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Project Management in the Library Workplace

Combining Project Management and Change Management for Project Success in Libraries

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COMBINING PROJECT MANAGEMENT AND CHANGE MANAGEMENT FOR PROJECT SUCCESS IN LIBRARIES

Melissa Fraser-Arnott

ABSTRACT

Purpose – The purpose of this chapter is to introduce library and information science professionals to the idea of combining the tools and techniques of project management and change management to support the success of their projects. Combining these two methodologies can assist professionals not only in carrying out their projects efficiently, helping them to meet project objectives, but can also increase the likelihood that their project objectives will be accepted by their organizations.

Methodology/approach – This chapter provides an overview of project management and change management methodologies with numerous examples from academic and practitioner literature and supplements them with concrete, specific examples of how these tools and techniques were implemented in an information management project.

Practical implications – This chapter contributes to the development of change management and project management competencies for librarians by providing explanations of project management and change management which include advice and evidence from the literature combined with examples of how these techniques and processes were applied in a library and

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information management project. This chapter should therefore serve as an educational tool for library and information management practitioners seeking either to develop their project management and change management skills or to apply these techniques to their own projects.

Originality/value – Articles which combine project management and change management methodologies are rare. This chapter takes these concepts and applies them in a library and information management setting in a way that should be practical and approachable to library and information science practitioners.

Keywords: Project management; change management; stakeholders; planning; communication; engagement

INTRODUCTION

What are project management and change management and why are they important to libraries? Why should the concepts and disciplines of project management and change management be examined together? These are the questions that this chapter will answer using a combination of research literature and examples from practice. The idea of linking change management and project management is not new in other bodies of research literature in business or industrial contexts. Articles that combine these concepts in the library context are, however, rare.

This chapter contributes to the development of change management and project management competencies for librarians by providing explanations of project management and change management which include advice and evidence from the literature and combining it with examples of how these techniques and processes were applied in a library and information management project. This chapter should therefore serve as an educational tool for library and information management practitioners seeking either to develop their project management and change management skills or to apply these techniques to their own projects.

Defining Project Management

Project management provides a systematic approach to dealing with projects in an organization (Wamsley, 2009; Winston & Hoffman, 2005). A project is defined as a discrete activity with defined time lines and objectives which will result in either the development or modification of a product or service and which is performed outside of the course of day-to-day activities (Wamsley, 2009). What does this look like in the library context? In the cataloging department, the daily activity of cataloging individual items would not be considered a project – each item cataloged would constitute a task. If the cataloging department chose to adapt a new cataloging system, for example switching from AACR2 to RDA, introducing a new custom taxonomy, or switching to a new cataloging tool, these could be projects. In the reference department, the completion of individual reference requests or the delivery of training or information literacy sessions are not generally considered projects. The development of a new training or information literacy program, however, would meet the definition, as it would require reference staff to undertake various project management stages to be successful. Examples of library projects often consist of the introduction of new information systems, such as integrated library systems, websites or portals, the development of new facilities, the relocation of materials and staff from one facility to another, or the development of new strategic plans for the library (Dukić, 2015; Dulock & Long, 2015; Du Plessis & Mabunda, 2016; Kinkus, 2007; Olney, Backus, & Klein, 2010; Stewart-Mailhiot, 2015). Project management is generally described in terms of both phases or processes and knowledge areas which have been defined by bodies such as the Project Management Institute through their PMBOK Guide and the Association of Project Management with their APMBOK (Greene, 2010; Kinkus, 2007; Wamsley, 2009). The project management's knowledge areas are largely clustered around the factors that need to be managed in a project including integration management, scope management, time management, cost management, quality management, human resource management, communications management, risk management, and procurement management (Project Management Institute, 1996). These knowledge areas will influence tools and techniques that are utilized in each step of the project management process. The project management process is divided into five processes or phases which are initiating, planning, executing, controlling, and closing (Project Management Institute, 1996). These will be outlined in greater detail later in the chapter as each phase will be discussed in relation to change management concepts and procedures.

Defining Change Management

Change management provides a structured approach to assist organizations in undertaking change initiatives (Du Plessis & Mabunda, 2016). A change initiative is a project undertaken to move an organization from the current state to another state – often referred to as the vision or desired state. Achieving a desired state may require changes in behaviors, values, systems, and structures (Dukić, 2015). Any of the examples of projects in libraries listed above could

also be change management initiatives because they all impact the way that employees work and interact with their patrons or communities.

