

Writing a Requirements Document and Implementation Plan

There is an old saying that “failing to plan is planning to fail.” No one wants to fail, which is why taking time to understand your requirements and ultimately your implementation plan will help your organization root out any issues that will need to be addressed and guide you to the best solution. It will also minimize any course corrections or costs associated with hidden issues in the project that were not initially budgeted for. And most important, it gives you the ability to clearly communicate the impact of rolling out your project to donors, board, staff, and clients, etc. allowing the organization to acquire better adoption and/or support for funding and track progress.

The size or scope of any plan will depend on the project itself. Web design or database/application projects, for example, have more to consider than hardware or other devices when implementing. But all projects can benefit from planning, knowing the milestones you want to meet and when, and who is responsible for each step. Even a one-page statement of scope, goals, risks, and potential cost does wonders to align a team of people around what needs to be accomplished.

Before you start a project, you should be able to answer these five questions:

- What problem are we solving or what is the business need we are addressing?
- Is technology the solution? If yes, then which technology and what is the scope of the solution and resources that will be needed?
- How does the proposed project advance our overall mission?
- Is the investment in solving the issue worth the cost? In other words, what is the return on investment or ROI of doing the project?
- What is the long-term cost and how will your organization monitor and budget for the shelf life of the solution?

If the answers to these questions affirm that your organization has a project that will advance your operations or service delivery and your organization has the capacity to do it, the next step is to gather requirements for the system you want to implement.

The creation of a system requirements document defines the purpose of the project and puts the project in context with overall strategy and operations. Assessing your current tech stack and how the new technology will fit into it is often a good place to start. Work to define your organization's needs by identifying generic features versus identifying a particular product you think you need to help the organization meet its goals. This allows you to be open to the best solution to meet your goals.

Spending time gathering requirements will give you better data input for planning and potentially developing priorities if the project has multiple devices or is a larger staged project. It is a best practice to engage all stakeholders in this process. Requirements should be driven equally by the needs of end users and those who will implement and maintain the technology. By including end users in identifying the requirements you will find out things you may not have known any other way.

The elements that should be addressed by a systems requirement document include:

- Why the system is needed - context of the system to the organization's operations.
- Description of system properties or requirements and any constraints.
 - Define how this technology project might relate to other parts of the system infrastructure. Are other upgrades needed?
 - Include any user, system, interface, security, and access requirements.
 - What the system should do and how it should work, and the outputs expected. Examples could be efficiency or connectivity for staff due to newer technology; reports that allow an organization better visibility into program outcomes; better communication; or the ability to reach a larger community.
 - Will the organization need to incorporate any process or procedural changes into the project timeline?
 - Why each requirement is needed - a rationale for implementing now.
 - Priority of the requirements in case the project needs to be phased in or paid for with multiple funding sources.
- Task timelines and who will be responsible. Include how implementing the project might impact the bandwidth or resources needed for current operations.

- Budget for the project including the price of the technology and staff/consultant time for implementation. Also consider training or other administrative time to accommodate process changes if needed.

Once the system requirements have been identified, the organization can start the process of selecting the technology tool or other solution that meets those requirements. The requirements will also help an organization identify the right consultant, if needed, to assist with implementing the project and guide that relationship including working together on planning for the project and its costs.

The next step is producing an implementation plan that describes the steps to the finished project using the product or solution chosen. This includes a play-by-play of how the organization expects to successfully cross that finish line. Each piece of the project is detailed and scheduled for time and cost.

Some of the common things an implementation plan should address are:

- A description of the product chosen or the development platform plus any customization or tools required to complete the project.
 - Include all assumptions and dependencies that went into the decision like hosting environment, security, any infrastructure constraints such as internet connectivity, development platforms, ease of use, etc.
 - Security will impact the architecture of the system, its implementation, and the budget.
 - Make sure all project components are addressed including how it will interface with end users, configuration of system, protocols, ports, and whether it needs to communicate with other technologies etc. For example; a donor database may need to send data to a financial database securely or audio-visual equipment may need to meet a standard for viewing/sound quality on internet, etc.
 - Are there any barriers to access that need to be addressed like internet connectivity of end users?
- Lay out the tasks or phases of the project including timelines and budget to accomplish each part of the project. Show who will be doing the work and how the project progress will be monitored to ensure the schedule and budget have not gone off track. Larger projects might also include budget breakouts for each phase.
 - Include a schedule of deliverables or deadlines for each person on the project and what they are accountable for.

- Make sure staff will have time on top of regular duties to perform and meet deadlines.
- If the project is large in scope, make sure your budget has room for any unforeseen changes that need to be made or “scope creep” of the project.
- Include the outputs expected from the system/devices along with any reports, data migration planning or quality assurance necessary.
- Incorporate any policy or operational changes the technology might lead to as identified in the system requirements phase including any documentation that end users will need to successfully roll out the technology.
- If needed, create release/launch plans including the communication strategy and/or training necessary to drive adoption or to successfully roll out this technology to staff or end-users.
- Plan for evaluation of the project (how it will be measured for success) and how the organization will sustain the technology through its lifecycle.

Organizations should not only monitor their current technology infrastructure but also emerging technologies and trends to meet the goals of your organization. This will allow you to evolve organically without the major adjustments that come with languishing too long on older systems until they fail or reach the end of support by the manufacturer.

Effective technology planning means a commitment of time and resources. But making that investment will lead to a project that has an immediate and transformative impact. The more money you intend to spend, the more risks there are and the more time you should invest in figuring out what a successful project will look like. In the end, it is through good leadership and planning that you will be able to communicate positively the expectations of the project to staff, board members, funders and the community served, and have the whole organization excited about the process.