

STOP ERP Projects until you are a 5-Sigma Company



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As *business grows* it becomes difficult to manage the silos without horizontal and real-time communication across silos. Many businesses fail to cope-up with the growth because of lack of proper integration of business processes across silos. Individual functional modules like HR & pay roll systems, sales & distribution, inventory management, accounting, MIS etc need to be integrated seamlessly to collect real-time information. Work performance data about the day-to-day



collections, expenses, invoices, inventory levels, defect levels, *resources' availability, resources' deployment etc across various products, projects and services* in the company in order to make effective decisions.

(Picture courtesy : Shutterstock.com)

Business Case for ERP software?

The following 5 symptoms / triggers possibly indicate if a company is in need of ERP software implementation any time soon.

#1. The company has grown several-fold and spanned across the globe

#2. The company wants to take real-time, comprehensive data-based decisions.

#3. The company believes in "*cost leadership*" and "*differentiation*" as its strategical USPs to win business

#4. The company wants to adapt to the fast-changing business environment across the value-chain.

#5. The company receives, in spite of increased sales, lots of customer complaints, defects, backlogs, poor inventory levels, etc due to improper coordination / integration across silos, eventually leading to "*operation-successful, but patient-dead*" syndrome.

While these symptoms may justify an ERP implementation project, what is more important is to *ask if the company is at the right process-maturity level to go for such a massive investment* and can a pan-company change in the way they do business will be acceptable to all stakeholders. If you are not sure of answers to these questions or in doubt, better stop. Don't proceed. It is worth the pause.

A good Business Case is not good-enough:

Even with a well-made business case, the chances of an ERP implementation project failing are high due to the inherent risks in such enterprise-wide implementation projects and processes.

This article's main focus is not on the project-related risks like on-time, within-budget etc, but on the effectiveness & efficiency of the processes that are automated as part of any ERP project.

I am not able to understand why almost every company is in a hurry to automate ineffective & inefficient processes in the name of ERP Implementation. It has become a business fad. ***An inefficient process will still be inefficient even if automated with a world-class software & hardware.*** So, it is imperative to ensure that at least critical processes, if not ALL processes, should be made efficient & robust before any automation effort is taken.

It is easy to make-up a business case so well as to get approval for an ERP project quickly, especially, when a company operates on a global-scale and depends on real-time information system for its quick and effective decisions.

Most ERP implementation projects are approved by the sponsors mainly based-on the ***rosy-pictures*** painted by the *vendors, consultants & internal IT department* about the improved business environment within the enterprise post-implementation. Some CXOs ***benchmark*** their current Information Systems with that of a global-giant in their domain and then craft a strategy to implement ERP software in their company. Their idea / vision is to embrace latest technology to doing business within the shortest time possible in order to be ahead of the competitors. This is a sure recipe for a disaster.

By the time the sponsors realize their blunder, much water would have already flown in the pipeline, it becomes "too late" to opt out, and in the confusion, they tend to commit another blunder. In their next phase-end review, they invariably consider ***sunk costs*** of the ERP project to justify continuation of the ERP project, only to find themselves in a bigger &

deeper trouble called, "**bankruptcy**". A point of no return and nil returns.

ERP Implementation Failure-Case Studies :

Wise are those who learn from others' mistakes. Several cases studies, of ERP project failures, have indicated that those ERP projects were approved without the full knowledge of ERP software's strengths & weaknesses, **adequate business analysis / requirements**, consensus of key stakeholders, proper due-diligence of vendors / consultants, assessment current **processes capability**, integration & post-implementation issues, market conditions etc.

Some well known case studies / examples of ERP implementation project failures are as below.

<http://www.uta.edu/faculty/weltman/OPMA5364TW/FoxMeyer.pdf>

<http://www.slideshare.net/mrbrian89/hersheys-erp-failure>

<http://www.smh.com.au/it-pro/government-it/top-5-lessons-from-the-queensland-health-payroll-saga-20130815-hv1d5.html>

http://www.cio.com.au/article/533907/worst_it_project_disasters_2013/

<http://calleam.com/WTPF/?tag=failed-erp-project>

When is it BEST to go for ERP Implementation?

The main purpose of any ERP project is to automate and integrate almost all business processes so that you get real-time information, about how the enterprises' resources are utilized effectively and efficiently, from a centralized dash-board in order to take quick & effective data-based decisions. However, executing a vision or strategy is not as easy as crafting it.

The following business-process related questions, but not limited to, should be asked and answered before embarking on a ERP Implementation project.

#1. Are we sure of the effectiveness (best practices) and efficiency (speed) of each business process.? One metric that is helpful in this case is Cost of Poor Quality (COPQ). Measure the COPQ and see if it is more than 5% of sales / turnover.

#2. Have we determined the **Cpk & Ppk** of all processes responsible for the **CTQ** characteristics.? Are they up to the expected level.?

#3. Are majority of our key business processes **lean, stable, capable, and robust.**?

#4. Have we assessed the Cpk & Ppk of all our Suppliers / Vendors' processes that are responsible for the **CTQ characteristics** of components supplied to us.

#5. Have we assessed the **long-term Sigma Level** of our enterprise.?

If your answer is "No" to even any one question above, you should stop considering ERP Implementation project further however-good your business case might be.

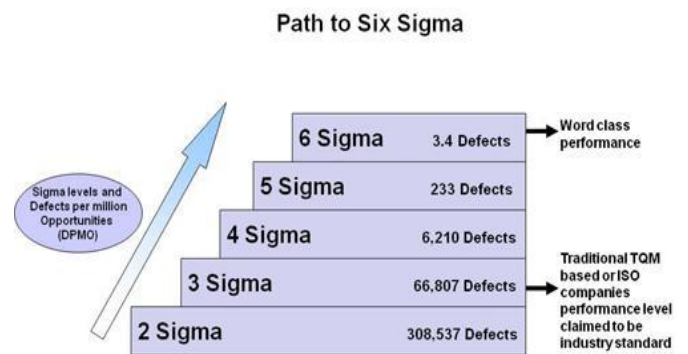
ERP and Lean Six Sigma :

The next question, that comes to the mind of a CEO, when his / her answers are "No" to some of the above questions, is "How do I assess and ensure my business processes are **lean, stable, capable and robust.**?"

Lean Six Sigma comes to the rescue of every business enterprise that is suffering from ineffective and inefficient processes, irrespective of the domain the business-entity is in.

While *Lean* reduces waste by eliminating the non-value adding steps from the process, and increases the speed of delivery, *Six Sigma* helps reduce variation and defects from a process using the data collected from its own past and current

performance.



To put things in the correct perspective, it is better if the decision-takers are aware of the possible performance/defects levels of their processes for every million opportunities at various sigma levels. The sketch above shows the **breakthrough gains** a company can achieve at various sigma levels by continuously improving their existing processes or designing new processes through Lean Six Sigma. For example, it is interesting to note that, at **Sigma-level 5, a process is expected to make only 233 defects out of million opportunities over its long-term performance.** A brilliant & world-class performance. This stage is the right time to automate the individual process and if you extend the same approach to the entire enterprise, you are talking about a robust ERP Implementation. A sure recipe for sustained success.

Depending on the criticality of the services or products offered and the cost of product recalls / rework, each company can choose anywhere between sigma levels **4 and 5** to start planning for implementing ERP software in order to reap the recurring benefits of both ERP software and Lean Six Sigma.

Any attempt, by any company small or big, to implement an ERP project before reaching appropriate sigma-levels in its critical-to-quality processes will not only be akin to **"biting more than what one can chew, but also prove to be a wrong & costly bite"**.

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