Combining Project Management and Change Management

Why are project management and change management important to libraries? The primary reason is that a significant amount of the work that libraries undertake involves change projects and library personnel are increasingly likely to be asked either to lead or to participate in one of these initiatives (Horwarth, 2012; Wamsley, 2009). Engaging in change initiatives is essential for libraries to remain competitive in relation to other information providers and relevant in their communities (Du Plessis & Mabunda, 2016; Wamsley, 2009). In spite of the prevalence and importance of major change initiatives and strategic projects in both libraries and other industry sectors, most projects are unsuccessful (Fernandes, Ward, & Araújo, 2014). There is a substantial body of literature that has explored reasons why projects fail (Fernandes et al., 2014; Kinkus, 2007; Mala, Bielik-Marettova, & Cerna, 2012; Varajão, Dominguez, Ribeiro, & Paiva, 2014; Zhang & Bishop, 2005). In her 2012 survey of library workers' project management practices, Horwarth found that the second most cited reason why librarians do not use project management techniques was "lack of awareness of these approaches/techniques" (Horwarth, 2012, p. 15). This lack of awareness can be remedied by additional resources on project management that provide examples of the use of project management techniques and approaches in information services and library contexts. Other reasons for project management failure such as misleading expectations, employee resistance, and poor communication can be counteracted by turning to techniques recommended in change management literature. Challenges to change management can include, among other factors, poor project planning. Combining elements from project management and change management may therefore increase a project's chances for success. Creasey and Taylor (2014) found that "Participants that integrated project management and change management reported greater change management effectiveness for their projects compared to participants that did not integrate" (Creasey & Taylor, 2014, p. 16).

In discussing the literature on project management that exists in the library and information science context, authors have noted several trends. The project management body of literature largely consists of three categories of materials (Horwarth, 2012; Winston & Hoffman, 2005). The first category consists of examples of project management initiatives that have been undertaken in libraries and these are generally large-scale, often technology-focused projects (Dulock & Long, 2015). The second group consists of works which provide general introductions to project management methodologies or tools (Besner & Hobbs, 2012). The third set of literature includes articles concerning the skills and training that should be undertaken by librarians seeking to participate in or lead project management initiatives (Stewart-Mailhiot, 2015). There have also been a few examples of articles from the library sector that mention both change management and project management. For example, Cervone (1993) wrote about three major change models and incorporated elements of both project management and change management. Both change management and project management are also listed as competencies for librarians by number of sources (Canadian Association of Law Libraries [Association canadienne des bibliothèques de droit], 2015; Canadian Association of Research Libraries, 2010; Knight, 2009; Searle, 2011).

Both project management and change management are described in terms of steps or processes that must be completed by the practitioner. The project management process is described as including initiation, planning, executing and controlling, and closing. The change management process includes the processes of stakeholder identification and engagement, developing a vision and strategic plan, communicating the change vision, empowering others to participate, creating and celebrating short-term wins, broadening the change, and embedding the change in the culture of the organization. Because these two procedures are seldom presented side-by-side it can be difficult for practitioners to determine when and how to align project management and change management processes. This chapter offers a sequence for combining project management and change management steps. Each step is described at the conceptual level and then are elaborated upon through the example of a specific change project case. The case used is the development of an information management system by a small combined library, records, and information management team. This case was selected because this is an example of a project that's success requires a behavioral change on the part of the project team's stakeholders. The project team's success depends not only on the launch of a new product, but also on the willingness of employees to use that product. For this reason, the team had to focus not only on delivering the change on time and to specifications, but also on addressing the change-related challenges posed by the introduction of a new system which would require clients to work differently.

PROJECT MANAGEMENT AND CHANGE MANAGEMENT

Project Management Phase: Initiation

Project initiation is described in the project management literature simply as "recognizing that a project or phase should begin and committing to do so" (Project Management Institute, 1996, p. 28). This limited explanation may be due to the fact that project managers are sometimes assigned projects by organizational managers and must simply initiate the project according to these

managers' time lines. A more helpful first step in a project comes from the change management literature in which the first step to a change management process is establishing a compelling reason for change (Du Plessis & Mabunda, 2016; Kotter & Rathgeber, 2005; Kumar, Kumar, Deshmukh, & Adhish, 2015). The rationale for 'establishing a compelling reason for change' step in the change management process is that the various actors or stakeholders who must be engaged in a project may need convincing to support either the project or its resulting change for the organization. The first job of the change management team is to persuade them of the need to undertake the project and to seek their cooperation and support.

A key aspect of change management is developing the end-state vision. This is an easily communicated picture of what things should be like in the organization once the change has been successfully implemented. This means that you should have a clear idea of the outcomes that you hope to achieve (Stewart-Mailhiot, 2015). Creating a sense of urgency and an organizational drive toward continuous improvement is needed for an organization to be change-ready and innovative (Welbourne, 2014).

Knowing when and how to initiate a project or any follow-up phases of a project requires a strong understanding of the organizational environment (Du Plessis & Mabunda, 2016). The factors that may convince a technical specialist to undertake a project might not be particularly compelling to the managers or directors within the organization who are responsible for resource allocation. Projects require resources to be completed. Even if there are no major purchases or contracts required to complete a project, it requires staff time and given that employees are only able to complete so much work in a day every project that is undertaken is done at the expense of other initiatives. The project team in this case found that the key to gaining management support for a project is to provide a justification for the project that aligns with management's priorities. A project is more likely to be approved if it is aligned with the organization's strategic priorities outlined in the organization's annual report or strategic plan. The project team made a deliberate decision not to communicate the value of the project in information management or information technology terms. Instead they showed how the information management system could support the organization's corporate priority of operational excellence. The team described how having a well-designed information management system could save employees time in saving and retrieving the documents needed to perform their work, could reduce duplications of effort, and could help to ensure consistency in work across the organization.

