4-21-2016

Bridging the Communication Gap Successfully for Library/IT Projects

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Abstract

Have you ever had a difficult time describing a concept for a project? This can be especially true with collaborative projects between library and IT staff. Library and IT staff have historically been at odds concerning communication due to the use of jargon specific to their area, different working environments and styles, and conflicting best practices and standards that each follow. K-State Libraries and their internal IT department will share the communication issues with solutions from a librarian's and developer's perspective. We will also discuss how has influenced processes and methodologies used for collaborative projects between library and IT staff as they evolved.

Keywords

Communication Barriers, Collaborative Projects, IT Professionals, Library Professionals

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Have you ever had a difficult time describing a concept for a project? This can be especially true with collaborative projects between library and IT staff. Library and IT staff have historically been at odds concerning communication due to the use of jargon specific to their area, different working environments and styles, and conflicting best practices and standards that each follow. K-State Libraries and their internal IT department will share the communication issues with solutions from a librarian's and developer's perspective. We will also discuss how has influenced processes and methodologies used for collaborative projects between library and IT staff as they evolved.

Literature Review

What is collaboration? What is teamwork? Collaboration is to work with "another person or group in order to achieve or do something" ("collaboration," n.d.), and teamwork is a narrower term defined as "work done by people who work together as a team to do something" ("teamwork," n.d.). These two terms are often used interchangeably in libraries because collaboration and teamwork are central to most libraries' missions.

There is much in the literature about what successful and unsuccessful collaboration is. Take for example for instance, what is deemed successful for this type of collaboration might differ for collaborations in an organization. Napier (2007) found that students felt their group projects were successful when there was a strong team spirit, the group was hardworking, and each student contributed equally to the project. On the other hand, students felt a project was unsuccessful when some of the students in the group did not participate, have efficient technical knowledge, or communicate well with the rest of the group (p. 39).

Collaborations within in an organization are much more varied with different end goals and makeup of staff involved. There are six main aspects of teamwork that affect collaborative projects: equal contributions, effort of team members, team cohesiveness, communication, coordination, and support keys to the success of a collaborative project (Hoegl, 2001). Addressing these aspects at the start of a project has a positive impact on the performance of the project team. If not addressed, the project outcome will be difficult to achieve or not met at all. As Head (2003) states, when "various parties involved in any collaborative act come with different backgrounds and knowledge there will always be misunderstandings and misconceptions" (p. 49).

The teamwork qualities stated above are part of knowledge management, but what is knowledge management concerning collaborative projects? Reich (2007) states:

"Knowledge management in the context of a project is the application of principles and processes designed to make relevant knowledge available to the project team. Effective knowledge management facilitates the creation and integration of knowledge, minimizes knowledge losses, and fills knowledge gaps throughout the duration of the project." (p. 8)

This knowledge sharing of information that can be applied or used by project team individuals fosters success in collaborative projects.

For the purpose of this paper, the focus will be on communication barriers in collaborative projects—a very important knowledge management facet. There are several main communication issues that create barriers in projects. The barriers listed below were the main barriers that K-State library and IT staff had to address in their collaborative projects.

- Interpreting terminology used by both library and IT staff differently.
- Articulating a concept that is understood by all.
- Lacking knowledge by the other's discipline.
- Differing project workflows for IT and libraries.

Background

From the early 2000s to 2010 what was considered "digital projects" was in actuality digitization projects. In the early 2000s, K-State Libraries' Special Collections and Repository Services started digitizing materials, and these small-scale digitization efforts were usually funded by grants or user request driven. These ad hoc "digital projects" did not follow any formal process or documentation since none existed, nor was there consistent management of all these "digital projects."

It was not until the reorganization in 2010 that a digital projects team was formed that included staff from Special Collections, Metadata and Preservation, the repository manager, and IT staff as needed. The formation of this group helped in formalizing the digital project processes that encompassed digitization, metadata description, upload to an access platform, and archiving the project. Unfortunately since the makeup of the team was individuals who had other job responsibilities, no one could dedicate their time fully to manage and work on digital projects.

