

A Journey of Discovery Discovery Projects on Trend^{1, 2}

Frances Crossno, PMP, and Linda McManis, PMP

How do you define project boundaries? How do you determine the size of a project? How do you find the complexities involved? How do you uncover extra-project dependencies and risks? The answer to these questions is increasingly becoming the funding of an initial “discovery” project. Rather than committing time and resources to an ill-defined effort, resources from all parties involved are brought together in an engagement to explore and define the boundaries, complexities, feasibility, approach, and resource requirements necessary for further project definition. The level of detail delivered, and the time spent on discovery will vary depending on the nature of the effort; however, the age of the discovery project has come into its own.

There are many benefits to a discovery project, however, they are at no less risk for failure than other projects. They have their own unique aspects and cautions. Today’s project manager needs to be aware and take advantage of the opportunities the discovery project presents, while navigating the dangerous, and often unexpected obstacles and risks.

This paper will explore the discovery project landscape and provide a map to start you on your journey.

First, we will look at “What is a Discovery Project,” with different types and benefits of using the discovery process. This will be followed by examining the five steps of a discovery effort and how to determine if your discovery project is a success or failure. Case studies are provided for both projects that have failed and succeeded. Finally, we will conclude with best practices. A discovery project guide is also provided as an appendix to the paper.

Let’s go on a journey of discovery.

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What is a Discovery Project?

For the context of this paper, the definition of “discovery” is an effort that focuses on analyzing project scope and goals, business needs/requirements/issues, or approaches to addressing major architecture/strategy or process changes.

A discovery effort can be run as a project unto itself or be part of pre-project initiation activities.

Types of Discovery Projects:

- Scoping decomposition to determine project boundaries and support cost estimating.
- Cross functional understanding.
- Current state analysis (system/process).
- “Build” versus “buy” analysis.
- Vendor selection efforts.
- To detail requirements that define the scope and next steps of a project.
- To define standards for an organization’s systems or processes.
- Software investigation, including usability, applicability, feasibility.
- Strategic road mapping.
- Determine approach to achieving a business or system objective.

Benefits of Discovery Efforts

- Better identify project scope and goals.
- Create a more accurate estimate of project cost and secure budget dollars.
- Involve staff early to maximize their familiarity with the work and gain staff and business partner buy in.
- Identify who is needed to source the project and business resource availability.
- Identify boundaries for change.
- Reduce time spent on research as part of the larger project.
- Help to avoid:
 - Scope creep.
 - Costly changes in direction later in the project.
 - Unexpected implications and change management challenges.
 - Initiating a project that does not meet expectations, wasting time and money.

- Identifying key issues and requirements in the discovery effort will improve the likelihood of achieving success criteria.

Five Steps of a Discovery Project

Before kicking off a discovery effort, make sure there is approval and funding from any budgeting, and/or governing body required. The discovery effort should also be adequately staffed with due diligence and commitment around stakeholder involvement. Once the effort is kicked off, follow the recommended steps outlined below.

1. Define Goals:

- Identify business goals and objectives.
- Define needed deliverables.
- Identify end users and stakeholders.

2. Define How to Measure Success:

- Desired future state.
- Changes needed for improvement.
- Potential cost savings.

3. Conduct Research:

- Document user stories and requirements.
- Define current state.
- Build user journey, if appropriate.
- Identify risks and potential bottlenecks.
- Review legacy technology details.
- Identify project dependencies, integrations, change management activities, and data migration needs.

4. Investigate Options:

- Is there something we have that will meet our needs?
- What solutions in the marketplace might meet the needs?
- Understand competitors in the market.
- Summarize costs of various choices.
- Review compliance and security needs.

- Consider buy versus build analysis, if appropriate.

5. Identify Next Steps:

- Provide an analysis of results of discovery project and options.
- Provide solution brief, if needed.
- Summarize recommendations for next steps.
- Identify well-defined scope for the next project, expected outcomes, milestones, and project timeline.
- Report back to project intake team or key project stakeholders.
- If supported, submit to authorizing committee for funding/approval.

