Project Management in Libraries: Class 4

Karen Calhoun, 31 July 2014
LIS 2971
University of Pittsburgh
Class 4 Outline

- Turn in second draft of your project charter (keep a copy for yourself!)
- Quiz
- Questions about sections 5-6 of draft charters?
- Project timelines, continued
- Project teams
- Understanding how libraries are managing their projects
- Preparing the final assignment (due via Courseweb no later than August 1, 11:59 pm)
Questions about sections 5-6 of your charters? How is it going?

5. HIGH LEVEL PROJECT TIMELINE
   – WBS outline or diagram
   – Estimated timeline

6. PROJECT TEAM, CONSULTANTS, PRIMARY STAKEHOLDERS
   – Names
   – Team members
   – Primary stakeholders (recall the definition?)
   – Consultants
   – Roles (RACI?)
PROJECT TIMELINES, CONTINUED
From last class - Getting started with a WBS – example of a family reunion

- **1 Initiate project**
  - 1.1 Interview family
    - 1.1.1 Sub-task
    - 1.1.2 Sub-task
    - 1.1.3 Sub-task
    - 1.1.4 Sub-task
  - 1.2 Validate requirements
    - 1.2.1 Sub-task
    - 1.2.2 Sub-task
    - 1.2.3 Sub-task

- **2 Send invitations**
  - 2.1 Pick date & location
    - 2.1.1 Sub-task
    - 2.1.2 Sub-task
    - 2.1.3 Sub-task
  - 2.2 Prepare invitations
    - 2.2.1 Sub-task
    - 2.2.2 Sub-task
    - 2.2.3 Sub-task

- **3 Serve food**
  - 3.1 Plan menu
    - 3.1.1 Sub-task
    - 3.1.2 Sub-task
    - 3.1.3 Sub-task
  - 3.2 Prepare food
    - 3.2.1 Sub-task
    - 3.2.2 Sub-task
    - 3.2.3 Sub-task
From last class - Another way to present a WBS: outline view

- Basis for creating a **project plan** …
- With **estimated “start” and “finish” dates** for activities, tasks and sub-tasks and …
- **Resource assignments** (who is responsible for each task/sub-task) and …
- **Gantt chart** (if desired)
Exercise, Part 1: Creating a timeline from a WBS outline*

• By yourself, study handout of WBS outline for “Creating a home office” project
• In your group, use the list in which the activities are numbered from 1 to 17 to:
  – Identify the dependencies (logical relationships) between the activities and tasks
  – Write these dependencies on the worksheet provided (see handout), in this format:
    • “Can start after x is complete” (see next 2 slides)
  – When done, wait for next instructions

*Exercise is based roughly on Jones and Murray 2008, activities 5.3 and 5.7
"Create home office" high-level WBS outline

<table>
<thead>
<tr>
<th>Project name: Create home office</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Prepare space</td>
<td></td>
</tr>
<tr>
<td>1.1 Remove existing furniture</td>
<td></td>
</tr>
<tr>
<td>1.2 Paint and lay new flooring</td>
<td></td>
</tr>
<tr>
<td>1.3 Add outlets and wifi</td>
<td></td>
</tr>
<tr>
<td><strong>2</strong> Identify requirements</td>
<td></td>
</tr>
<tr>
<td>2.1 Identify computing and communications needs</td>
<td></td>
</tr>
<tr>
<td>2.2 Identify required office furniture and fittings</td>
<td></td>
</tr>
<tr>
<td>2.3 Define layout</td>
<td></td>
</tr>
<tr>
<td><strong>3</strong> Purchase equipment, office furniture and fittings</td>
<td></td>
</tr>
<tr>
<td>3.1 Identify acceptable suppliers</td>
<td></td>
</tr>
<tr>
<td>3.2 Order items</td>
<td></td>
</tr>
<tr>
<td><strong>4</strong> Install facilities</td>
<td></td>
</tr>
<tr>
<td>4.1 Assemble and position office furniture and fittings</td>
<td></td>
</tr>
<tr>
<td>4.2 Position and install computing and communications equipment</td>
<td></td>
</tr>
<tr>
<td>4.3 Check and troubleshoot for correct and convenient use</td>
<td></td>
</tr>
<tr>
<td><strong>5</strong> Start using home office</td>
<td></td>
</tr>
</tbody>
</table>

