

“Learning from Failed ERP implementation”

Or

“How to make em Successful”

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Disclaimer: In this project report we have taken practical approach to analyze the problem instead of pure theoretical approach & theory is used in applied format rather than abstract format. Also Case study of **XYZ Manufacturing** is interwoven into larger study of learning from various ERP implementations instead of focusing on one case.

High Level Problem Summary

While Enterprise Systems have the potential to offer benefits beyond Traditional legacy systems, many organizations report that these have been less successful than originally anticipated. The difficulties of successfully implementing Enterprise system implementation & its dependence on critical success factors is what we are attempting to find out in this paper.

At the outset it's apparent that Enterprise Systems are perceived as more effective and efficient ways of business processes by means of pre-engineered packaged software application, the stated goals of adopting Enterprise Systems are to obtain organizational benefits such as lower inventory costs and shorter cycle times. Thus, Enterprise Systems tend to impose a specific logic of doing business, which is particularly shaped by the "best practices". By adopting a process orientation and consequently integrating it with the system Business 'Hope' that it would work. Too often, project managers focus on the technical and Financial aspects of a project and neglect to take into account the non-technical issues the 'Critical Success factors' & also the interrelationships leading to project success or failure. Overall problem is to understand why even best of breed ERP implementations fail, despite of best minds & best planners spending years to implement the state of the art systems at various businesses. So the question remains.....

"Why most of ERP implementations overrun in terms of cost,time, effort & fail to provide ROI comparable to investment done on them?"

& More importantly!! "How to make ERP implementation Successful"

Top 10 reasons of failures

Why ERP implementations fail? In a recent survey, information technology managers identified three primary reasons for the failure of all IT-related projects: poor planning or poor management (cited by 77 percent), change in business goals during the project (75 percent), and lack of business management support (73 percent). Since ERP is an IT-related project, the above are valid reasons for explaining ERP implementation failures. But more specifically, ERP implementation failures fall into 10 categories:

1 Poor leadership from top management. If top management is not strongly committed to the system, does not foresee and plan for the profound changes necessitated by ERP, or does not actively participate in the implementation, the implementation has a high likelihood of failure. The implementation of ERP must be viewed by top management as a transformation in the way the company does business.

2 Automating existing redundant or non-value-added processes in the new system. The integrated environment of the new ERP system will require the organization to do business in a different way. Therefore, existing business processes need to be reengineered from the bottom up to dovetail with the ERP structure and requirements.

3 Unrealistic expectations. Many companies grossly underestimate the amount of resources, time, and outside assistance required to implement and run the new system. Moreover, managers and workers frequently assume that performance will begin to improve immediately. Because the new system is complex and difficult to master, organizations must be prepared for an initial decline in productivity after the new software is put into operation. As familiarity with the new system increases, the expected improvements will come. But management must be prepared for initial waves of frustration.

4 Poor project management. Managers are often surprised by the scope, size, and complexity of an ERP implementation. As a result, management sometimes does not initiate the necessary level of detailed project management planning and control.

5 Inadequate education and training. Top managers and all system users must be fully educated so they understand how the ERP system should be integrated into the overall company operation. All users must be trained to take full advantage of the system's capabilities. A failure to educate and train all relevant personnel will guarantee implementation problems.

6 Trying to maintain the status quo. People have a natural tendency to be comfortable with the status quo and may be fearful of changes brought about by any new system, especially one as pervasive as an ERP system. They may fear that the new system will make their jobs more difficult, reduce their importance, or even cost them their jobs. People are also afraid to fail. And ERP systems may create a great deal of uncertainty in some people as to whether or not they will be able to perform their jobs as well as they did under the old system. Some front-line staff may be uncomfortable with the realization that with better information, upper management can keep better track of what they are doing and the money they are spending.

7 A bad match. Some of the biggest ERP system implementation failures occur because the new software's capabilities and needs are mismatched with the organization's existing business processes and procedures. An ERP system that is not designed to meet the specific business needs of the company can cause tremendous problems. A significant mismatch between the technological imperatives of the system and the existing structure, processes, or business needs of the organization will generate widespread chaos. Less severe mismatches between business processes and software requirements will merely create significant problems for implementers and users.

8 Inaccurate data. Data entered into an ERP system may be used throughout the organization. Because of the integrated nature of ERP, if inaccurate data is entered into the common database, the erroneous data may have a negative domino effect throughout the enterprise. Inaccurate data can lead to errors in market planning, production planning, material procurement, capacity acquisition, and the like. If a company with inaccurate data just forges ahead under the assumption that data errors will be corrected when they are spotted, the ERP will lose credibility. This encourages people to ignore the new system and continue to run the company under the old system.

9 ERP implementation is viewed as an IT project. If the implementation is treated as simply an IT project, the ERP system will never realize its full capabilities. In such cases, it is likely that the technology will be deployed in a vacuum, business processes will not be properly reengineered and aligned with the software requirements, and staff will resist using it.