Is Your Project a Success or Failure?

Success:

- The discovery effort was delivered on time and budget and agreed-upon scope.
- The discovery effort met its acceptance criteria, objectives, and goals.
- The defined requirements and solution analysis support the creation of scope and goals for next steps and are aligned with strategic goals. *(Note: A valid next step might be not to proceed.)*
- Project team is satisfied with the outcome of the discovery.

Failure:

- Project does not meet its objectives, goals, or acceptance criteria.
- Project is over budget, over time or failed to address the complete scope of the planned discovery. *(Note: A project could be a partial success.)*
- Stakeholders are not satisfied with the project results or quality of deliverables.
- Lack of needed information to proceed with the next steps, or next steps are unclear or not defined.

Failure Case Studies

Failure - Case Study A:

Situation: Large entertainment, hotel, and gaming organization wanted to define a communications platform to meet the needs of 30 properties that rolled up to the organization.

This discovery effort was to define and prioritize requirements, issue a request for proposal (RFP), and find a new platform.

The project had a goal to find a solution that would meet the needs of the 30 unique properties that would support both internal employees (back-of-the-house functionality) and gaming and entertainment side of the business as well, all with individual branding and unique communications needs. The team started with the requirements, weighted must have, nice to have, and not needed but nice to have, etc., defined solutions that could work and initiated a vendor selection/RFP process. They organized vendor demos and ranked all vendors by the same criteria and chose the top three vendors to move forward in the selection process.

Benefits:

- Exposed challenges with structure of reporting organizations.

Issues Contributing to Project Failure:

- Trying to meet the needs of 30 large customers with a single solution was difficult. Leaders were protective of their properties and how communications were managed.
- The project team initially met with executive leaders to define the system needs and not director level stakeholders and others with “boots on the ground” and insights to requirements. This director level staff were engaged later, at the time of the vendor demos, and as a result, additional requirements were identified.
- Clarifying and adding requirements added complexity and time. The project drew the attention of company leadership who were concerned about so many staff (one person from each of the 30 organizations and other stakeholders) involved.

Results:

- Four months into the discovery effort, the company stopped the project and decided not to implement a new platform.
- The communications department was reorganized into a shared services arrangement. Additionally, 4,000 staff were let go at this time, though not specifically tied to the outcomes of this project.

Lessons Learned:

- Staff who would be using a new platform should be engaged from the start of the requirements process.

Failure – Case Study B:

Situation: A client wanted a retail web site that could allow for shopping (displaying multiple products), payment processing, shipping, and reporting functionality.

A discovery project was initiated to identify requirements and find a solution. This included gathering requirements, completing a build vs. buy analysis, and then identifying solutions when a buy approach was determined.

Benefits:

- None identified post-project except some good lessons learned.

Issues Contributing to Project Failure:

- The organization hired to take on the project had never built an online store.
- Three solutions were identified to implement together, but the project team did not have experience in integrating the solutions, although they continued to press for delivery.
- High-risk project but went forward anyway.

Results:

- The project ended with the team's inability to deliver an integrated solution.
- They had to pay back the client for work not done.

Lessons Learned:

- Ensure the project team is qualified to take on the work or resources with needed experience are included.
- Identify and manage project risks and be willing to stop and re-evaluate when issues arise.

Failure - Case Study C:

Situation: Organization wanted to review diversity attributes maintained in its systems and identify needed additions or changes to those values.

The goal was to document current values captured by specific departments and define future values.

Benefits:

- The discovery project delivered a standard for diversity fields for the organization that can be used for consistent capture of information.

Best Practices Contributing to Project Outcome:

- Project goals were reviewed in the project kick-off meeting and documented in a presentation deck.

Issues Contributing to Project Failure:

- During elaboration of future state, the project team was asking stakeholders the fields and values they would like to see in the future. Midstream of the discovery work, sponsors said the future standard for diversity fields was already defined. These future standards had not been previously shared with the project manager or business analyst during the kickoff of the project.
- Rather than moving into implementation, stakeholders started driving additional discovery without including the project manager and business analyst.
- Delays in moving the project to implementation extended project costs.
- It was challenging to schedule meetings with many stakeholders with busy schedules. Emails were used, but stakeholders were not always responsive. This delayed discovery completion.
- Several of the people they were asked to interview expressed surprise at being identified as a contact to provide feedback and were hesitant to participate.

