

SUCCESSFUL SYSTEMS IMPLEMENTATION

THE DIFFERENCE BETWEEN SUCCESS AND FAILURE

This report takes a close look at implementation of large information systems. For decades, IT projects have had abysmal rates of success by any and all standards. Is it really that difficult a task? What can and should be done differently? What is the difference between success and failure?

We have a methodology to share with you that does not involve needing more money to guarantee success. It does not involve a series of complex documents which make most methods unmanageable. It does not involve techniques that require PhD's to understand.



It does involve:

- Common sense
- Being goal oriented
- "Sleeping with one eye open"
- A simple process
- Applying the art and science of project management
- Managing change
- Understanding the relationships between processes and systems
- Excellent communication
- Being truthful with all involved
- Creativity
- Understanding the concepts of momentum
- Accepting reality
- Understanding human nature
- Being able to apply project phasing concepts
- Anticipating problems
- Understanding the difference between "leading edge" and "bleeding edge" technology and knowing how to prevent bleeding when it occurs

IN THIS REPORT:

<i>Defining Implementation</i>	2
<i>How Bad is the Problem?</i>	2
<i>Why is there Really a Chronic Problem?</i>	3
<i>The Xalles 4-Phase Implementation Process</i>	4-5
<i>Project Management</i>	5
<i>Beyond the Processes</i>	6-7
<i>Asking the Right Questions</i>	7

DEFINING IMPLEMENTATION

For the purpose of this report, we define the implementation components of a project as the release management and deployment of a system into the user community. There are many articles written about requirements definition and the system development lifecycle. There are many development methodologies, and although development itself is not without its problems, many large projects fail during the deployment phase.

HOW BAD IS THE PROBLEM?

First, how bad is the systems implementation problem?

According to a frequently quoted Standish Group report, only 16.2 per cent of projects were "Project Successful" which was defined as software projects that are completed on-time and on-budget among U.S. companies and governments. That report was issued in 1995. It also estimated that \$80 billion dollars was being wasted annually as a result of the failures.

According to Standish Group's latest annual Chaos survey (relating to 2000 data), only 28 per cent of all IT projects in the U.S., in government and industry alike, hit their targets for budget, functionality and timeliness. Another 23 per cent were cancelled outright and the rest failed on at least one of the counts. The estimates for the cost of failure today is well over the \$100 billion figure for the U.S. alone.

Here are a couple of the extreme examples to understand the potential for disaster.

The FBI said in January 2005 it might cancel its custom-built, \$170 million Virtual Case File project because it is inadequate and outdated. The system was intended to help

agents, analysts and others around the world share information without using paper or time-consuming scanning of documents.

The publicity related to Government large project failures is so heavy that it is easy to point fingers, but large corporations struggle with the same issues that prevent success.



"Ever since there's been IT, there have been problems," said Allan Holmes, Washington Bureau Chief for CIO, a magazine published for information executives. "The private sector struggles with this as well. It's not just ... the federal government that ... can't get it right. This is difficult".

Mr. Holmes is right about one thing. The problem is not unique to the public sector. Large corporations are plagued by the same problems when trying to implement new technology.

Ten years ago American Airlines settled a lawsuit with Budget Rent-A-Car, Marriott Corporation and Hilton Hotels after the can-

cellation of the CONFIRM car rental and hotel reservation system. \$165 million was wasted before the project was cancelled.

The problem is also not unique to the United States or any other single country.

Prudential Europe terminated a contract with a large international system integrator for its "Unite" project, which was geared at delivering real-time web-centric processing of life insurance policies and pensions as well as related back-end systems. This UK based firm spent £35 million before the project was cancelled in late 2001.

Must we continue with more examples? We didn't think so. Saying the problem and rates of failure are bad would be a huge understatement. Even when large consulting and system integrator firms are brought in to help, the results are still bad. Human nature dictates that the individuals in most of these consulting firms fall into the same traps that internal employees of the client organization do.

The scary proposition for companies and Governments is that you cannot simply buy your way out of this vicious cycle.

