Systems Engineering

Operational Readiness - Planning a Successful Rollout
Contact

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Overview

Operational Readiness

• What is it?
• Why is it important?
• Where does it fit into the “V” model
• Key considerations for a successful rollout
Opening thoughts – Extreme ends of the failure spectrum...

[Wikipedia]

**Vaporware** - a product, typically computer hardware or software, that is announced [to the general public] but is never actually released nor officially cancelled [“Selling Smoke”].

**White Elephant** - a valuable but burdensome possession of which its owner cannot dispose and whose cost (particularly cost of upkeep) is out of proportion to its usefulness or worth.

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How does this happen? How does it affect your stakeholders?
Opening thoughts – Extreme ends of the failure spectrum...

Vaporware

• Started with all the right intentions.
• Stakeholders were kept informed, prepared and ready but...system was never delivered.
• Short term result: Lost investment (planning, capital acquisition, training, etc.)
• Long term result: Loss of stakeholder confidence. More difficult to get their attention for the next rollout 😞
Opening thoughts – Extreme ends of the failure spectrum...

The White Elephant

• Again, started with all the right intentions but...

• Stakeholders were NOT kept informed, prepared or ready. Stakeholders were also not involved in the planning/design/etc.

• Short term result: Wasted $$$$ on unneeded/unwanted features/functions. Long, painful, costly rollout. Struggle to gain acceptance.

• Long term result: System may suffer an early death. Once again, loss of stakeholder confidence. More difficult to get their attention for the next rollout ☹️
Opening thoughts: Case Study

Chrome OS Laptop “Almost” Vaporware (November 2009)

Announced for late 2010 delivery. Selling point “Every capability you want today, in the future will be written as a web application”.

Almost never made it to market, limited and very poorly received Chromebook entry in June 2011. Market lost interest and was not quite ready for internet connected apps.

Everything changed of course in 2013, year of the cloud!!! Take-away: State of the art is not may be overkill and unneeded.
Opening thoughts: Case Study

Avon SAP Business System Implementation White Elephant (December 2013)

$125 million system rolled out and then tossed.

SAP spokesman Andy Kendzie [...] told the Wall Street Journal that Avon and SAP’s relationship remains solid and that the system “is working as designed, despite any issues with the implementation.”

[PC World 12/12/2013]

Take-away: Are you delivering a system your users actually want and need to use or a system some savvy marketing team sold you on?
Operational Readiness – What is it?

Operations readiness is the process of preparing the custodians of an asset under construction, and their supporting organization, such that, at the point of delivery/handover, they are fully ready to assume ownership of the asset. [Wikipedia]

- Assurance – Nothing is omitted or overlooked, system operates according to design/specification and in a safe/efficient manner.
- Documentation – Design, manuals, SOPs.
- Processes are in place – Configuration management, inventory/accounting, operations and maintenance contracts and staff, CUSTOMER SUPPORT.
- Training completed.
- Everyone is prepared for expected issues.
- I.e., ready for rollout.
Operational Readiness – Why is it important?

Rollout success is not a system power up without fire. Initial success really is a measure of operational readiness. How effective can it be operated on the battlefield?

• System does what it is expected to do
• System does what users need it to do
• Users know how it works and how to operate it including work-arounds
• Logistics are in place to maintain good state of repair
• Etc.
Operational Readiness – Where does it fit into the V-model?

Keep this in mind...

Operational readiness is a *milestone* that can be achieved almost automatically through *user involvement* in planning, design, testing and implementation processes.

Operational Readiness *preparation* is an activity that spans the entire process.
OR and the V-Model
Plan for Successful Rollout

Key Stakeholders
- Front-liners
- User involvement

Project Definition
- Concept of Operations
- Requirements and Architecture
- Detailed Design

Implementation
- Verification and Validation
- System Verification and Validation
- Integration, Test, and Verification

Operational Readiness
- Needs?
- Funct. Reqmts?
- Look & Feel?
- Test / Train
- Logistics
OR and the V-Model
Plan for Disastrous Rollout

[Diagram showing the stages of project definition, implementation, and operational readiness, with labels for Concept of Operations, Requirements and Architecture, Detailed Design, Operation and Maintenance, System Verification and Validation, Integration, Test, and Verification, Project Test and Integration, and Logistics and User Involvement.]

Operational Readiness
Logistics
User Involvement
Case Study
Bad Rollout - DWP Billing System

LA DWP New Computer System (November 2013)

Customers have been subjected to bogus late notices, incorrect bills, delayed bills, threats of disconnection and an assortment of other snafus.

The mayor and city council have demanded that the utility fix the problem immediately, but that won’t happen. DWP's customer service director Campbell Hawkins told the Times it will take four to six months to straighten out the billing problems and two years to get the entire system functional. “This is fairly standard,” he said. [www.allgov.com]

Take-away – Have plans/resources in place for users/customers to handle the anticipated issues!!!! Let customers know what to expect and where to go for help BEFORE they experience problems.
OR and the V-Model

Planning

• Identify the stakeholders and get them all involved from the very beginning. Give them only what they need, that works in a familiar manner. Avoid bells and whistles. Involve stakeholders in planning and all other project phases. Objective – no bling and no surprises.
Design

- Prepare solid procurement documents. Require systems composed of widely available products by stable manufacturers and that will last (be maintainable for) a very long time. Objective – Minimize the training requirements and maximize the time it will be relevant. Design to plant roots.
OR and the V-Model

Construction/Execution

• Perform regular checkpoints of quality and compliance. End users, maintenance staff etc. should be involved in these inspections, contractor supervision, and “taste tests”. Objective – To avoid a snow job, promote feeling of ownership and minimize the need for “hand holding”.

OR and the V-Model

Construction/Execution

• Alert project and program management of schedule/performance issues and follow up until resolved. The squeaky wheel gets the grease. Don’t follow up and it is likely your issue will vaporize.
OR and the V-Model

Construction/Execution

• Make it clear to PMO the impacts of compacting the integration/roll-out schedule and document it. At minimum the consequences can become part of the lessons learned database 😞
OR and the V-Model

Famous rollout success case-studies? Good luck finding them (other than legalization of marijuana in Colorado. Pun intended 😊).

Successful rollout is like the perfect crime. Nobody even realizes it happened!!!! That is your ultimate goal/objective.
Key Considerations

Schedule will change. Most likely construction will be extended and readiness activities will be shortened.

How it starts off. The perfect plan...

| Construction | System Integration | Acceptance | Training / Logistics | Revenue operations |
Key Considerations

...what usually happens? System is in service before it is fully constructed. Scramble to complete testing, training and establish logics on the battlefield! Lucky to even get documentation.
Key Considerations

As a systems manager you need to expect the typical construction scenario. What steps can you take to influence a positive outcome?
Key Considerations

Already discussed how to ensure success. Take matters into your own hands. Get users involved from the beginning. Compile your own essential user/maintenance guides/training etc. Then, it does not really matter what happens in construction.

Discussion:
• Ideas for getting everyone involved?
• Make it work just like the other systems [minimize training].
• Setting up logistics?
• Being ready to take on the initial bumps in the road?
• Etc.
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Summary

• Operational Readiness is only a milestone!!!
• Needs to have activities planned in project definition, implementation, testing, O&M.
• Operational Readiness is a key performance indicator for project success.
• However - Operational Readiness means nothing if you deliver a system customers do not need or want.