A second important factor in determining when to undertake a project is understanding which other projects are occurring within the organization. If teams that you are hoping to engage in your project have already been committed to other initiatives, then you may wish to either delay your entire project or adjust your time line to accommodate these stakeholders. The project team took into account busy periods for the various teams in their office when designing their project plan. For example, they knew that certain groups would be impossible to contact in the months immediately before or after the end of the fiscal year. Knowing what is going on in the organization may also help you to discover possible opportunities for collaboration. In the case of this project, the team decided to undertake a metadata review to determine whether the metadata fields and values available in the system were working well for employees. They aligned their metadata review with a project the records team was undertaking to define document retention and disposition schedules for the organization based on different types of information resources of business value. Because both projects required information about workflows and the types of information resources that teams created, working together with the records team prevented the duplication of effort and reduced the number of meeting requests that the project team needed to send out to employees in other branches.

Change Management Phase: Stakeholder Identification and Engagement

Stakeholders may be included either as project team members, project partners or assistants, or project clients. Active and visible participation by stakeholders, especially executive sponsors, can contribute significantly to a project's success (Olney et al., 2010; Rasid, Ismail, Mohammad, & Long, 2014). These stakeholders and project sponsors need to be engaged early and involved throughout the duration of the project. They may play a variety of roles including building coalitions of support, communicating with employees on behalf of the project team, and actively participating in aspects of the project such as resource procurement and contract negotiation (Chandler & Thomas, 2015; Creasey & Taylor, 2014; Welbourne, 2014). Assembling a strong team to lead a change project is an essential early step in a change management project. The team should include the right people to lead and promote the change project. Reaching out to various specialists within the organization can also be beneficial to the project. Olney et al. (2010), for example, described engaging outreach librarians to assist in the promotion of their Go Local initiative.

Change Management Phase: Developing a Vision and Strategic Plan

Creating a vision for what the organization will look like after the change initiative has been successfully completed is an important step in the change management process. This vision needs to be explicit and concrete enough to attract and maintain the focus of the stakeholders involved in the change (Pock et al., 2015). The vision will also help you in establishing a change plan by providing a clear picture of what success will look like for the organization. You can use this vision to help develop objectives (Kumar et al., 2015). This vision may include broad goals as well as a breakdown of values and behaviors which members of the organization should undertake to achieve the vision (Vaccarezza & Rizzi, 2014). A vision is a necessary precursor to the development of a strategic plan (Du Plessis & Mabunda, 2016; Kotter & Rathgeber, 2005; Kumar et al., 2015).

Change Management Phase: Communicating the Change Vision

Communication is generally considered one of the most important success factors in both project management and change management (Fernandes et al., 2014; Gotsill & Natchez, 2007; Horwarth, 2012; Stewart-Mailhiot, 2015; Varajão et al., 2014). There is a considerable amount of advice available on how to structure and deliver change messages. First, the change message must have an element of emotional appeal to attract people's attention and ideally this message should be inspirational, highlighting positive elements of the new end-state vision (Welbourne, 2014). Next, communication should be persistent and repetitive to ensure that the message reaches as many people as possible and to help engrain the vision in people's minds (Pock et al., 2015). The change team should tailor messages to intended audiences and should deliver those messages through as many channels as are appropriate, such as through individual or team meetings, email, corporate portals and websites, posters in the physical premises, and telephone calls (Creasey & Taylor, 2014). Who should deliver the message should also be considered. Certain messages are best delivered by an individual with a high level of authority within the organization, others by people who have close relationships with the intended audience (Creasey & Taylor, 2014). In terms of content, change and project messaging should include the following elements, tailored to the audience: a business justification for the change, reasons for participation, impact of change, and change procedures and details (Creasey & Taylor, 2014, p. 15).

Project Initiation in Practice

In the case of the metadata project, the first stakeholders that were engaged were the managers of the information management and information technology branch. These managers were important first project sponsors because of their ability to serve as gatekeepers between the information management team and senior decision makers. They were able to provide intelligence regarding other projects being undertaken, resource availability, and strategic priorities. They could also provide advice on communication and engagement plans and played an active role in delivering change messages and securing project resources. The first step in initiating the project, therefore, was convincing information management and information technology managers of the project's value. This was the group that was most receptive to technical arguments for the project and needed to see evidence-based support both for initiating the project and for the proposed solution. The project team supported the need for change with policy as well as research. They made sure that all staff were aware of the priorities of the branch team and associated the project proposal with the priority areas identified in the five-year branch plan.

The second group of stakeholders engaged were senior management. As indicated in the literature notes above, senior managers can play a key role as project sponsors. In the case of this project, the team knew that they needed senior managers to convince their employees to participate in the project. The project would require input from each team in the form of meeting attendance and document reviews that could take employee volunteers up to four or five hours of work to complete. This is a significant commitment given employees' busy schedules, so either being directly assigned by a branch manager or receiving managerial support to participate was important. The project team appealed to the senior managers first through a presentation by their manager (prepared by the technical team) at a senior management meeting which introduced the project and then through individual emails requesting assistance and repeating the value of the project for their team.

