization learned how to live with it. In the ideal situation, when this situation continues, the software covers its cost and continues to give the business long-term benefits. That is why an ERP system implemented the right way can reward an organization with several benefits.

But even though an organization is ready to splurge out cash to streamline operations, the time the implementation process can take matters, too. The time the software takes to implement can depend on many factors.

Are you going for a waterfall approach or an agile approach?

Are you getting your staff trained by professionals? Is your staff willing to adopt a new change? What processes are you transferring to the new system?

#### B. Agile Approach vs Waterfall Approach

Developers have always preferred an agile way of developing software. Because it simplifies the end user's experience and is a lot easier to use, making software management easy. The flexibility this approach offers to businesses has made it popular amongst people. Especially amongst those businesses which see customer demands change very quickly.

While moving to this approach has worked for many businesses worldwide, people are often sceptical about whether it can be implemented at the enterprise level. Is it possible to implement an agile approach to an ERP system? ERP systems are better than other software because they come right off the shelf. They have a life cycle unlike any software in the market, and they are frequently made with the waterfall approach. This approach focuses on a linear and sequential method. Even though it might sound confusing, this out of the box method has ensured ERP systems work for a long time. On the other hand, the agile culture of developing an application is mainly used when a developer builds software from the *ground up*.

If developers used the same approach toward an ERP system – performances could increase tenfold. It is solely because many businesses are investing in an agile approach. An agile approach promises customized ERP software that takes less sacrifice from the people learning the software. The software has to adapt to the organization rather than the organization adapting *to the software*.

When a corporation adopts an ERP system with the waterfall approach, the process can take almost a year because many steps need to be completed. You still cannot be sure that your employees have started to understand how the system operates even after a year of testing software to train employees. Essentially, an agile approach also ensures that your employees do not feel demotivated after the system has been applied to your organization.

## C. The Challenges While Going Agile

Even though going agile is entirely possible, businesses face some challenges in the ERP implementation process.

Cross-functional communication and the elimination of functional silos is essential for a 21<sup>st</sup>-century organization. But when you adapt to an ERP system with an agile approach, fulfilling this condition can be challenging. In an agile environment, performance alignment is crucial.

Moreover, businesses also have to decrease their documentation needs, so functionality is not sacrificed when an agile approach is adopted. Because of disruptions like such, the transition to agile from the waterfall will be slow. But there are no two opinions about the fact that agile is undoubtedly the future of ERP.

#### D. Project Timeline and Business Involvement



Image Title: Teamwork Alt. Image Title: Team Meeting Image Description: People sitting together talking

Creating a timeline for the implementation process can be difficult. No two businesses are the same, and there is no standard template that you can adopt. Each team has a different focus, and the core tasks given preference can be widely dissimilar, too. In the first phase of the process, assessing the hardware and software requirements can be crucial. Companies also don't realize that even when they *don't* have a namesake ERP system, they have excel files and manilla folders that somewhat do the same job.

When consultants start gathering data from the system, they go to these same sources to scrub and clean it to fit an ERP system. Even though several data records can be added to an ERP system, business owners usually choose to integrate customer data and vendor data onto their system. After all the data has been incorporated into the system and is ready to go live, a final check is made to ensure that all the users are completely trained on the new system.

A pilot test is run when several sample orders are run through the system from the start to the end. Different users use the software during the test run to ensure the software is not a problem for anyone in the team. After the pilot has been completed, look at all the noticed problems, and decide if the system can go live. If the problems you faced can be fixed before the system goes live, fix them, so they live date does not get delayed.

#### E. The Decision-Making Process and Data Quality

Thinking about the situation strategically can result in major cost savings for your company. Cost savings come with recognizing that you can save a lot of money when implementing an ERP system. If you try to implement an ERP system thinking that tossing money into the process will be necessary, the process will create more problems than it will solve.

The solutions and cost savings an ERP system can offer are real! This also comes down to the data quality you use to optimize the system's performance. For example, if your company has warehousing needs, an ERP system can decrease the time deliveries take. Deliveries will get completed quicker, but you'll also start to get new customers when you can promise quicker deliveries.

Also, make sure that the system you implement is "modern." A modern system is usable on every device – a laptop, tablet, phone – you name it.

## F. Implementing the Core Processes – Not All

One of the most important steps during the process is implementing the processes that you think take a lot of operational power. Any process that requires the most human resources should be the first process to be automated with the help of an ERP implementation. One common mistake organizations make during the process is taking every business operation onto the software.

Even though this decision may seem harmless – it does not consider that software can fail. And when that happens, no business process can be carried out. That is why leaving out some secondary business processes is essential. Giving the software too much to handle makes your training phase longer and reduces the system's overall effectiveness.

#### G. Working With Third-Party Partners



Image Title: Assigning Goals Alt. Image Title: Team Meeting Image Description: People sitting around a table looking at a wall with sticky notes

Now that your organization has decided to implement ERP software for the business, you will have to decide if you want to work with a third-party vendor. People often choose to work with implementation partners because there is a general perception that they understand the process better – which isn't *always* true.

Every ERP consultant comes from a different background and has undergone various training procedures. Before you sign a Statement of Work (SOW) with your consultants – get to know them better. You will find out that a particular professional has done the exact implementation you are looking for through communication. Ask the ERP consultant all the questions you want to ensure they're the right person for the job.

## H. Working in a Silo

When your organization's employees work in an operational department that does not communicate with each other, inefficiencies can arise. On several occasions, communication must be fluent and in real-time. That is why ERP systems must get rid of a functional silo. It is also because a competitive environment has caused businesses to rethink their strategy surrounding silos.