SEE HANDOUT
# Worksheet for identifying dependencies

<table>
<thead>
<tr>
<th>Dependencies List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project name: Create home office</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Dependency List</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Project name: Create home office</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>Prepare space</td>
</tr>
<tr>
<td>1.1</td>
<td>2</td>
<td>Remove existing furniture</td>
</tr>
<tr>
<td>1.2</td>
<td>3</td>
<td>Paint and lay new flooring</td>
</tr>
<tr>
<td>1.3</td>
<td>4</td>
<td>Add outlets, phone and wifi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can start simultaneously with 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Start after 2 is complete</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Start after 3 and 8 are complete</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>Identify requirements</td>
</tr>
<tr>
<td>2.1</td>
<td>6</td>
<td>Identify computing and communications needs</td>
</tr>
<tr>
<td>2.2</td>
<td>7</td>
<td>Identify required office furniture and fittings</td>
</tr>
<tr>
<td>2.3</td>
<td>8</td>
<td>Define layout</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can start simultaneously with 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can start simultaneously with 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can start simultaneously with 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>?</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>Purchase equipment, office furniture and fittings</td>
</tr>
<tr>
<td>3.1</td>
<td>10</td>
<td>Identify acceptable suppliers</td>
</tr>
<tr>
<td>3.2</td>
<td>11</td>
<td>Order items</td>
</tr>
<tr>
<td></td>
<td></td>
<td>?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Milestone; start after 10 is complete</td>
</tr>
<tr>
<td>4</td>
<td>12</td>
<td>Install facilities</td>
</tr>
<tr>
<td>4.1</td>
<td>13</td>
<td>All materials shipped and received</td>
</tr>
<tr>
<td>4.2</td>
<td>14</td>
<td>Assemble and position office furniture and fittings</td>
</tr>
<tr>
<td>4.3</td>
<td>15</td>
<td>Position and install computing and communications equipment</td>
</tr>
<tr>
<td>4.4</td>
<td>16</td>
<td>Check and troubleshoot for correct and convenient use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>?</td>
</tr>
</tbody>
</table>

**SEE HANDOUT**
What is a Gantt chart?

- Named after Henry Gantt
- Around since 1910s
- A technique for plotting the tasks of a project on a calendar chart to depict:
  - The activities and tasks
  - When they start and finish
  - Dependencies between tasks (“predecessors”)
  - Milestones (significant points or events)
  - Progress (percent complete)
What does a Gantt chart look like?
Exercise Part 2: How to make a Gantt chart for “creating home office” project

- Hint before you start: IT HELPS TO PLAN IN ANALOG (and with your team)

1. List *activities* and *tasks* down left side of a grid
2. List timeline across top of grid (days, weeks, months – you choose scale)
3. Figure out *dependencies* between tasks (see exercise 1 handout)
4. Estimate how long each task between 1 & 8 will take (task *duration*)
5. Taking account of dependencies and estimated duration for each task:
   – For each task between 1 & 8, and starting with the first, place a mark at the time when the task should start;
   – Draw a line to the end of the estimated duration;
   – Place a mark at the end of the estimated duration and color in the bar
6. Illustrate dependencies by drawing arrows between bars on the chart, like this:

7. Illustrate milestones (significant points or events) with diamond symbols, like this:
See HANDOUTS: List of Dependencies and Project Plan with Gantt Chart for “Create Home Office” Project