The third group of stakeholders the team needed to include in the project were the employees at all levels of the organizational hierarchy who would be using the information management system. Given that the system was the official information management system containing all of the organization's documents, this meant that all employees were stakeholders. The team was able to group employees based on their work function, which meant that messages including outreach communication and training materials could be tailored based on function rather than individualized to each employee. The team created individual packages of documents for each functional team in the office which focused on the metadata used by that team. This meant that each team was presented only with the information that they needed to review for the project. In some cases multiple teams used the same metadata fields. The project team would allow each team using the field to review the properties, and in cases where one team requested a change that would be brought to the other impacted team for their review, especially if the change involved the removal of a metadata choice or a new suggested workflow. As with the senior managers, the communications concerning the project were closely connected to the work that employees performed and how the project could benefit them rather than the technical or even legislative reasons for undertaking the project.

The team put a significant amount of effort into crafting materials that communicated the rationale for undertaking this project with the audience in mind. All of the team's communications focused on the "What's in it for me" elements of the project, describing why the project should matter to the audience rather than why the information management team intended to undertake the project. The project team used intelligence that it had gathered through meetings and monitoring help tickets about employees' "pain points" or frustrations with information management systems or workflows into communications. They also used their understanding of how employees worked and the types of tasks that they undertook to craft examples in project communications to make the project as relevant to the audience as possible. The team even consulted with the communications team in their office for their expert advice on how to word email messages and presentation slides to ensure that they were communicating effectively. As subject specialists, the team needed to be reminded when they were including jargon or concepts that people outside of information management practice would find difficult to understand or which would detract from the project purpose. They understood that the project required the involvement of employees to succeed. Attending to the advice in the change management literature was of particular importance here, because they discovered that they needed to be able to convince people to support the project and create a sense of urgency to encourage participation.

Project Management Phase: Planning

The Project Management Institute defines planning processes as "devising and maintaining a workable scheme to accomplish the business need that the project was undertaken to address" (PMI, 1996, p. 28). Planning is considered to be the most important phase of a project (Horwarth, 2012; PMI, 1996; Varajão et al., 2014). Planning includes determining the scope, time line, and resource needs for the project. Any significant miscalculations in any of these projections can result in project failure, and insufficient planning is a common problem within project management (Wamsley, 2009). Planning should include determining what aspects of the project should be monitored and what objectives need to be met at each step for the project to be deemed a success (Vaccarezza & Rizzi, 2014).

As discussed earlier, the vision state included a picture of the state that the organization should achieve for the project to be deemed a success. It is in the planning stage, however, that the specific, measurable objectives that need to be met to reach that end-state are determined and a time line is set for meeting those objectives (Wamsley, 2009). Any obstacles that could impact the team's ability to achieve these objectives should also be identified and risk management strategies developed. Risks may include dependencies on other teams to complete the required work, the ability to obtain specialized assistance in completing the project such as an expert consultant, the availability of funds, the functionality of available software and systems, and the likelihood of employee acceptance or resistance to the project. Creating milestones or mini-deadlines

along the way will both help you to assess how the project is progressing and give you the opportunity to celebrate successes. Although it is difficult (if not impossible) to account for every variable that may impact your ability to complete the project, try to be as realistic as possible in developing your time line (Stewart-Mailhiot, 2015). You may discover that your initial projections for completion are overly optimistic. Breaking down the project into a number of smaller tasks can help you to develop a realistic time line as you may have a better sense of how long it will take to complete each small step than would the entire project (Zhang & Bishop, 2005). The more groups or teams that are involved in the project, the more explicit and rigorous the project plan should be to keep the project moving forward (Greene, 2010). A structured approach to engaging in a project can assist employees by clearly defining roles, detailing the progression across stages, helping to explain the project to others, and allowing for the quick identification of mistakes or gaps (Creasey & Taylor, 2014, p. 13). It can be helpful to include some types of metrics in your plan to include in reports to senior management and project stakeholders as well as to justify any expenditures (Gotsill & Natchez, 2007). Do not, however, simply employ metrics for the sake of using metrics. You should carefully consider what you need to monitor and ensure that those elements are linked to the project's values and objectives (Vaccarezza & Rizzi, 2014).

Planning in Practice

In undertaking the information management system project the team found it helpful to think of project planning as an activity that is done in multiple phases throughout the project rather than at one time because the plan will need to be modified as new information emerges and circumstances change. A portion of the planning needs to be completed before project initiation as part of the information that is used to promote the project to organizational decision makers. To "sell" the project to senior management the team needed to have an end-state vision, stakeholders identified, and an idea of how long the project would take and how much work would be involved. They developed an end-state vision based on information gathered from a number of sources. First, they had to understand what challenges employees in the organization faced with regards to information management and needed to demonstrate how a new electronic information management system would address those challenges. Second, they had to be aware of the legislative and policy requirements impacting the organization and ensure that their solution would align with these obligations. Third, the team investigated the literature on information management systems to see what systems benefits could be supported through research. They also needed to have a significant amount of organizational knowledge to identify stakeholders. Some of the information about the various business functions could be obtained through organizational charts as well as a review of any procedural or workflow maps that had been developed through previous systems projects. The team also brought experiential insights in terms of which employees were particularly interested in information management and were more likely to take an active role in the project. Gathering this evidence for initiation was part of the planning process.