Results:

- The discovery was not considered a complete success because after the project, there was confusion about the future state and opposition to the standards that were defined by the project.
- Lack of agreed-upon standards delayed the implementation of the fields in organization's systems.
- Business stakeholders initiated their own discovery through meetings that excluded project resources (project manager and business analyst).

Lessons Learned:

- More frequent meetings with sponsors may have provided sooner insights into future state. By delivering information via weekly status reports, they may not have caught the attention of stakeholders.
- Reiterate project objectives and deliverables to ensure alignment.

Failure - Case Study D:

Situation: Project manager was hired (by a travel industry company) to complete a discovery around developer tools used for defect tracking, define needs, and recommend processes and improvements to be completed after discovery.

The project team met with group leaders of teams who were managing defects and found everyone was using different tools. There was no consistent, enterprise-wide solution. The project team defined requirements and gathered information from several resources, including Gartner and Forrester, to define possible solutions. They identified stakeholders who would rank the tools, developed a score card, sent a request for proposal (RFP), and completed vendor demos and system selection.

Benefits:

- Gathered the community which led to being beneficial to the second discovery project.

Best Practices Contributing to Project Outcome:

- Followed a well-defined vendor selection process and were methodical in the process. They gathered the team, fully defined requirements, developed a scorecard with rankings and percentages, then had everyone on the team evaluate the possible solutions.

Issues Contributing to Project Failure:

- When the results of the vendor selection process were presented to the business, the organization's leadership said, "great but this isn't our biggest problem." They wanted an enterprise version control system, not defect tracking.
- Business stakeholders were not involved early enough. They were not aware a problem had been identified, and a project manager was brought in to review issues and make recommendations.

Results:

- The initial discovery was considered a failure and the discovery and analysis had to be repeated for a different solution.
- Ultimately, after the follow-up discovery, the organization implemented two systems and transitioned users to a new solution for enterprise version control. The team chose a solution already in use by some of the teams but not most. It was a relatively low-cost option which hit most of the scorecard rankings the most highly.
- Defect management was not addressed in the final solutions.

Lessons Learned:

- Involve business stakeholders early and make sure they understand the project scope and goals at the project onset and then are involved throughout the project.
- Having a good, solid core team engaged in the discovery who can also then participate in implementation can help steer that project. They will have core knowledge and understand needed outcomes and goals.

Success Case Studies

Success - Case Study E:

Situation: Understand current state and interfacing systems to prep for an upgrade of marketing / customer engagement software. Look at potential new functionality to understand staffing and change management implications.

Current state and integrations were analyzed and documented ahead of the marketing project kickoff. Documented data collection and management. Conducted a mini workshop to narrow scope of the marketing journeys. Leaders presented their strategic vision and determined a “Welcome Journey” and a “Re-Engagement” Journey.

Benefits:

- Identified change management challenges and uncovered activities that were being performed that were not generally known/understood.
- Made stakeholders aware of key opportunities to better their processes and business strategy. Provided action items and roadmap to prepare for readiness.
- Identified if staff had necessary skills to take advantage of planned upgrade capabilities.

Best Practices Contributing to Success:

- Due diligence when defining the problem and goals.
- Used visioning appropriately.
- Adequate time was made for current state analysis.

Issues Experienced:

- It's difficult to keep people on track of defining their current state without having them talk about what they want to happen. Although they'll get to future state, documenting current state is key.

Results:

- The effort delivered a broad picture of the people/processes/systems and set boundaries for the upcoming project.
- A defined scope was put in place for the upcoming implementation.

Lessons Learned:

- Be prepared for negative emotions being shared during discovery processes. People will share issues they are having with the current state.

