



CTCLINK PROJECT FINAL LESSONS LEARNED

ctcLink Project Management Office

May 31, 2022

Table of Contents

- Table of Contents.....2
- Lessons Learned Methodology.....3
- Lessons Learned Recommendations.....3
 - Agency Readiness.....3
 - Executive Sponsorship & Governance.....4
 - Project Management/Project Controls.....5
 - Organizational Change Management.....6
 - Communications & Stakeholder Management.....6
 - Training & Support.....7
 - Project Team/Human Resource Management.....7
 - Scope Management.....8
 - Schedule Management.....8
 - Cost Management.....8
 - Procurement/Contract & Vendor Management.....9

Lessons Learned Methodology

The Washington State Board for Community and Technical Colleges (SBCTC) ctcLink Project Team is committed to continuous improvement. After each Deployment Group was implemented into ctcLink Production, the ctcLink Project Team gathered Lessons Learned from the key stakeholders involved in the deployment. Through the process, the team identified pain points and documented the corresponding improvement strategies to be implemented for the next deployment group. The improvements based on Lessons Learned (LL) were implemented in real-time.

As the project progressed, the LL were increasingly less about the project methodology and more about change management—demonstrating the methodology’s growing maturity. Over time the LL findings transitioned from largely technical and functional aspects of implementation and, instead, were focused on organizational change management strategies at the local college level. Due to that evolution, this final document is focused on overall experiences with the ctcLink Project and is focused on LL Recommendations.

Lessons Learned Recommendations

This section summarizes aspects of the project that went well or were major pain-points which may have been avoided with the proper actions. The *Recommendations* based on Lessons Learned—when applied to future projects—could help achieve similar successes or avoid similar challenges.

In this document “Agency” is used to represent the entity which is accountable for the project. For the ctcLink project the agency was the State Board for Community and Technical Colleges (SBCTC). The agency (SBCTC) included a Project Management Office (PMO) which was ultimately responsible for implementing the project.

“Organization” is used to refer to other institutions/offices tasked with implementation under the guidance of the agency. For the ctcLink Project the organizations were the 34 community and technical colleges in the state of Washington, along with the HR/Finance offices of SBCTC.

Recommendations based on lessons learned are listed below by category. Some recommendations are applicable to both the *agency* and the *organization(s)*.

Agency Readiness

Performing the work to conduct the necessary due diligence, ensure strong sponsorship and governance and establish suitable project management, resourcing and implementation approaches to support project success.

Ensure there is an agency Project Management Office (PMO) with key staff 100% assigned to the project. In large-scale implementations the agency PMO needs an experienced, qualified Project Director with project management experience. Failing projects need someone who has high-risk project and replanning experience.

In addition to an agency PMO, each organization needs a Project Management Office led by a qualified project manager who is dedicated 100% to the project. For key domain and implementation subject matter experts (SMES) the majority of their day-to-day responsibilities should be delegated to others so they can focus on the project work.

The agency itself owns IT, Support and Operations. The activities at the agency need to be communicated and coordinated with the agency PMO so there is minimal risk to any of the parties. This is especially important related to IT maintenance or upgrades, agency policy, and business processes that will impact the project and the customer.

If the agency is also implementing the project they become another organization, and need a PMO led by a qualified project manager. They need to be responsible for their own configuration, testing, communication, and training. The agency PMO managing the entire project should not be responsible for implementation at the agency itself.

Executive Sponsorship & Governance

Performing the work to establish the vision, secure resources, articulate the project's objectives and expected outcomes, guide and champion the project, remove roadblocks and ensure timely decision-making. The project sponsor is accountable for enabling success.

A strong governance structure with representation from all stakeholders is critical to the success of any large-scale ERP project. It can be difficult and time-consuming to get a Project Charter and all Governance charters and project controls in place, but it is critical to do that work up front. This cannot be stressed enough.

Agency executives and project sponsor(s) should be vocal and visible champions for the project to help communicate and encourage organizations to follow best practices and recommendations for success. Executive leadership is key to any project success.

Increase the visibility of the executive sponsor at both the agency and organization. The executive sponsor must be a champion for the project and keep it elevated as a top priority. This person needs to help organizations understand that the agency PMO is using best practices and their recommendations should be followed.

A charter should be created at the beginning of the project authorizing the organization project manager to manage the project scope, budget, timeline and resources. The project manager should meet regularly with leaders to align the project to organization goals and objectives.

Agency PMO should educate organization project managers, executive sponsors, and key leaders about their critical roles; help organizations define roles and responsibilities; and provide opportunities for training and collaboration of project managers and executive sponsors from the agency and organizations.