The next step in project planning was to start developing task lists and time lines for the project. This task relied on the experience of team members who had engaged in similar projects in the past or who had built relationships with various organizational teams. Knowing which teams are likely to cancel meeting requests and require multiple attempts at rescheduling helped the team to develop a realistic time line for data gathering. Team members could also provide estimates of how long it would take to complete any particular task. The team found that they had to resist the urge to create a time line that was too optimistic. Many of the tasks in the project depended on the cooperation of other teams which creates the potential for bottlenecks and delays as these teams may have other obligations that delay their completion of tasks for the project. They discovered that their task list was highly dependent on the feedback that they received from each of the work teams. Even though the team had a limited scope of work for the project, they found that some teams made more requests for modifications than others, and some of these far modifications were more significant and complicated. For example, adding a new term to a vocabulary list is far less time consuming than creating a new metadata field and linking that field to other existing fields through preprogrammed relationships. The team modified their task list after each meeting to keep track of what was requested and adjust their project time lines accordingly.

Project Management Phases: Executing and Controlling

The Project Management Institute defines the implementation or executing processes as "coordinating people and other resources to carry out the plan" (PMI, 1996, p. 28). It defines controlling processes as "ensuring that project objectives are met by monitoring and measuring progress and taking corrective action when necessary" (PMI, 1996, p. 28). Executing a project includes carrying out the activities included in the project plan, verifying that the project scope has been accepted, assuring the quality of the product or service under developing in the project, working with and developing the team responsible for project completion, and obtaining and utilizing the resources required to complete the project. Controlling includes regularly measuring the performance indicators that were identified in the project plan. These indicators may

include project component due dates, budgets, and deliverables. When potential problems are spotted in the controlling processes, such as the chance of missing a deadline or going over budget, the project team must report on these issues and develop appropriate solutions either to prevent the problems for derailing the project plan or to adjust the project plan given obstacles which cannot be circumvented. Risk management is the key activity undertaken in this phase.

This is the stage of the project in which change management activities should be carried out by the project team. This includes carrying out communication and engagement plans to ensure that employees are aware of the project and are able to carry out the operations needed for the project to succeed (Wamsley, 2009). The idea here is to create the circumstances needed to make the new behaviors, structures, or attitudes part of the everyday routine of the organization (Fernandes et al., 2014). The ways in which this objective can be achieved are discussed in the change management literature in the form of engagement, communications, and training.

Monitoring and controlling are important to any project, especially a project requiring change management. Change process supervision and control have been strongly linked to project success (Wiśniewski, 2013). Whether or not to use some form of project management software or a change management dashboard, and examples of the applications of such systems, have appeared in the project management literature (Zhang & Bishop, 2005). There are many technological tools available that can be employed to assist in the control and monitoring of projects and each of these tools has their own strengths and weaknesses. Whether a library team should utilize project management software should depend on several factors. First, the complexity involved in learning how to use the software. Learning how to use a new piece of software requires a commitment of time and effort on the part of project participants. If the software is only to be used in a single project, is unlikely to be used by the organization again, requires significant effort to master, and the baseline comfort with technology in the organization is low, then using less sophisticated means of monitoring the project, such as excel workbooks and shared documents, might be preferable (Mala et al., 2012; Zhang & Bishop, 2005). The level of complexity and degree to which the project steps have been defined should also be taken into consideration. The more complex and poorly defined a project, the more helpful software tools may be in analysis, planning, and monitoring – especially if the project is linked to other concurrent projects within the organization (Besner & Hobbs, 2013). The duration of the project is another factor to consider. If the project time line is less than six months, then using project monitoring software (and taking the time to learn and implement this software) may not be necessary (Vaccarezza & Rizzi, 2014).

Change Management Phase: Empowering Others to Participate

Empowering others to participate in a change process means both encouraging participation and removing any barriers that may exist to participation in achieving the end-state vision (Kotter & Rathgeber, 2005). Empowering employees is also referred to as employee engagement. This may involve changing systems or structures within the organization that help to maintain the status quo (Du Plessis & Mabunda, 2016; Kumar et al., 2015). The change management literature provides several pieces of advice on employee engagement. The first is to include employees from all levels of the organization and not just senior management in change initiatives and to keep them involved in each phase of the project (Gotsill & Natchez, 2007). Employees who may be considered unlikely candidates for project teams, such as those who have dissenting views of the change initiative or who are seldom sought out for input, should be deliberately included in the change discussion and implementation procedure (Pock et al., 2015). Ensuring that employees have the skills and knowledge needed to accept and carry out the new systems or behaviors that are part of the change initiative is another important aspect of employee engagement and this is achieved through training or coaching and support. Open communication is important here as well, but ideally communication show flow in multiple directions and employees' feedback and advice should be incorporated into the project design (Creasey & Taylor, 2014).