10 Significant technical difficulties. Every ERP implementation will encounter a certain number of problems. These difficulties can include bugs in the software, problems interfacing with existing systems, and hardware difficulties. Normally, such problems simply contribute to the organization not achieving its target goals. However, if technical problems go unresolved or are poorly managed, they can doom the implementation.

Problem Definition (Mess,data & Problem finding)

- 1 Why is successful ERP implementation important to organization?
- 2 What would it take to implement the system on Time?
- 3 What would it take to implement on cost?
- 4 What would it take to make the ERP profitable to organization?
- 5 Why would organization want the system to look like?
- 6 Who will most benefit from this ERP implementation?
- 7 What would we loose to competition if we don't implement the system?
- 8 What would it mean to future of this business?
- 9 What would it mean to users of the system?
- 10 Wouldn't it be useful to see x% of savings if this works?
- 11 Who needs to get involved?(stakeholders) & what's in it for them?
- 12 Who would not like to see this a success?
- 13 How can I get stakeholders participate in this initiative?
- 13 How would it affect next generation of my products?
- 14 What if competition implement this before us would it make any difference to bottom-line of this company?
- 15 Is it worth effort taking up this investement?Is it worth the effort?
- 16 What resources do I have?
- 17 Why can't I continue business as usual?Status quo?
- 18 Why would top management agree to spend money/time?
- 19 Do we have an IT solution that can be used? Do I really need to buy this?
- 20 Most of all are we ready to do this? What's the willingness of organization?

Why why why using language of our Business??

Why ERP is required, it is important and should be done at this time?

- We need an infrastructure that offers high availability and redundancy in order to provide 24x7 supports for our operations.
- Business managers and boards demanding better returns from IT investments. So we have to have a well known system.
- There is concern over the generally increasing level of IT expenditure. We have to implement such a system with the lowest total cost of ownership.
- The need for organizations to assess how they are performing against generally accepted standards and against their peers is essential.
- We have no more time and money to re-invent the wheels.
- We can control costs by reducing dependency on technology experts
- We can increase the potential to utilize less-experienced staff if properly trained
- We have to make it easier to leverage external assistance
- There is a chance to overcome vertical silos and nonconforming behavior
- Reducing risks and errors could save our survival
- This system could help us to improve quality
- Integrated systems help us to improving the ability to manage and monitor the enterprise
- Costs reduction could be achieved by increasing standardization
- We have to used of IT to optimize management of work and resources
- There is a potential to reduce or eliminate non-value added work by reducing interfaces and hand offs
- Jobs and roles can be enhanced via expanded information access. Integrated systems expand information access

- This system focuses on processes. So functional boundaries dissolve as processes become the focus
- Authority and responsibility move to the front line along with information. This system brings your information in hands
- Changes to business needs and additional technologies/capabilities can be embraced in an accelerated fashion
- The entire enterprise shares the same set of database information (parts in stock, material masters, production plans, maintenance costs, customers, vendors, etc.)
- We have to replace legacy systems with new systems because of low effectiveness and maintenance costs
- Processes' standardization and simplification instead of personal approach to processes
- By implementing ERP we can benefit from companies best practices
- With this system we adopt ourselves with global systems and can compete in the market
- We have to reorganize our structures because of survival
- Because there is a central database of information, the need to re-enter duplicate information into separate systems is eliminated
- Help reduce operating costs
- ERP software attempts to integrate business processes across departments onto a single enterprise-wide information system.
- The major benefits of ERP are improved coordination across functional departments and increased efficiencies of doing business.
- The immediate benefit from implementing ERP systems we can expect is reduced operating costs, such as lower inventory control cost, lower production costs, lower marketing costs and lower help desk support costs.
- Facilitate Day-to-Day Management

ERP systems offer better accessibility to data so that management can have up-to-the-minute access to information for decision-making and managerial control.

ERP software helps track actual costs of activities and perform activity based costing.

- Support Strategic Planning

Strategic Planning is "a deliberate set of steps that assess needs and resources; define a target audience and a set of goals and objectives; plan and design coordinated strategies with evidence of success; logically connect these strategies to needs, assets, and desired outcomes; and measure and evaluate the process and outcomes."

Part of ERP software systems is designed to support resource-planning portion of strategic planning.

- The Competitive Business Environment and the Emerging Firm

Four powerful worldwide changes have altered the business environment.

- Emergence of the Global Economy

Today, information systems provide the communication and analytical power that firms need for conducting trade and managing business on a global scale. Globalization and information technology also bring new threats to domestic business firms.

- Transformation of Industrial Economies

In a knowledge and information, based economy; knowledge and information are key ingredients in creating wealth. Knowledge and information are becoming the foundation for many new services and products.

- Transformation of the Business Enterprise

The traditional business firm was and still is a hierarchical, centralized, structured arrangement of specialist that typically relied on a fixed set of standard operating procedures to deliver a mass-produced product.