"Only 28 per cent of all IT projects in the U.S., in government and industry alike, hit their targets for budget, functionality and timeliness.

The estimates for the cost of failure today is well over the \$100 billion figure for the U.S. alone."

WHY IS THERE REALLY A CHRONIC PROBLEM?

Question: How are most IT projects designed?

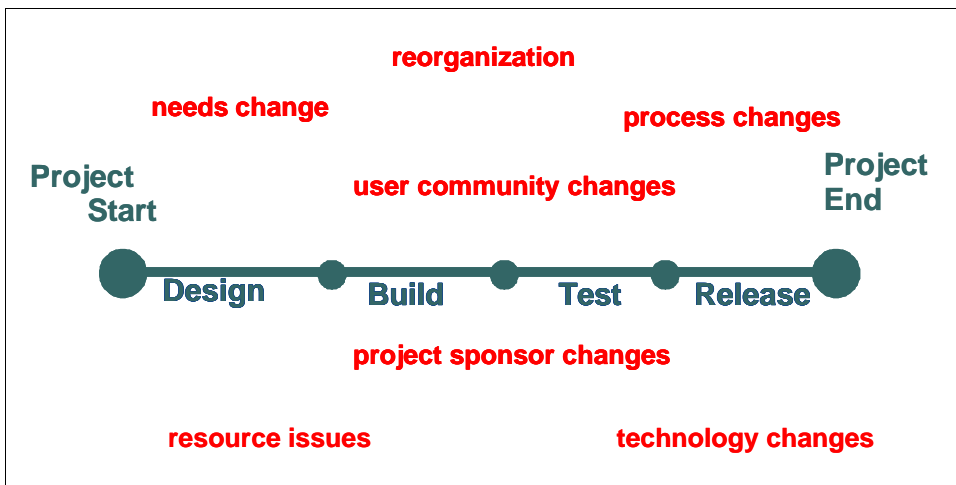
Answer: Without a full understanding or anticipation of reality.
 (“Vacuum Mentality” Syndrome)

The realities that are not usually considered during the lifecycle of a large systems implementation project include:

- Reorganizations
- Change of project sponsors and key players
- Technology changes
- Process changes
- Resource issues for the project team and user
- The user community changes
- Needs change

Question: What is the shortest path between two points when you are trying to design a project?

Answer: You won’t know when you start the project.
 (“We’ll Take This Path And Stick With It” Syndrome)



Did you ever wonder why there are a hundred methodologies for the system development lifecycle, and not very many written about the deployment of the system? We have many certifications like CMMI for the development organizations and teams. Many systems methods include a section on deployment which amounts to not much more than saying, install the system and then train the users, then answer their questions. The “advanced ones” often deal with the issue of making sure processes are not designed to contradict system functions being deployed.

Why are the other aspects not documented in such a detailed manner? It’s because most of the other tasks, techniques and concepts are too often considered to be “common sense”. As we have seen this common sense is not so common when it comes to IT deployment.

“Did you ever wonder why there are a hundred methodologies for the system development lifecycle, and not very many written about the deployment of the system?”

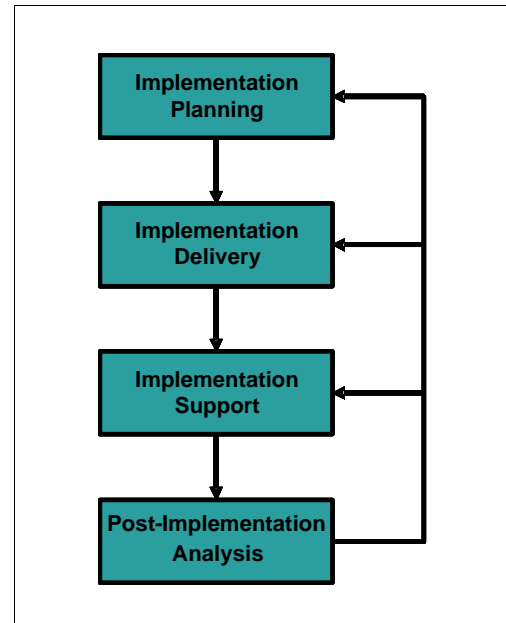
THE XALLES 4-PHASE IMPLEMENTATION PROCESS