Nowadays, an integrated and interconnected communication style has proven to be more effective on several occasions. Companies smartly link sales, finance, marketing, product development, and service departments so your organization performs at maximum productivity. An ERP system can easily integrate all departments and their processes of your company. Silos are a thing of the past. They don't promote crossfunctional communication, and there can be delays if your teams aren't aware of each other's responsibilities.

## I. Integration Testing

After your company has decided on the processes they are taking on to the system, then comes the time for integration testing. Since an ERP system makes the whole organization move in synergy – all modules must work *together* effectively. On most occasions, integration testing happens after unit testing.

Integration testing is a more complex and extended version of unit testing. The larger the project is, the more important it will be to have an effective integration strategy. In the first phase, small systems and processes are tested. In the second phase, more extensive processes are tested to understand if the system can carry all the organization's processes together.

Since every department relies on shared information, seamless integration for any ERP system is vital.

# J. User Acceptance Testing & Not Involving Everyone Responsible

The real challenge of an ERP implementation process is the implementation itself. After carefully evaluating which process you will include in the implementation, you'll be surprised to know that even perfect execution almost guarantees problems after going live. To ensure this problem does not arise, some system users test common daily usage situations on the software to check its effectiveness.

But here is where many business owners make a mistake. After they are sure the system has been implemented correctly, they get *consultants* to go through the testing phase. Do not do this!

Involving every person responsible for your business operations in the testing phase is essential for successful implementation.

## K. Transferring Knowledge When the Software Is Live

When you hire the right ERP consultant for the job, they guide you through the processes and help you make decisions that help the software perform to its maximum potential. However, you will figure out that many consultants have little knowledge of the troubleshooting process with experience. Complete and elaborate knowledge transfer is essential for successful ERP sustainment. Referring back to older ways of operations can be timeconsuming.

To ensure the process is sustainable for your business, your ERP consultant needs to provide you with a solid understanding of all the processes.

## L. Employee Motivation and Documentation

When people receive motivation and appreciation every time they learn a new skill, they feel more engaged to be a part of that activity. Because of this reason, several business owners use gamification to motivate their employees when an ERP system is being implemented. The more enjoyable an ERP implementation experience, the faster the employees become comfortable with the software.

A video gamer typically spends an hour or two playing video games. Many of these involve co-operation and teamwork. In the same way, social games are good for corporations since recognition and competition can motivate employees to do better. Likewise, change agents also play a huge role in motivating employees to use the software. Change agents are people within the organization who act as catalysts for change management activities.

They are the bridge between the technical team and the endusers. They make sure that everyone on the team is engaged in the software, and they do this by gamification.

## M. Training Your Organization for An ERP System

ERP implementations are a one-time procedure in most organizations. They are a multi-million-dollar process that can involve 4 to 5 years of relentless dedication. And even after you've completed this long process of implementing them in your organization, there's no telling what can go wrong when. Massive losses are incurred when an ERP system fails despite all the money and training efforts that make it work. Here are some of the most common reasons why ERP implementations fail in several organizations:

- Underestimating the importance of training
- Training budget not sufficient
- The vendor does not give importance to training
- Trainers were not part of the implementation process.

These reasons make one thing apparent – training is crucial! Even though it is not rocket science – implementing a proper training schedule can take planning and a lot of thought. Setting out a budget for the whole training process is the first step. It can be surprising to see how corporations set aside millions of dollars for ERP software but don't give the same importance to training.

What's the point of having something when you don't know how to use it?

But like every budget associated with the ERP implementation process, training costs can shoot beyond expectations. To ensure this does not happen, the budget of the training process must be carefully designed, considering all internal and external factors. Make sure you do not skimp on your training budget!

Even though training the users mostly depends on their understanding of the software and tech-savviness, keep your training diverse. You never know which style appeals to whom. Try to incorporate every element in the training process. For example, you can train your employees with tools like:

- Virtual web-based training
- Computer-based training
- Online courses and videos
- Self-help books
- Pop-up screens

One successful way of training your employees can be finding an organization that is an expert on training employees. A professional doing this for a long time will always be the best choice for all your training needs. These organizations understand the importance of this procedure and the significance of each step. They would also know the best methodology that can be used to train your employees, depending on their skill level and the software's complexity.

#### N. Retaining Employees

It is no secret that your employees can tend to feel insignificant when an ERP system goes live. Because they have reduced control over business operations, they tend to think that their input isn't valuable and that they're only operating software. Everything your employees once knew about operational activities has changed, resulting in a lack of enthusiasm for their work.

This is where business owners need to take control. One of the most important factors in making an ERP implementation successful is making sure your employees are comfortable using it, which results in successful ERP sustainment. Employee engagement matters at this point, and you need to make sure that employee connections are stronger than ever. Employee retention is a common problem when an ERP system is implemented.

When employees are disconnected from their work, they often tend to distrust their leadership. If your company has an employee who isn't too enthusiastic about the ERP system you're implementing, the software's overall performance can hinder.

# **II. CONCLUSION**

ERP implementation is a process that can make life tough for many organizations. Implementing great software only to find out that your staff cannot understand it can be disappointing. Take your time with the process and make sure your employees are on board. Correct implementation can hold several advantages for your business.

ERP sustainment depends on an agile transition to ERP software. Even though this process transforms your organization's work and can be time-consuming, the benefits are worth it in the long run. But it is also worth remembering that successful ERP sustainment depends on a thorough and *elaborate* implementation. Business owners also have to keep in mind that the organization's needs change with time, and customer demands change.

The software you choose to implement must be adaptable and *flexible* to change. This way, ERP sustainment is smooth sailing.

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