Critical Success Factors

What would look like to be successful & what are the factors of Success & Criteria for success.

I.e. how relevant each parameter is to success/failures of Enterprise System in an organization & what is a higher priority than others for “**Success**”

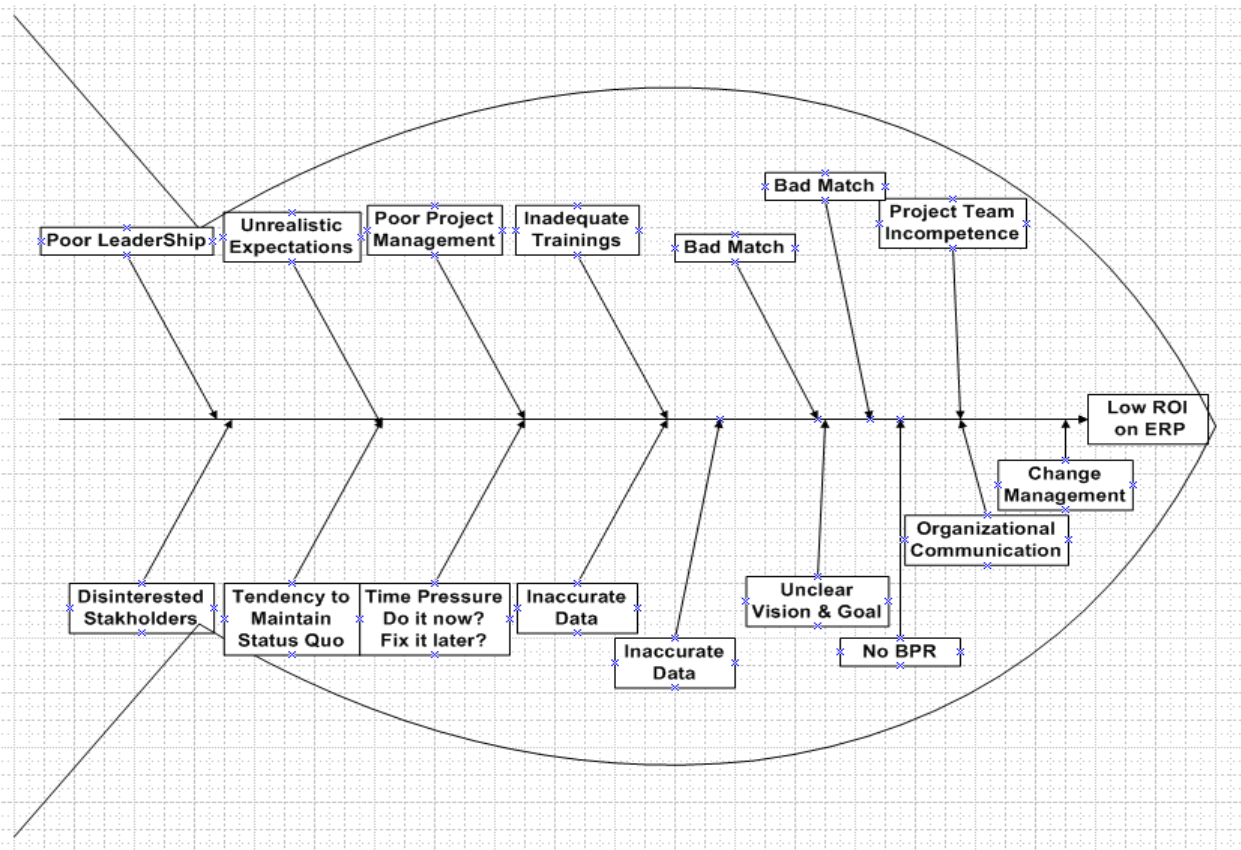
CSF: Reliability values & Mean Ranking

CSFs	Absolutely Agree	Strongly Agree	To Large Extent	Fairly Agree	Hardly Agree	Definitely not Agree	Cant' Say
	(F%)	(F%)	(F%)	(F%)	(F%)	(F%)	(F%)
Top management Support (mean=5.54, α =0.84)	74.6	14.3	7.6	2.3	0.0	0.0	1.2
User Training & Education (mean=5.21, α =0.78)	72.9	15.3	6.4	2.2	1.1	0	2.1
BPR & Minimum Customization (mean=4.96, α =0.80)	71.2	16.5	7.2	5.1	0	0	0
Team Competence (mean=4.94, α =0.79)	68.2	16.0	7.4	5.2	0	1.1	1.1
Project Management (mean=4.86, α =0.78)	62.6	20.2	5.2	9.4	1.2	0	1.4
Organizational Communication (mean=4.85, α =0.81)	59.9	21.4	7.3	8.2	1.1	1.1	1.1
Clear goals and objectives (mean=4.78, α =0.82)	55.4	38.6	1.5	3.4	0	0	1.1
Change Management (mean=4.76, α =0.80)	51.6	38.8	9.4	1.2	0	0	0
Project Champion (mean=4.72, α =0.77)	45.2	50.6	0	0	1.8	1.3	1.1
Vendor support (mean=4.69, α =0.75)	44.8	44.4	5.4	4.2	0	0	1.2
User Involvement & participation (mean=4.68, α =0.76)	40.9	49.4	1.2	5.2	1.1	0	2.2
External consultant (mean=4.63, α =0.75)	38.1	50.7	3.6	4.2	1.2	1.2	1.1
Compatibility of Technology (mean=4.59, α =0.76)	37.4	49.4	4.6	4.2	1.2	2.1	1.1

