Business Process Architecture: What Project Managers Need to Know

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Old Words to Remember

- Lawes are ordained as rules of vertuous and sociall living, and not to be snares to trap your good subjects: and therefore the lawe must be interpreted according to the meaning, and not to the literall sense.
  - King James I, England, 1604

- If rules cannot or ought not to be enforced, they should not exist.
  - "Standard Code" for US Trains, 1899

What is a process?
What is architecture?

- Business Process:
  A business process or business method is a collection of related, structured activities or tasks that produce a specific service or product (serve a particular goal) for a particular customer or customers. It can be visualized with a flowchart as a sequence of activities.
- Architecture:
  Architecture is both the process and product of planning, designing and constructing space that reflects functional, social, and aesthetic considerations.

  - definitions from Wikipedia: URL *http://wikipedia.org*

Process Exercise:

The Peanut Butter Robot

- Materials:
  - ✓ Jar of peanut butter
  - ✓ Slices of bread
  - ✓ Plate and plastic knife
- Duration:
  - ✓ Approximately 10 minutes
- What happens:
  - ✓ One person will be the robot. Three others will give the robot instructions.
  - ✓ The object is to get the robot to make a peanut butter sandwich.
  - ✓ The robot cannot do anything on its own. To be successful, give very specific instructions to the robot.
  - ✓ Vague commands such as "make a peanut butter sandwich" will not work. The robot will look confused and shrug its shoulders. Non-specific commands such as "put the peanut butter on the bread" may cause the robot to put the jar of peanut butter on top of the bread. If too many talk at once, the robot will get confused.

Robot Exercise Questions:

- What did you learn from the Peanut Butter Robot?
- What can the Peanut Butter Robot teach you about good process architecture?

Basic Architecture Questions

- Ask yourself and the requestor these three questions when considering a new process or the revision of an existing process.
- The order of the questions will vary. You may need to talk with many people to get clear answers:

1. What is the problem?
2. Who is the customer?
3. What are the constraints?

1. What is the problem?

(more questions)

- What is the goal of the process?
- Are the root cause and best solution known or unknown?
- Is there a good reason why this process has not been created before?
- What work/materials feed into the process and what comes out?
- Do any processes or pieces of processes already exist?
- Are there existing process variations based on individuals, departments, groups or divisions?
- Is anything written down? *(Does anyone know where?)*
- Is the problem worth solving?
- What are the financial, efficiency, and political returns on the development of this process?
- Does this process add value?
- Does creating this process benefit the internal and external customer? *(How?)*
- Can the problem really be solved (technically, organizationally, and politically)?
- Does your organization own enough of the problem and likely solution space to be able to solve it?

2. Who is the customer?
(more questions)

- Who are the stakeholders?
- Who cares?
- Who wants the problem solved? *(Who doesn't?)*
- Who will use the process?
- Who owns the problem?
- Who owns the solution?
- Who must be on the team? *(Who shouldn't be?)*
- What is the level of executive visibility and support for solving this problem?

3. What are the constraints? (more questions)

- Are there required standards, methods, or tools?
- Are resources available? Any budget? Any staff?
- Is the problem the "day job" for key participants or would this work be in addition to a full-time load?
- Schedule requirements?
- Reporting requirements?
- Legal, procedural, or policy requirements?

Process Example #1

A New Process

"Submitting Contributions to a Standards Setting Organization" (SSO)

Created 1999-2000, Sun Microsystems Standards Group

1. What is the problem?

   Needed a way to review and (if appropriate) to quickly release intellectual property (IP) to an SSO.

2. Who is the customer?

   SSOs such as IETF (Internet Engineering Task Force), and eventual users.

3. What are the constraints?

   Protecting Sun's IP (including brands and trademarks), existing Sun policies and business practices.

Process Example #1

Learnings

1. Keep it simple.
2. Check in with your customers/stakeholders frequently.
3. Only include the minimum: question the need for each step before you put it in, and again at every review, and again before you publish.

Process Example #2:

Existing Process Change

SEED World-wide Mentoring Process

Created 2001-2002, Sun Microsystems
Based on existing Sun mentoring programs
URL *http://research.sun.com/spotlight/2009/2009-08-28_TR-2009-185.html*
Sun Mentoring: 1996-2009" Sun Labs Technical Report, August 2009

1. What is the problem?
   Needed a mentoring process for Engineering.
2. Who is the customer?
   Sun Engineering world-wide, executive focus.
3. What are the constraints?
   Buy in, Resources, Company Culture.

Process Example #2:

Learnings

1. Let the process define the web tools.
2. Assume that process and tool users will have access to only the most basic web resources and performance.
3. Collect and analyze data routinely and make decisions based on those data.

Useful Tools

Check Wikipedia for Tool Information

- In/Out of Frame (avoiding scope-creep)
- Stakeholder Analysis: understanding your context
- SWOT Analysis (Strengths-Weaknesses-Opportunities-Threats)
- Brainstorming & Affinity Diagram, voting with dots, (remember the option for silent brainstorming)
- SIPOC Chart (Supplier-Inputs-Process-Outputs-Customers)
- Detailed Process Mapping, flow chart (when in doubt: draw a picture!)
- Operational Definitions: creating a common vocabulary
- Fishbone or Ishikawa diagram: structured brainstorming, root cause analysis
- Kano Analysis, understanding satisfaction

Process Success Measures

While any individual process will have its own success measures, two key measures of overall success for any process are:

1. The process is used long-term by a variety of people.
2. It is updated and improved by people other than the ones who created it.