<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>Duration</th>
<th>Start</th>
<th>Finish</th>
<th>Predecessors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prepare space</td>
<td>10 days</td>
<td>7/7/14 8:00 AM</td>
<td>7/18/14 5:00 PM</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Remove existing furniture</td>
<td>5 days</td>
<td>7/7/14 8:00 AM</td>
<td>7/11/14 5:00 PM</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Paint and lay new flooring</td>
<td>2 days</td>
<td>7/14/14 8:00 AM</td>
<td>7/15/14 8:00 PM</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Add outlets and wifi</td>
<td>2 days</td>
<td>7/17/14 8:00 AM</td>
<td>7/18/14 5:00 PM</td>
<td>3;8</td>
</tr>
<tr>
<td>5</td>
<td>Identify requirements</td>
<td>8 days</td>
<td>7/7/14 8:00 AM</td>
<td>7/16/14 5:00 PM</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Identify computing and communications needs</td>
<td>5 days</td>
<td>7/7/14 8:00 AM</td>
<td>7/11/14 5:00 PM</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Identify required office furniture and fittings</td>
<td>5 days</td>
<td>7/7/14 8:00 AM</td>
<td>7/11/14 5:00 PM</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Define layout</td>
<td>3 days</td>
<td>7/14/14 8:00 AM</td>
<td>7/16/14 5:00 PM</td>
<td>6;7</td>
</tr>
<tr>
<td>9</td>
<td>Purchase equipment, office furniture and fittings</td>
<td>6 days</td>
<td>7/17/14 8:00 AM</td>
<td>7/24/14 5:00 PM</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Identify acceptable suppliers</td>
<td>5 days</td>
<td>7/17/14 8:00 AM</td>
<td>7/23/14 5:00 PM</td>
<td>8</td>
</tr>
<tr>
<td>11</td>
<td>Order items</td>
<td>1 day</td>
<td>7/24/14 8:00 AM</td>
<td>7/24/14 5:00 PM</td>
<td>10</td>
</tr>
<tr>
<td>12</td>
<td>Install facilities</td>
<td>20 days</td>
<td>7/25/14 8:00 AM</td>
<td>8/21/14 5:00 PM</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>All materials shipped and received</td>
<td>10 days</td>
<td>7/25/14 8:00 AM</td>
<td>8/7/14 5:00 PM</td>
<td>11</td>
</tr>
<tr>
<td>14</td>
<td>Assemble and position office furniture and fittings</td>
<td>3 days</td>
<td>8/8/14 8:00 AM</td>
<td>8/12/14 5:00 PM</td>
<td>13</td>
</tr>
<tr>
<td>15</td>
<td>Position and install computing and communications equipment</td>
<td>2 days</td>
<td>8/13/14 8:00 AM</td>
<td>8/14/14 5:00 PM</td>
<td>14</td>
</tr>
<tr>
<td>16</td>
<td>Check and troubleshoot for correct and convenient use</td>
<td>5 days</td>
<td>8/15/14 8:00 AM</td>
<td>8/21/14 5:00 PM</td>
<td>15</td>
</tr>
<tr>
<td>17</td>
<td>START USING HOME OFFICE</td>
<td>1 day</td>
<td>8/22/14 8:00 AM</td>
<td>8/22/14 5:00 PM</td>
<td>16</td>
</tr>
</tbody>
</table>

Note:
List of dependencies handout
Activity (summary) level – black bar on Gantt chart
Task level – indented under activity - blue or red box on Gantt chart
Duration column
Start and finish columns
Predecessor column (dependencies) – arrows on Gantt chart
Milestones – diamonds on Gantt chart
Time scale on Gantt chart (weeks)
A simple way to present a high-level timeline (suitable for small projects)

ULS Survey Team timeline

January 2014:
• Gather information from stakeholders
• Gain approval for project charter

February 2014:
• Compile survey distribution list
• Draft survey
• Meet with Office of Assessment to review draft questions.
• Finalize survey instrument.

March 2014:
• Test and run survey.

April 2014:
• Analyze results.

May 2014:
• Evaluate initial survey findings with stakeholders.
• Prepare final report (incl. recommendations and communications plan).

June 2014:
• Gain approval for final report and execute communications plan
• Submit strategic option proposals to Planning Group.
Your section 5 “High level project timeline” should include…

1. A **WBS in outline OR diagram format** containing the:
   - **Top two levels** of the project’s work breakdown structure (activity and first level tasks)

2. An **estimated timeline at the activity level**, based on information available at the start of the project
   - Formatting this timeline as a Gantt chart is **OPTIONAL**
Break: 10 Minutes
PROJECT TEAMS
Calling a group a team does not make them a team

<table>
<thead>
<tr>
<th>Work groups</th>
<th>Teams</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Individuals responsible for own results</td>
<td>• Responsible for own <em>and</em> team’s results</td>
</tr>
<tr>
<td>• Individual work products</td>
<td>• Collective work products</td>
</tr>
<tr>
<td>• Often report to a single manager</td>
<td>• Usually facilitated by a team leader</td>
</tr>
<tr>
<td>• Often ongoing, formal part of hierarchy</td>
<td>• Sometimes temporary (project-based)</td>
</tr>
</tbody>
</table>