This methodology contains the following four phases:

- Implementation Planning
- Implementation Delivery
- Post-Implementation Support
- Post-Implementation Analysis

The implementation methodology is based on the following assumptions and principles:

- A disciplined project management approach is essential. This methodology will enhance but will not replace an effective project management methodology.
- Explicit but not excessive documentation is needed to communicate effectively on large projects. Detailed plans for each implementation component are the products of the planning phase. These plans are then executed in the delivery phase.
- Problems will arise throughout the life of a project, therefore an effective management style will facilitate the resolution of these problems.
- The methodology should help everyone highlight the people, products and processes involved during all 4 phases.
- At all phases of the project the aim of the implementation team should be to make it easier for the user/customer and all stakeholders.



IMPLEMENTATION PLANNING

The work products of this implementation phase include the following detailed plans:

- Product and Service Definition
- Testing Plan
- Technical Installation Plan
- Communication Plan
- Training Plan
- Support Plan
- Overall Implementation Plan which combines elements from above plans and incorporates the field tests, pilots and roll-out plans

These plans are intended to be the roadmap for all participants in the implementation delivery phase. To achieve the benefits expected, teams should develop these plans with the following guidelines in mind:

- Plans need to be easy to follow and understood by everyone on the team
- The format of these implementation plans should be as consistent as possible with the formatting of other project components or organizational standards
- All team players on a project should be involved in parts of the planning process and agree to the need and value that their respective tasks have for the project.



IMPLEMENTATION DELIVERY

The work products of this implementation phase include, but are not limited to:

- Delivery of the training programs
- Receipt of user/customer feedback
- Production of materials and user documentation
- Completion of testing
- Completion of technical installations
- Design of the Operational Support System
- Results against measurements of success
- Communication of results to stakeholders

The critical success factor during this phase is for participants to follow the plans closely and communicate their work through the pre-established channels. Information about task completions and deficiencies/problems must be readily accessible.

It is important to know when the implementation delivery phase has been completed. This should be established during the planning phase. This sounds simpler than it really is. There should be a finite list of transition tasks that signal the end of the delivery and the beginning of support ownership of the remaining processes and responsibilities. In addition, clear sign-offs at the completion of the delivery phase are required for project success.

POST-IMPLEMENTATION SUPPORT

The beginning of this phase involves one or more of the following:

- Some project teams are disbanded
- Some project staff take on permanent support roles
- New staff are brought in to take on support roles
- Some contracting and/or consulting roles are completed after an appropriate knowledge and skills transfer period

The ongoing support effort is often an undervalued component to technology-oriented projects. If an effective support system is not deployed which can be sustained long term, the results achieved during the implementation delivery can be wiped out, and in some cases a new project team is created to solve problems. These drastic steps will not be necessary if the support system is planned for in conjunction with and as an integral part of the implementation planning process.

Clear leadership needs to be in place for the support group. Often it is the last piece to be field tested and it is the most likely component that will need modifications after the implementation work has been completed. Unexpected volumes or types of problems could necessitate changes to the support process itself.

A successful support phase is built on a simple business process and effective communication with users and customers.



POST-IMPLEMENTATION ANALYSIS

This phase involves analysis aimed at providing improvements to:

- Product/service development
- Testing processes
- Future technical installations
- Communication, training and support processes
- Call/help center design
- Future implementation planning