Change Management Phase: Creating and Celebrating Short-Term Wins

Creating and celebrating short-term wins or project milestones is emphasized by several authors as a means of building motivation and maintaining project momentum (Du Plessis & Mabunda, 2016; Kotter & Rathgeber, 2005). These celebrations, especially when they recognize the contributions of employees who have worked to advance the project's objectives, are another way of encouraging employee engagement (Pock et al., 2015).

Executing and Controlling in Practice

In the case of this metadata review project, the team played with a few tools in figuring out how to share information about how the project was progressing. The office had a SharePoint collaborative software implementation. This content management tool includes a number of resources to support collaborative project teams such as task management lists, document libraries, and social media tools. The team was able to create a project page to organize materials. Having a single site for document storage and document control mechanisms

such as an audit history was vital to the project as they ensured that everyone knew where the documents were saved and that they were all working with the correct and most up-to-date versions of project documents. This was especially important for the early planning documents as some of the presentations and background reports were passed through multiple editors before reaching their final state. A tool like SharePoint offers a number of additional features that could be used to support project management initiatives such as task lists that allow for the monitoring of key performance indicators. They initially set up some of these tools, but because the team was not used to working with them and because some members of the team wanted to be able to access the project tools remotely and could not access the advanced project tools in that manner, they elected to use simple excel spreadsheets and word documents for project execution and monitoring. These types of documents were also easier to share with consultants who needed access only to one or two elements of the project rather than to a complete information portal. As indicated in the literature, the culture of the organization matters and for the sake of this project the team decided to stick with the tools that aligned with existing cultural practice rather than introducing new practices into the project.

The project team focused on providing as complete a set of project documentation as possible as a means of both monitoring the status of the project and communicating with stakeholders. The project involved meeting with each branch team in the office to determine what metadata fields and terminology choices they would need to complete their work. They created one spreadsheet to record all of the meetings and related tasks. This spreadsheet contained columns for the name of the branch team, the name of the contact person from the branch, the date on which they emailed the contact person to set up the meeting, the date of the meeting, the date on which the project coordinator completed and sent out post-meeting documentation, and the date on which feedback concerning the post-meeting documentation was received. The postmeeting documentation consisted of a meeting report in which they outlined all of the major topics of conversation at the meeting and all of the change requests that were made. This document was sent to all of the meeting attendees to verify that needs had been correctly understood. This served as a way of reinforcing the team's relationship with the project stakeholders and verifying the work plan.

Each of the action items from the meeting reports were fed into a master task list for the overall project. This task list was also organized in an excel sheet and contained the following columns: task name, task description, task requestor, groups impacted, task stakeholders, complexity, and projected completion date. This information led to the identification of three groups of stakeholders for project tasks. The first group was the team that requested the task, usually a change to an existing metadata field. The second group included any other teams that also use that metadata field and would therefore be affected by the change. This helped in establishing task complexity as fields that are used by multiple teams might require multiple approvals before they can be amended. The third group were those individuals who would be needed to implement the change. In the case of updating a system, there were some changes that the information management team could complete on their own and some that would require the participation of the information technology team. Task completion time lines should take into consideration the number of employees involved in each task. Involving more people in a task will require more time. By identifying tasks that could be completed quickly and easily by the project team, they were able to produce some "quick wins" for clients which demonstrated both that they were responding to requests and that the project had momentum.

Project Management Phase: Closing

The Project Management Institute defines closing processes as "formalizing acceptance of the project or phase and bringing it to an orderly end" (PMI, 1996, p. 28). This may include launching a new product or service as well as setting any contracts entered into to undertake the project. There are several activities that should be undertaken in the closing phase of a project to assess the success of the current project and to better prepare the organization for future projects. The first is to evaluate both the project result and process. The goal here is to identify that all of the objectives of the project have been met and that the product or service delivered was the one requested or needed by the client. In addition, the team should evaluate the project process, paying particular attention to how well the project's scope and resources were managed (Wamsley, 2009). The reason why both project results and the project process should be reviewed is that a project is determined to be successful if it results in a product or service that meets the quality requirements of stakeholders, it was completed within budget, and completed within schedule (Rasid et al., 2014; Varajão et al., 2014). Ideally, lessons learned from the project should be captured in a location where they can be accessed by other employees engaging in project work in the future as a means of managing organizational knowledge. This step is often overlooked because of the fast pace of work in many organizations, especially in libraries where teams are both small and busy, but it can help to facilitate the planning of future projects. This intelligence can be particularly helpful in future project planning because it can be used to identify possible risks and to set project time lines.