Success - Case Study F:

***Situation:* Discovery effort to define requirements to replace an enterprise core legacy system with a custom-built solution.**

The goal was to define a system that would allow the business to be agile, with the ability to make changes quickly. The business needed to control key elements of the system and wanted ease of use along with that control. The discovery effort was to deliver detailed requirements and cost estimates for the build.

Eight months were spent decomposing and understanding the business needs and costs involved. Once return on investment was determined, management made the decision not to proceed with a custom build. The discovery effort then continued with an RFP to select a software as a service (SaaS) vendor with the vendor building select customizations.

Benefits:

- A more accurate estimate based on understanding detailed requirements.
- Determined the approach of building was not feasible.

Best Practices Contributing to Success:

- Involved not only business in the discovery effort, but also brought in industry subject matter experts (analyst/architect).
- Adequate detail was available to be able to switch approaches and to support the decision to buy versus build.
- Time was spent understanding cost/benefits and priorities of requested customizations to be able to make decisions and determine the level of customizations which made sense.

Issues Experienced:

- Change of approach required additional discovery work and determination of the most cost- beneficial customizations versus what would require process change supported by change management.

Results:

- Multi-tenant software vendor chosen and later implemented with the vendor developing selected custom functionality.
- Led to the adoption of processes that were more aligned with industry standards.
- Change management was planned and integrated into the implementations.

Lessons Learned:

- Granular requirements enable comprehension of change impact and business readiness.
- Align management expectations and strategy.

Success - Case Study G:

Situation: Discovery to make recommendations to “transform” the payroll and benefits group.

Determine what could be automated, transform staffing model to include offshore resources where appropriate, and to introduce a new payroll tool.

Benefits:

- Set reasonable boundaries for changes and understand if there was staffing to support the changes.
- Uncovered little-understood processes and cross-functional impact.
- Broadened awareness of planned changes and impact on other teams.
- Provided needed information for budget planning.

Best Practices Contributing to Success:

- Set clear goals.
- Upper management on board.
- Included technical resources, QA resources, etc., in the discovery team. Ensure people who will support the application after go-live are part of the journey.
- Discovery was not rushed, appropriate to the size of the overall effort. “Don’t short cut the process.”

Issues Experienced:

- High-level business managers did not include all the functional staff needed initially.

Results:

- New tool implemented.
- Offshore resources were used on more repetitive tasks.
- Support of large U.S. clients kept in U.S.

Lessons Learned:

- Take time to identify all cross-functional stakeholders and all levels of staff that need to be interviewed.

Success - Case Study H:

Situation: The legal team, in conjunction with key business units, wanted to replace the current conflict-of-interest tracking system with a new tool which they had already selected.

The old tool was cumbersome, did not provide all the functionality desired, and significant manual effort was required to manage the process. There was basically no customer service from the current vendor. A discovery effort was performed to:

1. Build the detailed requirements and validate that the selected tool could meet them.
2. Validate the platform/technology was acceptable in the systems environment.

The discovery project team interviewed legal and business stakeholders to understand the opportunities for automation and the planned business direction, then worked with the desired vendor to verify the tool could meet those needs.

Technical architects worked with the vendor to understand the technology, APIs, security, interfaces, and more.

Benefits:

- The discovery defined a clear scope, documented what the vendor could do and what the project team could do.
- The requirements were at such a level they could be prioritized and mapped during implementation.
- There were no unexpected technology or security implications.

- Vendors were able to demonstrate against detailed requirements prior to signing contract.
- Since business was engaged throughout the process and later in implementation, that consistency and sense of ownership for the process supported a successful system implementation. Business felt they were driving change instead of being driven.

Best Practices Contributing to Success:

- Took time to understand the strategic direction of the business and legal departments.
- Due diligence around technology during discovery.
- Legal, business, and technical architects were involved in the discovery.

Issues Experienced:

- Because the business had already decided they wanted the tool, the due diligence was on the technology side.
- Additional technology departments had to be brought in during implementation that had not been identified during the discovery. They had specific requirements around the tool that also had to be met.