Taking Responsibility Leads to Success it's time to ask: **Whose failure is it & why?**

Cause & Effect Diagram (Fishbone diagram)

Very high level cause & effect diagram based on the top 10 reasons of failure & Critical 'Failure' factors above.

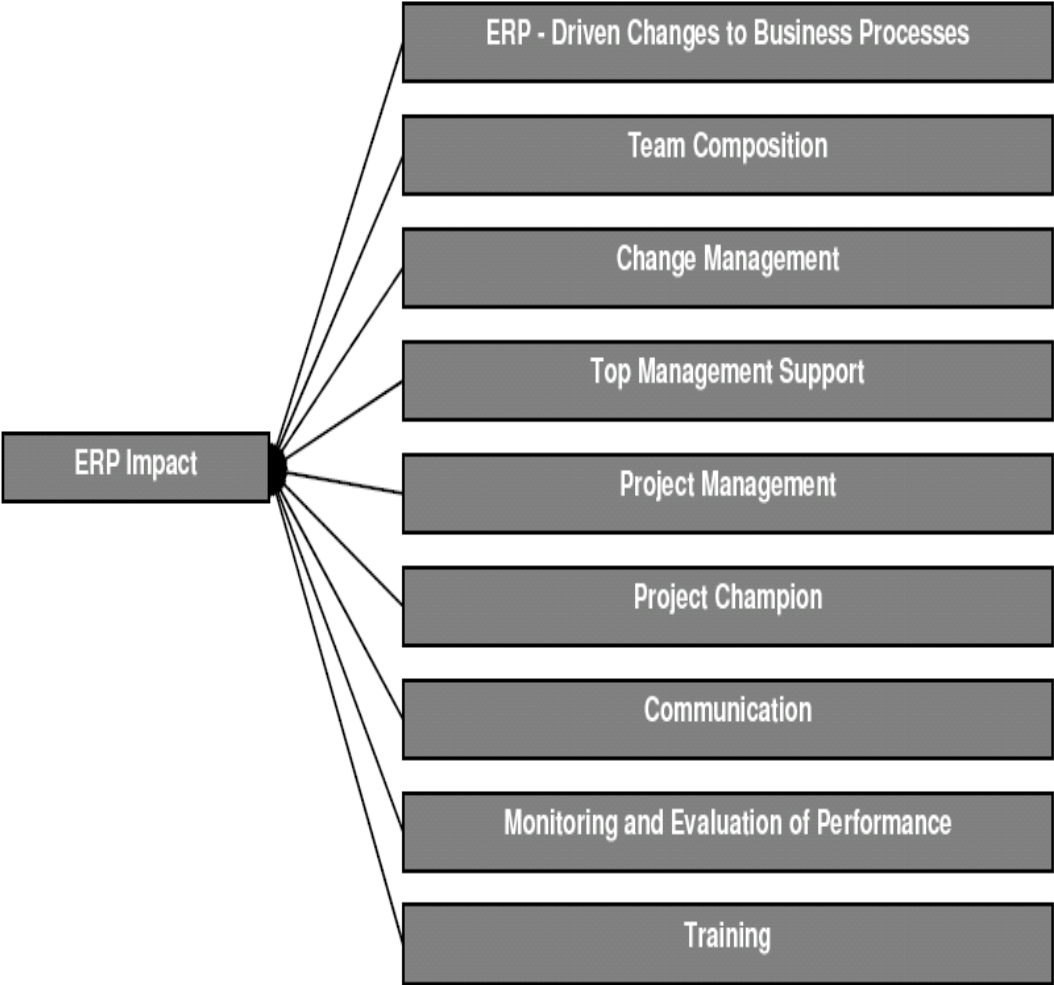


Stock of Situation at Organization : A Simple Picture

A snapshot of companies' situation can be presented as SWOT analysis

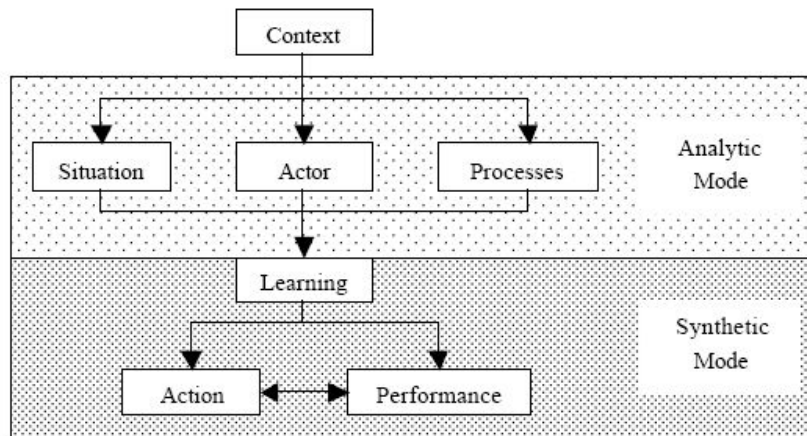
<p>S (Strengths)</p> <ul style="list-style-type: none"> • Good brand equity • Excellent dealer network • Wide range of products • World class manufacturing plants • Strong R&D facilities • Foreign joint venture 	<p>W (weaknesses)</p> <ul style="list-style-type: none"> • Global presence is low • Lack of innovation in product design
<p>O (Opportunities)</p> <ul style="list-style-type: none"> • Major presence in defense sector from last 30 years • Other government projects e.g. Metro rail • Brand and quality as uppermost concern in the mind of consumers 	<p>T (Threats)</p> <ul style="list-style-type: none"> • Government import policy • High excise duty • Rising cost of inputs • Expectation of highly energy efficient, low / zero noise, environment efficient product • One of joint venture company trying to enter in India with other joint ventures

Vision of Future (Impacts of ERP on the Organization)



Before we attempt to solve the riddle let's try & understand the tools that can help us.

SAP – LAP Model at 10000 Feet



Interpretive Structural Modeling Technique

Process that transforms unclear & poorly articulated mental model of system into visible, well defined models by establishing contextual relationships by use of self interaction & reachability matrix

Synthesis of a Case Study

Situation : Company “XYZ manufacturing” chosen for this study is an Organization which has it's presence in various sectors like IT hardware, Software ,Services & Logistics it has it's presence in Europe & Americas & The company has ambitious plans to foray into the promising markets of the Middle East and African countries. The company was found constantly leveraging its technological infrastructure in order to benchmark its operations and processes. In an attempt to strengthen its customer relationships and provide better customer services, the company has networked its branches and head office to enable efficient customer call handling, monitor product Quality and receive direct feedback. The competitive nature of industry, non-availability and sharing