Change Management Phase: Broadening the Change

Change management researchers have noted that one change within an organization may serve as the catalyst for additional, interrelated changes

(Du Plessis & Mabunda, 2016; Kotter & Rathgeber, 2005). For example, when an information system is changed this will lead to changes in workflows and the way that employees interact with each other and potentially also with clients or other external actors. A major workflow change may require changes to organizational structures or work descriptions. Changes in workflows may also result in changes to how employees' work is evaluated leading to new performance objectives and standards. Achieving an end-state vision may require that a series of changes be successfully completed.

Change Management Phase: Embedding the Change in the Culture of the Organization

Once a change has been implemented, it needs to be embedded into the culture of the organization for it to persist. A new way of working or behaving may give way to old patterns or traditions if it is not properly reinforced (Du Plessis & Mabunda, 2016; Kotter & Rathgeber, 2005). Reinforcement generally requires training so that everyone impacted by the change will be comfortable with the new behaviors or practices that were developed through the change process. Culture is a key factor in determining whether or not a change initiative will succeed as it will lead employees to either embrace or block the proposed change. Changing an organization's culture requires deliberate efforts of socializing and embedding new habits and routines (Denison & Nieminen, 2014).

A number of challenges or barriers to project or change initiative success have been identified in the literature. Creasey and Taylor (2014) provided a list which included lack of support and involvement from supervisors, lack of communication and failing to listen to employees, change resistance, and lack of coaching and support for employees to integrate the change into corporate culture (Creasey & Taylor, 2014, p. 16). Another reason for project failure highlighted in the literature was lack of either authority or responsibility on the part of the project team. This can lead to incorrect pacing due to either hasty decision-making or lack of movement on project steps (Pock et al., 2015, p. 159).

Closing in Practice

Training was an important part of the team's plan for the implementation of a new information management system. The project team developed a number of training tools for employee use. They started with group training for each of the branch teams. These training sessions were tailored to the types of documents that each team created to make it easier for them to see how the system could be used in their day-to-day activities. They also offered one-on-one coaching and troubleshooting to employees on demand. Because the team was working in a small organization all new employees received a one-hour individual training session on the use of the system as well as general information management principles. They also created an online learning site that included step-by-step procedures, printable guides, and screen-capture videos to allow employees to learn how to use the system on their own time. As the project team received questions from staff or were made aware of technical issues they expanded the training site.

The team also built a metadata review into their plan. Two years after the full launch of the system and four years after the initial data gathering and design of the metadata scheme, they met with all of the teams again to review their use of the system. They combined actual use data with employee feedback to develop a plan to make improvements to the system. The team was aware when they designed the system that it could not be static, but would instead need to be modified over time to reflect new projects, priorities, and work structures within the organization. This reinforced the observation that project planning is an iterative process and that the completion of one project may provide the basis for another project. Being flexible in the use of systems and tools also helps the project team to stay connected with the needs of stakeholders.

CONCLUSION

Project management guidance allows for variations in implementation in practice based on individual organizational characteristics (Besner & Hobbs, 2013; Fernandes et al., 2014; Konstantinou, 2015). There is recognition that approaches need to be varied based on the culture and needs of the organizations in which they are applied (van der Linde & Steyn, 2016). One way that organizations determine how to apply project management techniques is to examine how other, similar organizations have adapted them for their own projects (Popa, 2015). There are over a hundred practices, tools, and techniques available in the project management toolkits assembled by the Project Management Institute and other sources that can be employed by librarians seeking to undertake projects within their organization (Besner & Hobbs, 2013, p. 18), giving each project manager a significant amount of choice and options for customization. This chapter does not propose to provide "best practices" for how to implement a library project, but provides an illustration of one way of approaching projects supported by evidence from the project management and change management literature which librarians and other information science practitioners can add to their project toolkits. Understanding that change management practices as well as the processes of project management should be combined in project initiatives because most of the projects that librarians undertake involve the introduction of some form of change for either library

staff or patrons can allow them to design their projects in ways that address some of the known barriers to change and therefore increase the likelihood of project success.