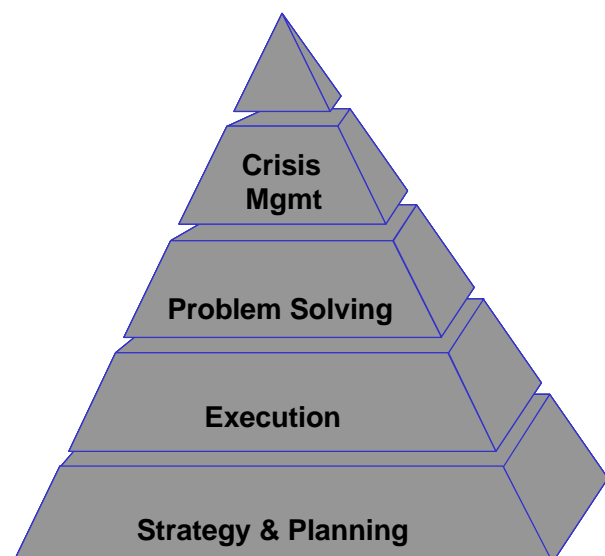
To take full advantage of a project as a learning experience, post-implementation analysis can provide insights into planning and execution decisions. This is an opportunity to identify and judge the assumptions that were made and evaluate the corresponding rationale for the approaches developed in the planning phase.

Participants in this type of analysis should be knowledgeable in the psychology related to hindsight analysis and its common pitfalls. The post-implementation analysis provides a feedback loop for the other three phases resulting in continuous improvement.

PROJECT MANAGEMENT

Most new technology or systems implementation efforts are made on a project basis. As stated earlier, the implementation methodology does not exclude the need for a solid approach to project management. At a high level view effective project management translates into the ability to assemble the right resources into the correct structure so that the project team has strength in the following areas:

- Strategy & Planning
- Execution
- Problem Solving
- Crisis Management



STRATEGY AND PLANNING

If the team has a strategy and a well defined set of objectives and resources within which to work, the job of implementation planning can begin. The products (detailed plans) of the planning phase will provide the teams with a road map that can be used to make progress and update others on that progress.

EXECUTION

Using well-described planning documents, the teams will launch into following their procedures and tasks. Motivation, regular feedback and clear goals need

to be part of the plan to ensure disciplined execution.

PROBLEM SOLVING

Problems can arise through mistakes or incorrect assumptions in the planning or execution stage. To mitigate the negative affects of the problem a structure should be in place whereby:

- There is clear ownership of the problem.
- Team players will have a clear understanding of their scope and control of project resources available for solving the problem.
- Problem solving skills and tools will be a part of

the key personnel's skill-set before the start of the project, preferably by all on the team.

CRISIS MANAGEMENT (A.K.A. SPIN CONTROL)

If a more serious mistake is made in any of the previous stages, a problem could result that would put a significant component or the entire project in jeopardy. There are techniques that advanced problem solvers use in these situations. Here are a few essential tasks for every project to consider before completing the planning stage:

- Identify a clear chain of command for rapid deci-

sion making in a crisis. (It may or may not be the same as the hierarchy in place for day to day operations).

- Identify resources that can be made available or have been set aside for serious problems.
- Identify a spin doctor for the project who will facilitate the process regardless of which area the crisis is in. Depending on the individual's skills, the spin doctor will usually be the person responsible for solving the problem.

BEYOND THE PROCESSES

You have read the above and say to yourself, "so far this seems straight-forward enough. I can do this. What else is needed to be successful?"

There are a series of concepts and techniques that supplement the basic process. Just like the process, none of these items are complex by themselves, but they are essential ingredients to a successful implementation project.

TRUTH AND HONESTY

Project sponsors should hook each of their project managers up to a polygraph machine once per week to discuss the project status. Then the project managers should hook the project sponsor up to that same machine. Too many times project teams start "spinning" the project progress within the organization. Projects are difficult -

enough without an internal view of the reality, good or bad. The spinning comes later when dealing with project momentum.

TEAM MANAGEMENT

Group dynamics and perceptions of the group can be the difference when implementing new technology. How do you turn an organization into a team? The art of building and managing a team means understanding each person's strengths and weaknesses, their personality and behavioural tendencies and their opinions about the project and the other team members. A small team, well designed and constructed can outperform any large unorganized team every time. Focus on team building. Do not discount the affect that team bonding has on performance. The make up of a team needs to create a positive

impression with stakeholders and users. If the users think that team members do not believe in the new process and technology, the users can lose faith too. All team members are team representatives for the project. The team itself must be marketed to the stakeholders.