of critical business information especially to top management were the primary reasons to go for an integrated solution. Further, the vastness of operations, remote locations of sales and service centers and foreign joint venture were the other factors to look for something new and innovative. To capture data of each location on site on time, fast information gathering and analysis, control of operations and cost of operations and eliminate.

Actors: Since company is expanding in new markets & demand in existing market is also increasing the chairman, MD, manufacturing unit heads and functional want Enterprise System to be implemented with Business Process changes where applicable to ensure success on expansion & Joint ventures that are planned in next 2 Years.

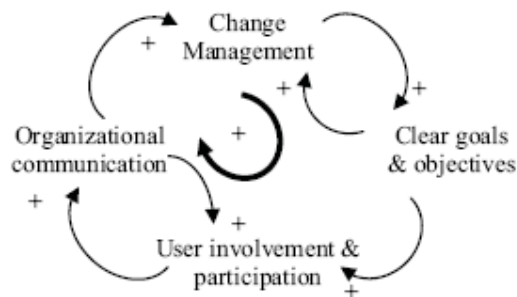
Processes (Enterprise System Implementation)

Based on market reports, cost, ease of implementation and SAP® already success in the same industry & companies software unit having experience in the software, the company decided to go for SAP® as Enterprise Software package. The company vision of looking inward and not do out of the box thinking, lead for vendor selection having focus on implementing Enterprise Software for the processes as they were in use at the time.

The project implementation originally started in November 2000 and planned to be live by mid of year 2003 with finance, distribution, manufacturing, projects and quality assurance at one of their units in South India. As a contingency of SAP® not delivering, customized reports were also prepared along-with Baan generated reports to keep the users happy. The parallel-run continued till December 2003. Afterwards, Japan and UK unit heads were reluctant at that stage to go for huge investment in Enterprise Software as unit in New York USA was still not operational, It took around two months and there were no operations in that period. A number of key users and EDP (Electronic Data Processing) members left the organization in the meanwhile. One of the major constraints for Enterprise Software project now was the non-availability of Key Users of the type and caliber required. Hence, the implementation had to be done with very few trained users available, and, in certain cases end users were assuming the role of Key Users, This was diluting the quality of project processes. So the project collapsed. Finally, in March 2005 due to the pressure for preparation of accounting books the company decided to go back to legacy system.