REFERENCES

- Besner, C., & Hobbs, B. (2012). An empirical identification of project management toolsets and a comparison among project types. *Project Management Journal*, 43(5), 24–46.
- Besner, C., & Hobbs, B. (2013). Contextualized project management practice: A cluster analysis of practices and best practices. *Project Management Journal*, 44(1), 17–34.
- Canadian Association of Law Libraires [Association canadienne des bibliothèques de droit]. (2015). *CALL/ACBD professional development pathways*. Retrieved from http://www.callacbd.ca/ Resources/Documents/Professional%20Development/PATHWAYS%20FINAL%20APPROVED %20Aug%2012%202015.pdf
- Canadian Association of Research Libraries. (2010). Core competencies for 21st century CARL librarians. Retrieved from http://www.carl-abrc.ca/doc/core_comp_profile-e.pdf
- Cervone, H. F. (1993). Organizational change models and digital library projects. OCLC Systems & Services, 29(2), 61–64.
- Chandler, D. E., & Thomas, J. L. (2015). Does executive sponsorship matter for realizing project management value? *Project Management Journal*, 46(5), 46–61.
- Creasey, T., & Taylor, T. (2014). Seven greatest contributors to change management success. People & Strategy, 37(1), 12–16.
- Denison, D., & Nieminen, L. (2014). Habits as change levers. People & Strategy, 37(1), 23-27.
- Du Plessis, T., & Mabunda, T. T. (2016). Change management in an academic library in the knowledge economy. South African Journal of Libraries & Information Science, 82(1), 53–61.
- Dukić, G. (2015). Perception and adoption of change management in information institutions: A study from Croatia. *Libri: International Journal of Libraries & Information Services*, 65(3), 175–190.
- Dulock, M. J., & Long, H. (2015). Digital collections are a sprint, not a marathon: Adapting Scrum project management techniques to library digital initiatives. *Information Technology & Libraries*, 34(4), 5–17.
- Fernandes, G., Ward, S., & Araújo, M. (2014). Developing a framework for embedding useful project management improvement initiatives in organizations. *Project Management Journal*, 45(4), 81–108.
- Gotsill, G., & Natchez, M. (2007). From resistance to acceptance: How to implement change management. T+D, 61(11), 24–27.
- Greene, J. (2010). Project management and institutional repositories: A case study at University College Dublin Library. New Review of Academic Librarianship, 16(Suppl.), 98–115.
- Horwarth, J. A. (2012). How do we manage? Project management in libraries: An investigation. Partnership: The Canadian Journal of Library & Information Practice & Research, 7(1), 1–34.
- Kinkus, J. (2007). Project management skills: A literature review and content analysis of librarian position announcements. *College & Research Libraries*, 68(4), 352–363.
- Knight, J. (2009). The contemporary library and information services manager: Skills and knowledge requirements. Business Information Review, 26(1), 51–56.
- Konstantinou, E. (2015). Professionalism in project management: Redefining the role of the project practitioner. *Project Management Journal*, 46(2), 21–35.
- Kotter, J., & Rathgeber, H. (2005). Our iceberg is melting: Changing and succeeding under any conditions. New York, NY: St. Martin's Press.
- Kumar, S., Kumar, N., Deshmukh, V., & Adhish, V. (2015). Change management skills. Indian Journal of Community Medicine, 40(2), 85–89.

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- Mala, A., Bielik-Marettova, A., & Cerna, U. (2012). Quality information in project management and uglies of project in industry. Annals of DAAAM & Proceedings, 23(1), 0081–0084.
- Olney, C. A., Backus, J. E. B., & Klein, L. (2010). Characteristics of project management at institutions sponsoring National Library of Medicine Medline Plus Go Local. *Journal of the Medical Library Association*, 98(1), 65–72.
- Pock, A. R. et al. (2015). Academic change management: Leadership lessons from curricular reform. *Military Medicine*, 180(April Suppl.), 158–160.
- Popa, T. (2015). Project management A tool for developing the performance and competitiveness of military education institutions. *Revista Academiei Fortelor Terestre*, 20(3), 322–326.
- Project Management Institute. (1996). A guide to the project management body of knowledge. Sylva, NC: Project Management Institute. Retrieved from http://www2.fiit.stuba.sk/~bielik/courses/ msi-slov/reporty/pmbok.pdf
- Rasid, S. Z. A., Ismail, W. K. W., Mohammad, N. H., & Long, C. S. (2014). Assessing adoption of project management knowledge areas and maturity level: Case study of a public agency in Malaysia. *Journal of Management in Engineering*, 30(2), 264–271.
- Searle, S. (2011). University libraries and research data management: Developing knowledge, skills and careers. Retrieved from https://www.monash.edu/__data/assets/pdf_file/0007/157786/ caul-pres-final_nb.pdf
- Stewart-Mailhiot, A. (2015). Project management: Moving beyond MacGyver. Reference & User Services Quarterly, 55(1), 18–20.
- Vaccarezza, A., & Rizzi, G. (2014). Change management dashboard: An adaptive approach to lead a change program. *People & Strategy*, 37(1), 48–50.
- van der Linde, J., & Steyn, H. (2016). The effect of a project management office on project and organisational performance: A case study. *South African Journal of Industrial Engineering*, 27(1), 151–161.
- Varajão, J., Dominguez, C., Ribeiro, P., & Paiva, A. (2014). Critical success aspects in project management: Similarities and differences between the construction and the software industry. *Tehnicki vesnik* [Technical Gazette], 21(3), 583–589.
- Wamsley, L. H. (2009). Controlling project chaos: Project management for library staff. PNLA Quarterly, 73(2), 5–27.
- Welbourne, T. (2014). Change management needs a change. *Employment Relations Today*, 41(2), 17-23.
- Winston, M. D., & Hoffman, T. (2005). Project management in libraries. Journal of Library Administration, 42(1), 51–61.
- Wiśniewski, Z. (2013). Model of resistance dynamics in the change process. Contemporary Management Quarterly [Wspólczesne Zarzadzanie], 12(3), 26–37.
- Zhang, Y., & Bishop, C. (2005). Project-management tools for libraries: A planning and implementation model using Microsoft Project 2000. *Information Technology & Libraries*, 24(3), 147–152.