Executive sponsors should work with leadership to set a tone of grace. The project needs to be flexible to allow for changes and continual improvement. People are doing their best and obstacles can be overcome. This is especially true immediately after implementation when end-users are learning a new system and others at the organization are in need of their services.

All aspects of project scope should be managed centrally through the agency PMO and not matrixed and managed by other areas within the agency. The matrixed management led to variations and inconsistencies in the delivery of some scope.

Keep the end-users in mind. If the new product is not adopted by the end-users then the organization is receiving no value from the project. Early activities must be designed to provide organizational PMO with sufficient knowledge of the new product to be effective in their work, even if this does not help the agency PMO with any specific work package.

Project Management/Project Controls

Performing the work to establish and follow a formal methodology to manage project activities and achieve project objectives. Includes the control documents (e.g., charter, project management plan, work plan and schedule) to support project management activities.

Continuous improvement is essential. Conduct lessons learned regularly and implement changes to improve the process. Organizations may find lessons learned from other organizations to be more credible than recommendations from the agency.

The agency PMO should continually refer the organizations back to their project plans and require them to update the plans as needed. This is especially true of the Resource Plan & Budget.

Operate and communicate consistently. If there are multiple leads there should be a standard operations and communication methodology developed and followed for all official activities (e.g. dates, receivables, meeting requests, etc.) Develop one location where people can go for all official communications.

Make configuration decisions after the organization better understands how the product will function and the future-state business processes have been mapped. Provide “best-practice” configuration and allow organizations to deviate only after they understand the impact of that decision. Meet to come to an understanding of common business processes across organizations.

Engage experts in the originating system (aka Legacy) in the transition activities related to the new system. They will understand the impact of the configuration decisions and business process changes and help provide the translation between old and new for end-users.

End-users want to experience the new system. Staff who have used an application for a period of time for their daily work need more than a demonstration and reading materials. These stakeholders learn best by doing. Being in the new system and practicing end to end business processes reduces anxiety and increases adoption of the new system. Invest in a robust training platform which includes hands-on activities.

Quality control. Ensure that all information provided to the organizations is accurate and consistent. Continual misinformation/mistakes can erode trust, especially for stakeholders who are not supportive of the Project.

Provide checklists for key activities. They are useful for ensuring that all activities are completed and for quality control. They are useful for the organizations to understand the scope of work they are asked to do.

Provide the organizations enough information about upcoming work packages that require staff so they can be prepared in advance.

Practice implementation. This can include Mock Go-Live activities and incorporating help desks into

testing so they can practice their support plan.

Organizational Change Management

Performing the work to establish the process, tools and techniques to manage the people side of change and increase user adoption.

Make sure the leader and Executive Sponsor are visibly engaged and supportive of the project and are present (even if briefly) for major activities.

The project should be a regular agenda item at executive leadership and board meetings. This will allow executive leaders to be accountable for delivery of the project activities within their teams, and sends a message to the organizations that the project is important.

Provide a directive framework of organizational change management for organizations to use to manage change at their organization.

Establish a partnership culture for better accountability and commitment to the outcome. Needs to involve the perspective of the organizations where the new solution is being implemented. Customer needs to be a partner and responsibility for work needs to be shared.

While minimal disruption to customers is important, the best way to do this is to close offices for a few days during implementation so staff can focus on learning the new system/business processes and then be better prepared to support customers.

Ensure that staff understand the current state business processes. Not just what tasks they do, but why they do those tasks and how it fits together. If they don't understand the process then different tasks in a new system will not make sense to them and they will try to mimic the way they did the tasks before.

End-users are minimally involved in implementation, yet they should be one of the most important stakeholders. They hold the key to successful adoption and will more readily adopt a project they have been a partner in, as opposed to feeling like they had no choice or the project was imposed upon them. Additional increased communications, in person meetings, etc. could mitigate the impact of those users not feeling a part of the project.

Communications & Stakeholder Management

Performing the work to identify stakeholder groups and the potential impacts on them of project activities and outcomes. Includes communicating and working with stakeholders to meet their needs and expectations, address issues as they occur and foster appropriate stakeholder engagement throughout the project life cycle.

Agency PMO should create a project communication plan and communication templates for organizations to personalize and use.

Engage mid-level managers throughout the project. This should involve communication, training, organizational change work, and participation in testing where applicable. Staff do well when they receive project information from their managers.

Communicate project changes early, frequently, and in multiple modalities.