Learning

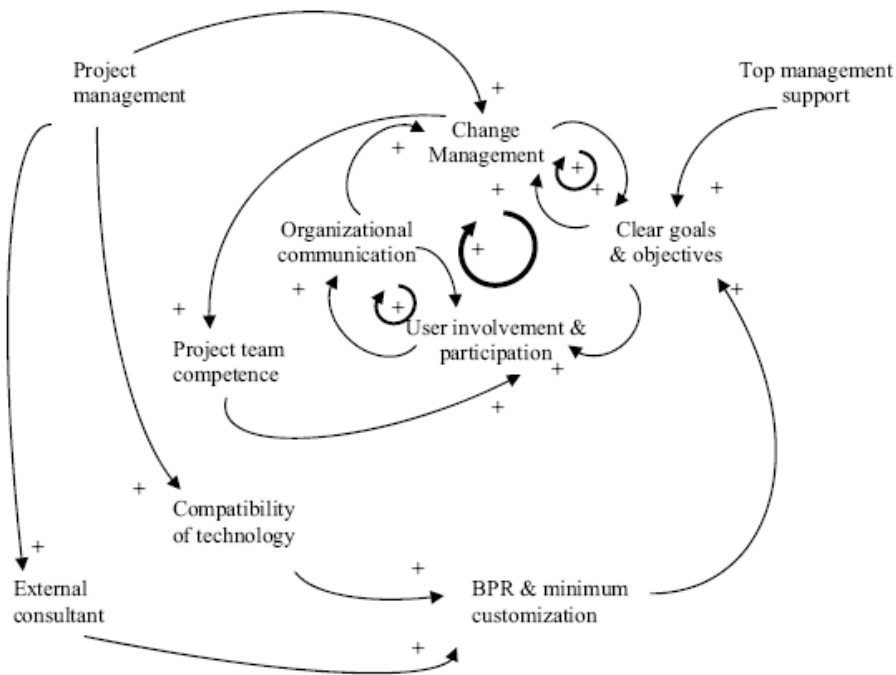
Enterprise System implementation project involves broad re-engineering. In conjunction with configuration, a large amount of re-engineering should take place iteratively to take advantage of improvements from the new system. Enterprise System project also integrate business function and resources. It is identified that 'change management' & 'clarity of goals and objectives', 'User involvement & participation' and 'organizational communication' are The core of Enterprise Software implementation process as depicted below



Reasons of Failure of this Project

In this case no individual or group of people was given responsibility To drive success in project management. Due to lack of vision clarity and poor change management of escalation of issues and conflicts resulted in the project occasionally coming to a halt. With this expectation mismatch, the project team members left the company. Treating end users as key users diluted the team's competence and, further, weakened the user involvement & participation. It was also observed that there was poor vendor support and the external consultant were having focus on technology rather than the current business process. In order to complete the project, software was modified and molded to fit to existing business practices leading to further non clarity of goals & objectives. The poor change management had no concern for user training and their education about how the system will change business process, system's impact and user role. It made it difficult to steer the direction of project as needed and resulted in a project mess.

Causal loop diagram describing causes of poor performance



Re-Look at Critical Success Factors

CSFs	Absolutely Agree	Strongly Agree	To Large Extent	Fairly Agree	Hardly Agree	Definitely not Agree	Cant' Say
	(F%)	(F%)	(F%)	(F%)	(F%)	(F%)	(F%)
Top management Support (mean=5.54, $\alpha=0.84$)	74.6	14.3	7.6	2.3	0.0	0.0	1.2
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Team Competence (mean=4.94, $\alpha=0.79$)	68.2	16.0	7.4	5.2	0	1.1	1.1
Project Management (mean=4.86, $\alpha=0.78$)	62.6	20.2	5.2	9.4	1.2	0	1.4
Organizational Communication (mean=4.85, $\alpha=0.81$)	59.9	21.4	7.3	8.2	1.1	1.1	1.1
Clear goals and objectives (mean=4.78, $\alpha=0.82$)	55.4	38.6	1.5	3.4	0	0	1.1
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Project Champion (mean=4.72, $\alpha=0.77$)	45.2	50.6	0	0	1.8	1.3	1.1
Vendor support (mean=4.69, $\alpha=0.75$)	44.8	44.4	5.4	4.2	0	0	1.2
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External consultant (mean=4.63, $\alpha=0.75$)	38.1	50.7	3.6	4.2	1.2	1.2	1.1
Compatibility of Technology (mean=4.59, $\alpha=0.76$)	37.4	49.4	4.6	4.2	1.2	2.1	1.1

What Matters & How much to ”Successful ERP implementation”

[A] Defining Interrelationships (the Matrix! At high Level)

Three types of relationships are considered

- 1 Relationship of CSF or elements with itself
- 2 Relationships across CSF’s or Cross interaction matrix
- 3 Assessment Matrix to find relative scoring of CSF’s

	Top Management Support	Project Management	Clear Goals & Objectives	User Involvement	Change Management	Organizational Communication
Top Management Support	1	1	0	0	0	0
Project Management	1	1	1	0	0	1
Clear Goals & Objectives	0	1	1	0	0	0
User Involvement	0	1	0	1	0	0
Change Management	0	1	1	0	1	0
Organizational Communication	1	1	1	0	0	1