Results:

- Implementation proceeded and was considered very successful.
- The business had ownership.

Lessons Learned:

- Identify all stakeholder areas and include them in the discovery.

Success – Case Study I

Situation: Existing online patient community software needed to be sunset. A discovery effort was put together to perform an RFP and select vendor software to replace it.

The goal was for the community to provide practical and emotional virtual support to more than 100,000 registered patients, caregivers, and their loved ones and users engaged with not only the organization, but also with each other. Should be web-based, mobile enhanced and allow users to interact via:

1. Posting questions about their conditions.
2. Interacting with subject matter experts.
3. Reading personal experience stories from others.

4. Connecting with people across the globe who are experiencing the same journey they or their loved ones are experiencing.

A bidders' scorecard was created evaluating against not only functional requirements but also looking at history, experience, financial standing, technical requirements and, of course, costs.

Benefits:

- More accurate estimates for funding.
- Identifying priority goals and requirements early on contributed to achieving success criteria.

Best Practices Contributing to Success:

- The procurement department led the RFP effort and recommended/researched companies selected for the RFP.
- Technical lead assigned to the team.
- Desired functionality was prioritized.
- Pework by the business was done to identify the desired functionality. This was planned into the effort.
- Key "must have" requirement was identified: To include not only "member" functionality, but "non-member" functionality as well.
- Vendors had access to the current system front end during the bidding.
- RFP was completed well ahead of when the current system had to be sunset.
- Data migration was included in the implementation planning.

Issues Experienced:

- None.

Results:

- A vendor solution was selected and later implemented.
- Software allowed patients, caregivers, and volunteers to talk to each other which helped usage.
- The community grew from 9,300 members to 21,000 in 12 months without advertising.

Lessons Learned:

- When contracting with a vendor, make sure you discuss toolsets to be used for requirements gathering and define plans for your company to have access to the materials.

Success – Case Study J:

Situation: Large food service company planned to replace its member portal with a new solution that would replace a system that was no longer supported. Other goals were to reduce administrative overhead and provide new features to support and engage customers.

The organization had lost a big customer that stated that lack of good technology was a reason for leaving. This project was aimed at identifying requirements and then selecting a replacement solution.

Benefits:

- Well-defined set of requirements, costs, timeline, and expected outcomes.
- Defined a vendor solution that met requirements.

Best Practices Contributing to Project Outcomes:

- Stakeholders were identified and engaged.
- The team was allotted enough time (several months) that allowed them to interview a robust group of stakeholders, including executives, account managers, and customers.
- During the RFP process, after a leading vendor was selected, the project team established a stage gate to determine if the organization wanted to move forward.
- Managers enforced the project charter and helped the team be accountable for identifying the best solution. They also cleared the way for engaging staff stakeholders and committing their time to the project work.

Issues Experienced:

- The finalist vendor the team initially identified was removed from consideration after additional analysis proved the vendor was not a good fit. They moved to their second vendor, which completed additional user studies to make a case for its solution.
- The company owned multiple child companies, which were able to maintain their brands and unique personalities. There was no overarching governance. This became an obstacle when companies would say they wouldn't follow processes because of their unique characteristics.

Results:

- A vendor solution was selected and later successfully implemented.

Lessons Learned:

- Ensure resources are engaged throughout the process and hold them accountable for their work. Committed resources from the discovery effort were able to participate in the implementation process and were aware and bought-in to the reasons for the changes being executed.
- In an organization with multiple child companies, it is important to define structure and allow for flexibility where appropriate.

Success – Case Study K:

Situation: International information technology company wanted to review three factories worldwide and determine why throughput was inconsistent with no apparent cause for differences.

The discovery included proof of concept (POC) work to determine if test data could be used as a proxy for the factories' throughput performance to determine cause of throughput differences. There were two parts to the POC:

1. Aggregating test data from all factories in a single data center using test servers' connectivity.
2. Implementing software which would analyze data to identify differences in throughput.

Benefits:

- The POC served its intent and was able to identify issues contributing to differences in throughput. This was a low-confidence analysis due to data disparities.