Provide one centralized location (e.g. a landing page) where the organization can go to and access (via links) all project information they need.

Clearly communicate who the right people, skills, and experience are for implementation activities. Positions/job titles do not equate to responsibilities. The agency PMO should work with stakeholders to determine who the correct people are and how to communicate that information to other organizations.

Agency PMO should be intentional about recognizing end-users are new to the system and to the jargon and language the PMO may take for granted. In long term projects there need to be reminders to project staff that the information is new to end-users. Provide information repeatedly and in writing so end-users have a place to refer to for answers to their questions.

Training & Support

Adequately training and supporting end-users is important for successful adoption of a new process.

Ensure you have an adequately resourced, professionally developed training strategy and training plan. Manage the plan throughout the life of the project.

Ensure the training team has skilled and experienced resources to execute a large-scale training plan, and develop the technical documentation in a consistent format to increase end-user learning and adoption.

End-users want to know why they are doing a task, not just how to do it, Training materials need to provide this information. They also want to know what to do when something goes wrong with a process.

Provide support sessions with support staff, trainers, and project implementation subject matter experts (SMEs) available to guide staff through new processes at the time of transition to a new system. Both Project and Support should collaborate in training, implementation, and support activities for knowledge transfer and consistency.

Develop new skills in employees so they can effectively use the new product.

Ensure all presenters have been trained in presentation skills.

Project Team/Human Resource Management

Performing the work to organize, manage, lead and develop the project team.

In long-term projects, anticipate attrition as the end of the project approaches and staff find new jobs. Retaining key staff through the end of the project should be identified as a risk and managed and mitigated through the life of the project.

It is particularly important to provide small organizations with some type of additional staffing. At small organizations, one employee may oversee multiple areas of responsibility. This creates a potential single point of failure as they attend to multiple work packages. In large organizations, employees are more likely to have a single area of responsibility, which allows competing demands

to be dispersed across multiple staff.

Agency PMO should continually encourage organizations to hire staff needed for the project. This may require the input from governance, quality assurance, and lessons learned from other organizations. Educate organizations to understand resources needed to complete the work, and not over allocate and burn out staff.

Where a replacement to an existing system is being implemented, implementation SMEs should have a working knowledge of the current system. It is difficult to guide and translate to end-users the future state if the current state is not well understood by those working on the project.

Scope Management

Performing the work to ensure that the project includes all the work required, and only the work required, to complete the project successfully.

A scope management plan is critical for a project. As new scope is identified, governance needs to evaluate the new scope request for its cost and timeline impacts. Governance should assess whether it is more economical for the project scope to increase or whether the risk would be detrimental to the overall project.

Scope management throughout the project is critical. A Requirements Traceability Matrix, to track the detailed scope (requirements), should be managed, communicated, and revisited at key points during the project. Track progress to ensure the original scope is implemented.

Schedule Management

Performing the work to manage the timely completion of the project.

If the project involves any work from third parties, this should be clearly identified and managed with plenty of timeline cushion. This is especially true when working with banks.

Provide an accurate and consistent schedule using a tool that works for both the agency and organization project managers.

Cost Management

Performing the work involved in planning, estimating, budgeting, financing, funding, managing and controlling costs so that the project can be completed within the approved budget.

There must be a mechanism to reevaluate staffing and costs to address unplanned or unfunded mandates (e.g. COVID attestation data collection), and policy/scope change (e.g. OCIO Technology Pool) not estimated and planned for in the budget. A mechanism for additional budget requests is necessary.

Agency should incorporate funds into the project budget to share costs with the organizations for project management and organizational change management at the organizations. These positions would be part of a matrix management and report to the agency PMO and the organization executive sponsor or leader.

Gated Projects within the IT Pool are required to provide documentation, meeting content,

deliverables, etc. for gated funding. The processes are time-consuming and need a dedicated, budgeted, resource to manage this body of work.

Don't try to support a multi-million-dollar project of new technology with old project management tools. Spend the time and money to ensure your tools help the project and instill confidence in organizations and end-users, instead of making do with outdated tools.

Procurement/Contract & Vendor Management

Performing the work to ensure contractual agreements are adhered to, research and source vendors, negotiate contracts, manage relationships and evaluate performance.

The agency project director should have strong vendor management skills. The organization owns the project, while vendors are there to assist. Ensure there is a partnership with the vendor to ensure the organization's needs are being met.

The agency PMO needs a dedicated budget management role.



Content is licensed under a Creative Commons Attribution 4.0 International License, unless noted otherwise.

Washington State Board for Community and Technical Colleges