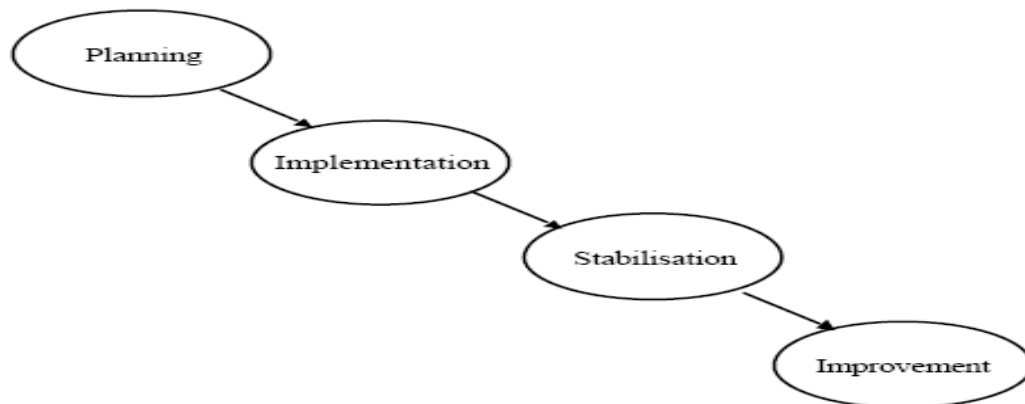
[B] Descriptive statistics for ERP success factors & operational performance criteria

ERP SUCCESS FACTORS	Mean	St. Dev.	OPERATIONAL PERFORMANCE CRITERIA	Mean	St. Dev.
Communication Efficiency	8,82	1,17	Scrap/rework	2,57	1,47
Capability of Teamwork	8,20	1,85	Warranty cost	2,00	1,53
Education Adequacy	7,67	1,76	Average quality cost	2,65	1,27
Preliminary Research Success	8,45	1,76	Raw material inventory turn rate	3,23	1,51
Modular Integration Accuracy	8,23	1,67	WIP turn rate	3,07	1,55
Adequacy of Main Software Components	8,25	1,50	Finished goods inventory turn rate	3,11	1,51
Technical Consultancy Sufficiency	8,62	1,48	Average rank of inventory rate	3,16	1,41
ERP Software Quality	8,39	1,59	Finished product first pass yield	2,36	1,84
Data Quality	8,55	1,44	In plant defect fallout rate	2,21	2,35
Business Reengineering and Software Development	8,48	1,77	Customer reject rate	2,40	1,76
Top Management Support	7,77	1,93	On time delivery	3,36	1,50
Project Management Success	8,45	1,39	Lead time in purchasing	3,02	1,42
Appropriate Setting Cost	7,74	2,31	Lead time in manufacturing	3,23	1,51
Appropriate Differentiation Cost	7,95	1,56	Lead time to customers	3,36	1,31
Cost Effectiveness on Operations	8,37	1,53			

[C] Firms' characteristics

A. Industry Mix			B. Employees Range		
	N	Sample %		N	Sample %
Automotive	15	33,3	0-100	5	11,1
Electrical/electronics	7	15,6	100-500	20	44,4
Steel	6	13,3	> 500	20	44,4
Food	5	11,1	C. The Age of The Firms		
Chemistry-Medicine	5	11,1	Less than ten year	3	6,6
Building	2	4,4	Ten year-Twenty year	19	42,2
Transportation	1	2,2	More than twenty year	26	57,7
Packaging	1	2,2	D. Tasks of Respondents		
Cement	1	2,2	ERP Project Official	15	33,3
Clothing	1	2,2	Information System Manager	11	24,4
Wood	1	2,2	Production Planning and Control Manager	9	20
			Top Managers and Assistants	6	13,3
			Supply Chain Manager	4	8,8
TOTAL:	45	100	TOTAL:	45	100

[D] Simplified Model of ERP implementation



[E] Sample Co-Relation Matrix between Variables

Measures	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ERP Business Success (1)	1											
ERP Project Success (2)	.43**	1										
Technical fit (3)	.06	.06	1									
Organizational fit (4)	.47**	.42**	.47**	1								
Strategic fit (5)	.40**	.42**	.32**	.62**	1							
BPR (6)	.10	-.06	-.12	-.27*	-.08	1						
Top management support (7)	.44**	.31**	.29*	.61**	.57**	.02	1					
Project Planning (8)	.53**	.52**	.21	.67**	.6**	-.15	.61**	1				
Training (9)	.29*	.33**	.27*	.53**	.33**	-.18	.34**	.56**	1			
Ease of use (10)	.32**	.15	.37**	.51**	.50**	-.15	.43**	.55**	.49**	1		
Resistance (11)	-.27*	-.35**	-.10	-.21	-.35**	.08	-.24*	-.24*	-.22	-.27*	1	
Competitive pressures (12)	.29*	.16	.35**	.49**	.39**	-.01	.47**	.38**	.37**	.58**	-.09	1