Best Practices Contributing to Project Outcome:

- A knowledgeable team was engaged and able to analyze issues and identify causes.

Issues Experienced:

- While the software functioned properly, the team determined that the test server connectivity had severe latencies that made data comparison impossible.

Results:

- The POC provided that the production systems were not networked well, making data tracing difficult and inconsistent due to server hops on computers located around the world. The result was to recommend a cloud-based data solution.

Lessons Learned:

- The team did not initially have a good understanding of the current server environment. Analyzing viability before the POC would have saved time.

Success - Case Study L:

Situation: This discovery effort represents a spike – or discovery effort within an agile project.

The team had a client that needed a data warehouse in a large cloud-based application. Customer needs were well defined. The project team agreed to timebox the discovery into a two-week spike.

Benefits:

- Concentrated focus of discovery work with the right team enabled a quick turnaround time.

Best Practices Contributing to Success:

- Appropriate team members were focused on the discovery work and were able to define needed fields, custom objects, and vet three different tools very quickly.
- Supported by architects and developers, the team was able to select a vendor, purchase a solution, configure it to meet the needs and test the solution and the needed feed to a business intelligence tool.

Issues Experienced:

- None.

Results:

- Defined and implemented a solution within the two-week discovery period.
- The solution built within that time frame met the needs of the client and no additional build was required.

Lessons Learned:

- The team referred to the goals of the spike in every daily scrum meeting and, as a result of that targeted focus, they were able to achieve the desired objective.
- Technically strong team focused only on this discovery for two weeks (the right people were on the discovery team)

- Scope, goals, and timeframe were clearly defined and understood by both the client and the technical discovery team.

Success - Case Study M:

Situation: Discovery effort to respond to a request from the finance department to set up an e-payables system for a grants department.

The business desired to reduce the manual cost of researching re-printing returned checks. The goal of the analysis was to determine requirements/feasibility. The current state was documented. A survey was sent to the institutes involved. The team determined that each institution would be required to set up a credit card and actively draw down on the credit card, requiring multiple credit cards for each institution. Determined there was no industry standard. Enhancement costs not only to the organization but to the institutions as well.

Benefits:

- Prevented issues with the institutions receiving funds.
- Determined the approach was not feasible and prevented issues with the institutions who receive funds from the organization.

Best Practices Contributing to Success:

- Researched the request to understand and decompose to determine the scope involved.
- Look at the impact of the request on the end customer.

Issues Experienced:

- Took time to understand the big picture impact.
- Needed to understand the “why” of the request and the “value” of the request.

Results:

- Decision was made that it was not feasible/beneficial to implement an e-payments system for the grants team.

Lessons Learned:

- Document detail around feasibility.

Success - Case Study N:

Situation: Discovery effort evaluated a specific tool to manage and monitor social media posts.

During the discovery meetings, it was learned the tool did not have a long-term place in the strategic plans of the company. Decision was made not to proceed.

Benefits:

- By completing the discovery effort, the organization made a good decision not to invest in a tool with a short-term shelf life.

Best Practices Contributing to Success:

- *Prework as part of the discovery was to look at the long-term viability of the product.*

Issues Experienced:

- *The long-term plans for the product were not clear to the sales rep. We used other company contacts to determine the vendor's strategic plans.*

Results:

- Project halted.

Lessons Learned:

- Perform due diligence around product roadmap.

Best Practices Recommendations

Define a scope that is achievable and not too broad:

- Use visioning within a discovery project with discretion. Consider higher level visioning as part of strategic planning – external to the discovery project.

Apply due diligence when defining the problem and goals:

- The vaguer the definition and goals, the higher the risk.
- Size the discovery effort appropriately.

Determine prework required:

- Starting a discovery project does not mean abandoning prework. You will likely need prework to understand the scope of the discovery and expected deliverables.

Plan adequate time into your current state analysis as appropriate to the project:

- This might end up taking a significant amount of time, depending on the nature of the effort.
- Set clear expectations for current state deliverables.