“The essence of a team is common commitment”
—Katzenbach and Smith

## How teams develop

### Requirements
- Distinct identity
- Shared values
- Definite intention
- Understood roles
- Clear, shared norms
- Defined processes, e.g. for planning and solving problems

### Key questions
- Who are we?
- What do we stand for?
- Where are we going?
- Who will do what?
- How work together?
- How will we allocate resources, manage conflict, adapt?
Tuckman Model of Group Development

1 Forming

2 Storming

3 Norming

Performing

Adjourning

Roles People Play in Teams (Belbin)

1. **Chair – coordinator**: clarifies tasks, coordinates efforts, optimizes team member talents
2. **Shaper**: motivated to get results; shapes and guides team efforts
3. **Plant**: source of creativity and imagination; problem solver; “idea person”
4. **Monitor–evaluator**: objective analyst, critic, interpreter of ideas and contributions
5. **Company worker**: turns decisions and strategies into tasks that people can accomplish
6. **Resource investigator**: has many outside contacts; can obtain ideas or information
7. **Team worker**: promotes unity and harmony; holds team together; maintains consensus
8. **Completer-finisher**: worries about detail, deadlines and what could go wrong

Personality Types Typically on Teams
All are knowledgeable but some are:

• **Integrators**
  – Like relating to people from other departments; want to be on the team

• **Receptors**
  – Respect others but don’t desire new relationships; good contacts but not good team members

• **Isolates**
  – Specialists who want to work alone – also not good team members

Setting up teams for learning and performance: lead-in to kickoff (first) meeting
Exercise – Evaluating Team Character – Try this at home? Try it with your team?

• Working by yourself:
  – Consider the teams of which you are a member and choose one to evaluate
  – Analyze the character of your team using the “Team Character Inventory”* HANDOUT

• Consider using the TCI with your group:
  – Each person take the test, then …
  – Ask each team member to select one factor from each Inventory category (Safety and Trust, Group, Goals, Vision) that they feel is key to the success of the team
  – Invite and facilitate discussion of what people chose, and why

Being Effective With What You Have

• Be influential
• Be trustworthy
What Do I Mean by “Be Influential”? 

• Focus on your “circle of influence” – those things you can do something about 
• Don’t stress too much about your “circle of concern” – those things you care about but can’t control 
• Be a networker 
• Be visible/credible or credible (see handout)
Tips for Networkers

- Recognize you have more responsibility than authority for getting things done
- Emphasize *influencing decisions* rather than giving orders or “being right”
- Give problems their proper weight and context
- Use humor (but not sarcasm) to regulate stress and encourage creative problem solving
Try This at Home? Visibility and Credibility: Measuring Power and Influence

Reddy, W. Brendan and Williams, Gil. The visibility/credibility Inventory. 1988 Annual: Developing Human Resources
UNDERSTANDING HOW LIBRARIES ARE MANAGING THEIR PROJECTS
Results of Horwath’s Research

• Growth of projects in libraries is pervasive
• Survey results suggest extensive training has not been provided on project management, but
• Interviewees all agreed that librarians need project management skills

Horwath’s results, continued

• Surveyed libraries much more likely to:
  – Use **ad hoc, less formal** approaches to managing projects
  – Have **smaller** projects
  – **Almost always** designate project managers and project teams, but
  – **Almost never** document a project’s business case, define scope, create communications plans, or have team kickoff meetings
“‘In this phial,’ she said, ‘is caught the light of Eärendil’s star, set amid the waters of my fountain. It will shine still brighter when night is about you. May it be a light to you in dark places, when all other lights go out.”

--Spoken by Galadriel to Frodo. J.R.R. Tolkien, *The Two Towers*
PREPARING THE FINAL ASSIGNMENT
In-class work on sections 5 & 6 of your project charter

• BY YOURSELF (5 minutes)
  – Glance through your draft project charter, sections 5 and 6
  – Jot down what remains to be done
  – Look through the handouts for today’s class
  – Glance at the last page of the syllabus (grading rubric)
  – Make note of any questions you have

• IN YOUR SMALL GROUP (10 minutes)
  – Compare notes – do you have any questions in your group?
  – Report out with your questions and any comments
The End!