* $p < 0.05$; ** $p < 0.01$

[F] Unified Critical Success Factors Model for ERP

	<i>Strategic</i>	<i>Tactical</i>
Organisational	<ul style="list-style-type: none"> • Sustained management support • Effective organisational change management • Good project scope management • Adequate project team composition • Comprehensive business process reengineering • Adequate project champion role • User involvement and participation • Trust between partners 	<ul style="list-style-type: none"> • Dedicated staff and consultants • Strong communication inwards and outwards • Formalised project plan/schedule • Adequate training program • Preventive trouble shooting • Appropriate usage of consultants • Empowered decision-makers
Technological	<ul style="list-style-type: none"> • Adequate ERP implementation strategy • Avoid customisation • Adequate ERP version 	<ul style="list-style-type: none"> • Adequate software configuration • Legacy systems knowledge

[G] Measuring Success of Implementation (Sample questionnaire)

	DISAGREE	1	2	3	4	5	AGREE
1. The new system has altered the way we do work in my area or department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
2. My area or department had to change to fit the new system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
3. The new system has hurt my area's ability to coordinate with other areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
4. Compared to our old system, the new system makes my area more aware of important information about other areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
5. Compared to our old system, the new system makes it easier to get the information I need	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
6. Important information that our old system provided is difficult to get with the new system.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
7. Our old system fits my area or department's needs better than the new system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
8. In my area, the new system makes it easier to get things done	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
9. I feel that my area or department is better off with the new system.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

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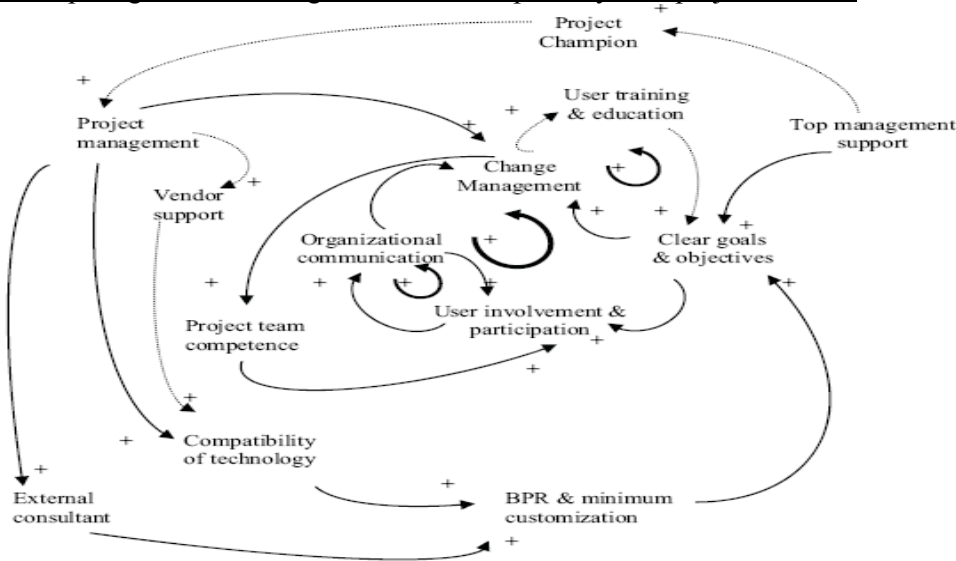
[H] Findings from ERP implementation at XYZ Manufacturing



How Success was Achieved (for the Case Study) & Conclusion

During June 2003, as lot of money has already been invested, top management having understood the causes of failures took several strong measures turning a poor performing Enterprise System project to a success. The top management appointed experienced project manager with requisite the authority and command at the top position to carry out the project. The project manager devised an effective project management strategy to control the Enterprise System implementation, avoiding overrun of budget and ensuring the implementation within schedule. The project plan defined project activities committed personnel to those activities, and promoted organizational support by the implementation process. Having framed sound change management plan, the implementation team was reconstituted having a mix of consulting company and internal cross functional staff.

Causal loop diagram describing causes of Enterprise System project success



Paradigm shift to Forward Focus

Because ERP systems are about integrating different business functions, 'organizational communication', and 'user participation & involvement', 'change management' with 'clarity of goals & objectives' were found to be the core processes for project progress. The presence and attitude of top management, project champion, project management, vendor support, and, user training & education were identified as the root causes driving performance of these core processes. The first contribution of success was the list of Critical Success Factors for an Enterprise System project as empirically found in Global business context, which was then applied to a specific case of Enterprise System implementation. The second contribution of the work was to show how these Critical Success Factors were interrelated and influenced each other directly or indirectly leading from poor performance to good performance of the project using causal loop diagramming models

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