In 2013 and 2014 a metadata librarian and digital initiatives librarian were hired to oversee digital projects full-time. At the start of 2015, the digital initiatives librarian took over the leadership of the digital projects team, which increased to included staff from Content Development and Acquisitions, Undergraduate and Community Services, and Faculty and Graduate Services. They led the team in crafting a digital program plan that would be the foundation for all digital projects. The plan included information on strategic goals, collection development policies, accessibility, disaster plans, digital program

management, metadata, workflows, targeted audiences, storage and backup, sustainability, software and hardware, outreach and marketing, and assessment. All of these aspects of the digital program plan affect the lifecycle of digital projects. At the start of 2016, the digital projects team went through another reorganization and is now called the Digital Projects Advisory Team that is still led by the digital initiatives librarian but now only consists of the head of Special Collections, a representative from Academic Services, and a representative from Content Development and Acquisitions. The charge of this advisory team changed to be smaller in scope with a focuses on:

> "Encouraging, soliciting, and reviewing proposals for digitization projects that would increase K-State Libraries long-term digital collections in alignment with the libraries' strategic plan." (Haddock and Stockham, 2015, p. 1)

Communication Barriers and Their Solutions

Terminology Differences

There are instances where terminologies get reused under different contexts in separate fields. For example in information technology, the term database refers to an organized collection of tables, views and queries that can be accessed and manipulated using the provided software system. Whereas in libraries the term database is often assumed to be subscribed databases of electronic journals. Another example is the term metadata. Information technology refers to it as data, and in libraries, it could mean descriptive, administrative, or preservation metadata.

K-State Libraries' solution to resolve these language differences was to create a glossary of common terms that all involved parties in a digital project could reference. One difficulty in having a glossary is what is considered common terminology for one project might differ for another. The benefits, though, outweigh the drawbacks because a glossary of common terminology helps troubleshoot issues, streamline communication between all project staff, and ease communication in meetings. Currently a glossary of common terms has not been created for digital projects at K-State Libraries, but library and IT staff are investigating what terms need to be included and where to store the glossary for easy access.

Articulating a Concept

Terminology differences affect articulating a concept too. When someone proposes a concept for a new digital project or a functionality concept in an active project, there is the possibility of misunderstandings. A person might have interpreted the concept that was presented to them differently from what the person who was presenting the concept envisioned. For example, a finished product is not what the stakeholder wanted. That is why it is so important never to make assumptions.

One solution that K-State Libraries implemented to improve articulating a concept was providing visual representations of concepts in addition to explaining concepts orally. The visual representations ranged from screenshots that were marked up in color to drawings that mocked up a concept. An example of this was a diagram created by a library IT staff

member that demonstrated a complex technical concept showing how data flows occurred in a software system or between multiple software systems to library staff. Another solution was creating visual representations to help with language barriers where English was not the native tongue. A library staff member created mock-ups of concepts through the use of color, shapes, and markers (i.e., arrows, text boxes, etc.) to communicate a concept to library IT staff where English was not their native language. The feedback received was positive, because the library and IT staff had a better understanding of what the concept or request was and are still actively used for K-State Libraries digital projects.

Discipline Knowledge Gap

Library and IT staff who are involved in collaborative digital projects bring their expertise to the project. Even though they are an expert in their discipline, they might have minimal understanding of other disciplines. This knowledge gap proves to be a challenge when someone is trying to articulate a complex scenario to someone who is not familiar with the basics of that person's field of expertise. An example of this is IT staff explaining a Web design decision to library staff assuming that library staff know the basics of Web development. This is why it is important to start with the basics to make sure that project members not familiar with another's area of expertise have a baseline understanding of their colleagues' area of expertise before a digital project starts.

K-State Libraries' solution was formal, detailed documentation to address the knowledge gap between IT and library staff members creating a common knowledge repository that all involved parties could access. K-State Libraries' digital project documentation usually includes a project summary, instructions, templates, technical specifications for software, memos of understanding (MOU), etc., that provides an in-depth knowledge base for digital project members. This is important especially when digital project members change. The documentation allows new members to know what the status is for a digital project along with who the other members are and what their expertise is.

Different Project Workflows

Many types of workflows occur during digital projects particularly library and IT workflows. IT workflows are iterative and cyclic where the same steps occur with rounds of improvements to come up with a final completed product (i.e., software development project). Library workflows, though, are not iterative. They are step-based workflows meaning one moves on to the next step once the previous step has been completed (i.e., digital project where there is a proposal, plan, activity, and completion).

Due to the different types of workflows that are involved in digital projects, K-State Libraries decided to develop a project management system (PMS). After researching existing PMSs, it was decided to create a customized one since existing PMSs could not address all the complexities of K-State Libraries' digital projects. Currently K-State Libraries' PMS is in the development stage, but once completed the PMS will be shared through GitHub.

Conclusion

Over the last fifteen years, K-State Libraries' digital projects have evolved from departmental digitization projects to collaborative digital projects that involved staff from various departments (i.e., IT, metadata, and special collections). As the complexity of digital projects increased, the need for improved communication grew.

Communication issues will always occur, but having staff dedicated full-time to digital projects will help alleviate some of them. More importantly, having a knowledge management system like a PMS will go a long way in addressing terminology differences, concept articulations, different discipline knowledge, and workflows by capturing and saving the history of each project. This project history will create a strong foundation for not only streamlining communication but other issues for future K-State Libraries' digital projects.

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