What you Need to Know about Managing an Enterprise GIS Project

Gerry Clancy
Glenn Berger

Session ID: 1235 (Tues) and 1429 (Thurs)
Enterprise GIS
Supporting a Complete System for Geographic Information

- Part of a larger system
- Supporting a critical business function
- Involving multiple platforms
- Large and complex
Its All about Business Objectives
Providing value through GIS technology

- Identify Business goals
- Who are the users

Delivering capabilities to support the enterprise
Requirements, Requirements, Requirements

**Customer requirements**

<table>
<thead>
<tr>
<th>ID</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>User must be able to search for images using a point buffer</td>
</tr>
</tbody>
</table>

**Revised requirements**

<table>
<thead>
<tr>
<th>ID</th>
<th>Type</th>
<th>Functional Area</th>
<th>Requirement</th>
<th>Original Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>F</td>
<td>Desktop Client \ Discovery \ Search Filter</td>
<td>User must be able to specify an area of interest by selecting a point feature on the map and inputting a radius (square buffer)</td>
<td>User must be able to search for images using a point buffer</td>
</tr>
<tr>
<td>102</td>
<td>F</td>
<td>Desktop Client \ Discovery \ Search Filter</td>
<td>User must be able to specify an area of interest by drawing a point on the map and inputting a radius (square buffer)</td>
<td>User must be able to search for images using a point buffer</td>
</tr>
<tr>
<td>104</td>
<td>F</td>
<td>Desktop Client \ Discovery \ Search Filter</td>
<td>All coordinate entry should support both decimal degree (DD) and degrees/minutes/seconds (DMS) input</td>
<td>User must be able to search for images using a point buffer</td>
</tr>
</tbody>
</table>

**Business processes**

**Use cases**

**Domain model**

*THE most important part of a project*
Communicate, Communicate, Communicate

- Keep key stakeholders and teams involved throughout the project lifecycle
- Provide atmosphere to raise issues
Implementation is a Continuous Process

- Business process improvement
- Break it into small workable phases
- Measure benefits
- Identify new opportunities
- Plan and Communicate

Assess what is critical and focus on it
Do Not Get Enamored with Technology

• Remember what you are trying to deliver
Use COTS as Much as Possible

- Reduce risk
- Accelerate deployment
- Configure
Complex Systems Require Prototyping

- Identify key components that are fail points/non-traditional or significant elements and PROTOTYPE

Test....Prove... Implement....
Involve IT Team Early

- Identify who will support system
- Highlight hardware and network impacts

And keep them involved
Manage Change

- Changes happen in every project
- Simple, Direct, Constant & Consistent

It will happen...get over it
Get Outside Review of Project – Need Sanity Checks

- Do Periodic Peer Reviews
- Incorporate feedback
Managing a Successful Enterprise GIS Project

1. Identify business objectives
2. Requirements, requirements, requirements
3. Communicate, communicate, communicate
4. Implementation is a continuous process
5. Do not get enamored with technology
6. Use COTS as much as possible
7. Complex systems require prototypes
8. Involve IT team early
9. Manage change
10. Get outside review of project – need sanity checks!
Additional Resources

- ESRI project methodology
  - esri.com/services/professional-services/methodology.html

- Business case resources
  - *The Business Benefits of GIS: an ROI Approach*—Outlines case studies and general methodology for doing cost-benefit analysis
  - *Thinking About GIS*—Roger Tomlinson
  - esri.com/getting-started/executives/

- Project Management Body of Knowledge (PMBOK)
  - pmi.org
Additional Resources: Books

- **Software Requirements (2nd Edition)** by Karl Wiegers, Microsoft Press, 2003
- **Agile and Iterative Development: A Managers Guide** by Craig Larman, 2004
- **The One-Page Project Manager: Communicate and Manage Any Project With a Single Sheet of Paper** by Clark A Campbell, 2006
- **Agile Development with ICONIX Process** by Doug Rosenberg, Matt Stephens, and Mark Collins, Apress, 2005
  - iconixsw.com
- **Software Project Survival Guide** by Steve McConnell, Microsoft Press, 1997
- **Writing Effective Use Cases** by Alistair Cockburn, Addison-Wesley, 2001
Discussion
Thank you…

Please fill out the session evaluation

**First Offering ID:** 1235 (Tues)
**Second Offering ID:** 1429 (Thurs)

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