Consider a multi-level team and determine appropriate participation:

- Different levels of stakeholders have different perspectives and inputs necessary to build a complete picture.
- Ensure commitment from supervisors and staff to the level of participation and time commitment required to participate in the discovery.

Consider including the following roles:

- Legal
- Cross-functional technology and business representatives
- Technical architect
- Experts or vendors involved in current systems and processes
- Integration systems experts
- Industry subject matter experts.

Consider if a vendor is going to need access to current system or code base for analysis:

- May be needed to understand existing functionality even if you are moving to a new system/vendor.

Schedule adequate elapsed time for review/approval of materials:

- Scope/requirements/cost estimates, etc.

Review any vendor-led discovery process and planned deliverables:

- Adjust any deliverable or process expectations as necessary.
- Be wary of following the vendor down a “Yellow Brick Road.” You are ultimately responsible for the direction and delivery of the effort.

Identify project level dependencies:

- This could be other planned project efforts, such as software, hardware, or business.

Recommendations should consider where “design” falls:

- It is tempting and often expected to go straight from discovery to build.

Identify and eliminate scope “outliers” as appropriate:

- This would include scope that is going to be too expensive, not viable, or low value added.

Consider the following when building the implementation project scope/cost estimates/contracts:

- Data migration, which is often underestimated and, with less skilled staff, a disaster waiting to happen.
- Integrations.
- Change management activities.
- Quality assurance and testing costs and responsibilities between vendor and business.
- Toolsets to be used.
- RFP vendor cost comparisons. Give all vendors the same costing sheet to fill out so it is compared appropriately. If your organization needs it, break costs into capital and expense.

Complete due diligence around cost/benefit analysis and prioritization of customizations:

- Include costs of customizations.
- Include enough detail to prioritize and make budget and build versus buy decisions.
- Consider the long-term viability of the product in vendor selections.

Consider impact to:

- External customer
- Internal customer
- Cross-functional areas
- Staffing
- Change management.

Apply due diligence to stakeholder management:

- Multi levels of management need to be considered and on board with the plans, especially decision makers and staff who will use the end solution.
- Include key functional stakeholders as appropriate.

Take time to understand the strategic direction/vision of key stakeholder areas:

- Upper management may have a completely different vision than the hands-on staff.

Identify key “must haves” in any RFP:

- This may help to quickly narrow the acceptable vendor list.

Use a defined vendor selection process:

- Fully defined requirements.
- Scorecard with rankings.
- Team evaluates possible solutions.
- Stage gate to move forward.

Final Discovery Words of Wisdom

Discovery work is all about understanding complexity, setting boundaries, and determining approach/next steps. Discovery work should be planned out and prepared for just as in any other project. In conclusion, some key words to live by:

- What you are trying to discover will drive the process.
 - Stakeholders are the keys to the kingdom.
 - The current state - even if embarrassing - needs to be understood.
 - Boundaries are everything.
 - Don't shortchange yourself on time to perform discovery work.
 - Don't abandon project management methodology just because you have a discovery project.
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Denise Martinez, IT Project Manager, American Heart Association

Laura Mainard, Senior Manager Applications Development, American Heart Association

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Melissa Nulf, PMP, IT Project Manager, American Heart Association

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Appendix: Discovery Project Guide

Before starting implementation, design or development projects, discovery projects can help organizations better understand users' needs and strategies, problems to be solved, value that may be realized, and other factors like resource needs, timing, and costs. Discovery projects have outcomes and deliverables that are either known at the start of a project or defined during initiation and planning. Not all discovery projects are one-size-fits-all. The following is intended to provide guidance as to what your project might deliver. You will want to work through the deliverables with your key project stakeholders and others and have the plan approved after completing the planning process.