BUSINESS SAVVY

Business savvy sums up a collection of skills that involves "political" understanding and know-how. Being able to deal with all your project stakeholders is critical. Understanding the nature of relationships with your project sponsors, champions and the motivation of each of those individuals will help you greatly on any difficult project. It's often the people involved and working environment versus the project constraints that make an implementation project

most difficult. In the midst of the inevitable political dynamics of organizations, working effectively means developing a plan for each party. Once the research and knowledge have been acquired, you will often need to create a unique communication plan for each individual to control their tendencies where the implementation is affected. If you manage the political dynamics affecting a project you have the opportunity to manage the results.

TRAINING NEW TRAINERS

On many implementation projects, one of two fatal flaws are common. The training of the users is assigned to an organization's existing training team, which is made up of people who usually have no expertise in the new system being implemented. These training generalists do not

have the ability to answer difficult process questions from the training participants, and worse, they have no credibility with the users. The second scenario is when organizations take subject matter experts to work on the project team, usually as business analysts or software testers and then expect these individuals to be trainers because they know the system better than the general corporate trainers. The problem with

this scenario is that these people usually have no training skills, which means they might have better credibility with the users but the training is delivered ineffectively. The secret to success is combining the subject matter expertise with effective training skills. Trainers should understand adult learning principles, training techniques and be effective facilitators of learning. This needs to be built into im-

plementation plans.

GOOD KPIS (KEY PERFORMANCE INDICATORS)

Follow these guidelines for creating good implementation KPIS:

- KPIS should be hierarchical and based on overall project and implementation goals
- Set standards for each KPI for people to strive towards

- 1-2 pages per project, maintain max.1 hour per week to
- Avoid conflicts between KPIS
- Ensure consistency with overall project and organizational measurements
- Reward team member performance against KPI goals
- Show KPIS visually to all project staff and management

ASKING THE RIGHT QUESTIONS

We could list pages and pages of checklists that accompany this methodology, but as a starter program, make sure your implementation program asks and answers the following key questions:

- What are all stakeholders expecting and when?
- What promises have been made?
- What is the value of the new system to each stakeholder?
- Do you have a plan for the following types of testing: unit, integration, regression, acceptance, production, installation, system performance, user performance, usability, security, hardware, platform, network, language compliance, legal compliance, and stress testing
- What are the stakeholder feedback loops?
- What are the installation and back up procedures?
- What are the disaster recovery procedures, tools and people responsible?
- Who is the implementation spin doctor?
- How are the online help, user manuals, training materials and job aids integrated together?



CONCLUSION

One last question:

Who is ultimately responsible for the successful system implementation of the project?

If you can answer this question, your project team might be almost half way towards a successful result on your project.

"Sponsors should hook each of their project managers up to a polygraph machine to discuss the project status, and vice versa."

Contact

Global Tel: +1 202-595-1299
Global Fax: +1 202-318-7712
Email: info@xalles.com
www.xalles.com

Xalles (USA)

2020 Pennsylvania Ave, NW
Suite 527
Washington, DC
20006
U.S.A.

Xalles (Canada)

157 Adelaide Street West
Suite 254
Toronto, Ontario
M5H 4E7
Canada

Xalles (Europe)

Ulysses House
Foley Street
Dublin 1
Ireland



The
Business Navigation
Specialists™

© Copyright Xalles Limited 2005

All Rights Reserved

Xalles Limited is a business management innovator, providing business strategy and systems implementation services to firms in the supply chain, logistics, transportation, financial services and information technology industries around the world.

Our mission is to improve our clients' bottom line by delivering innovative strategy and systems implementation results to solve their business problems.

Xalles Limited has offices in the U.S., Canada and Ireland and has a mobile group of personnel in 6 countries.

For more information about Xalles Limited, visit www.xalles.com.