Discovery Project Purpose and Goals

Define the purpose and value of this discovery project. This will likely include the department initiating the project, their defined objectives for the discovery work, the strategic objectives this work supports, business value, and any success criteria that must be met from this discovery work. In addition to business goals consider:

- **Current State Description:** *This could be bullets or a diagram, depending on the need.*
- **Opportunities for Cost Savings** *(such as if solution will sunset an existing application or will save staff time)*
- **Expected Project Outcomes**

How to Measure Success, Define Needs, and Meet Business Objectives

- **Desired Future State:** *This could be bullets or a diagram, depending on the need.*
- **Changes Needed to Achieve Improvements**
- **User Stories and Requirements:** *Provide a requirements document or provide access/link to user stories in a work management tool.*

- **Potential Risks and Obstacles:** *List identified risks and obstacles discovered during the research and analysis process.*
- **Legacy Technology Details:** *Provide documentation or specifications for legacy system(s). This could include technical documentation and diagrams, number of licenses, current costs, who supports the system, and other details. A support and operations document with this information may be available.*
- **Project Dependencies, Integrations, Data Migrations, and Other Requirements:** *Identify dependencies, integrations, and data migration needs. Consider cross-team involvement required and business change management needs (e.g., business will need to identify a staff person to support a new process).*
- **Stakeholders: Identify stakeholders and end users.** *Define any vendor or third-party stakeholders.*

Options and Approach

- **Is There Something Your Organization Already Has That Will Meet the Need:** *Work with your technical and business resources to determine if there is a solution in place that may work for the goals and objectives of your stakeholders. Document any identified options or if no options are found.*
- **What Solutions in the Marketplace May Meet the Needs:** *Work with technical resources to define solutions in the marketplace. Understand the competitors and their strengths and weaknesses. Identify potential costs or solutions. Determine as best you can if the solutions meet your compliance needs (e.g., branding, accessibility, security/risk, etc.).*
- **Summarize Cost Estimates:** *Estimate costs for the next steps. If you are considering multiple options, create separate worksheets to show each option.*
- **Consider Build vs. Buy Analysis:** *If needed, evaluate whether build vs. buy analysis is needed. Then consider the costs, benefits, risks, etc., of both.*

Next Steps

Summarize Recommendations: *As a result of the discovery project work, what are the key findings and what are the recommended next steps? Consider including the following items.*

- *Provide a list of technical requirements.*

- *Create a well-defined scope for the next project.*
- *Define next project outcomes, milestones, and project timelines. Include cost estimates for the preferred solution or multiple, optional solutions.*
- *Provide documentation generated during the discovery effort, such as a solution brief, wireframes, technical recommendations, or similar documents.*

Handover of Recommendations: *Arrange your recommendations and findings into a document or presentation deck and plan for a read through of your findings and recommendations with appropriate stakeholders.*

About the Authors



Frances Crossno

North Texas, USA



Frances Crosso is a PMP certified project manager with over thirty years' experience in successful cross functional, cross business, and global projects. She retired as a project manager from Texas Instruments in 2009 and is now a project manager at the American Heart Association. She has a background which includes programming and business analysis as well. Her work has provided her a broad range of experiences with stakeholders from pre-project scope assessments to working long-term system and business strategies.

A strong focus on business process with stakeholders has been predominant in Frances' career. Vendor evaluation experience has provided her additional perspectives with stakeholder management. Obtaining consensus on project scope from multiple business units / functional areas and managing expectations of multiple levels of

stakeholders has allowed Frances to consistently deliver successful, quality projects throughout her career.

Frances was recognized by Texas Instruments for technical contributions by election to TI's technical ladder. She can be contacted at frances.crossno@heart.org



Linda McManis

North Texas, USA



Linda McManis is Project Management Director at the American Heart Association. She has been with the AHA for more than 22 years, working in the Business Technology department for 14 years with roles in program, portfolio, and business relationship management. Her expertise includes ensuring process improvement and best practices in project management, including training and coaching project managers and reporting on project initiatives, financial progress, project successes, and challenges. She has planned, implemented, and delivered solutions that drive business results.

Linda initiated and facilitates Centers of Excellence for both project managers and business analysts at the AHA. She has a passion for communication and training, is an experienced technical writer, and is a PMP-certified project manager. Linda also leads efforts to ensure digital accessibility compliance at the AHA. Linda can be reached at linda.mcmanis@heart.org