







Increase Operational Efficiency Through a Data-Driven Process

In today's challenging commercial markets, the typical project for technology managers contains a combination of several technologies, bringing together audio/video, automation, lighting, access control, telecommunication, and networking into various environments including higher education, corporate, and IT settings. Technology managers need to understand how these diverse technologies can work together to create a cohesive, easy-to-use system for them and their clients.

In this article, we'll explore three different areas of the systems integration process where you may face potential pitfalls, and how implementing a solid, data-driven software solution such as D-Tools System Integrator (SI) can help overcome them. **Estimation and Budgeting, System Design, and Project Management**—all crucial to the systems integration process—are often managed separately or not at all. However, when these project phases are managed with a software application and dynamically linked together by product data, the benefits become immediately apparent for internal and external teams. D-Tools enables you to document and manage technology as well as equipment utilized in commercial facilities of any size, preventing issues before they start.

D-Tools Software Solution Overview

More than 5,500 companies around the world have made D-Tools SI the most widely used estimation and budgeting, design, and project management software platform. Our solution ties these elements together into a singular, data-driven, connected process that reduces time, helps eliminate errors, and ultimately produces bottom line results. Featuring third party integrations and access to a comprehensive library of manufacturers' products, this solution positively effects – and thereby improves – all areas of a technology manager's business.

D-Tools' data-driven solution improves on all areas of your business:

• Estimation and Budgeting:

Generate fast, accurate, detailed documentation ensuring accurate, equipment needs and labor time.

• Engineering:

Generate stunning system designs via integrated Visio or AutoCAD.

Project Management:

Communicate with your team from any device to deliver the job on-time and to-budget.

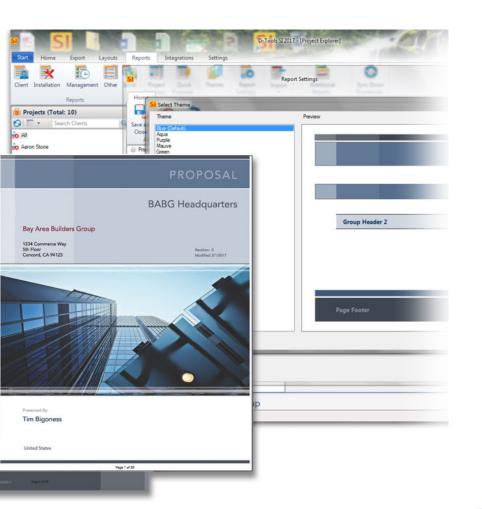


ESTIMATION AND BUDGETING

Estimation and budgeting can be difficult and extremely time consuming as it can often be challenging to find essential products for a given project. When each proposal consists of repetitive tasks, such as copying and pasting, as well as locating necessary products, it can easily lead to overlooked equipment needs and underestimated labor time which results in confusion and lack of support for the project. Furthermore, without proper project estimation, proposals may be incomplete and inaccurate.

It can also be difficult to accurately determine budget adherence per project. Allocated time per project phase can be under-estimated and common project materials, such as wire connectors, can be overlooked and when tallied up can potentially result in significant job cost expansion.

Implementing a systems integration software solution such as D-Tools SI can help with the creation of fast, accurate proposals and enable projects to stay on budget. All pricing and product data is driven from a constantly updated database—where all the information is readily accessible. System designers and internal teams can dramatically reduce the time it takes to research products for proposals, which in turn provides everyone the ability to react to requests more quickly thereby ensuring the best chance to complete additional projects.



Before implementing D-Tools, our team was forced to research equipment pricing multiple times just to get the project's budget to align with the design. It was inefficient and ineffective to say the least, and we didn't have the complete buy-in for projects we needed. Now, everyone with a say in the matter is more engaged and aware of the overall scope. Our team had been battling the inefficiencies created by redundant tasks. With D-Tools, we get an idea for how much a project will cost when we begin the design, rather than once everything has been fully sourced."

- Western Carolina University

SYSTEM DESIGN -

System design is the most straightforward way to communicate the parameters of the project to the client, inhouse team members, subcontractors, and other trades. Concise designs provide a guide for the project installers and team members or subcontractors to follow, ensuring accurate and efficient project execution. Unfortunately, some technology managers lack the in-house engineering resources to complete system design, and so they either skip this phase or assign it to another firm. Subcontracting this important work can be costly, while foregoing system design, altogether, can ruin a project before it begins.

If you include a project design in the proposal, you'll clearly communicate to internal and external team members with your attention to detail, improve the readability and aesthetic of every proposal, and help clients visualize the results of the completed project. Detailed and accurate system designs can be the differentiator that solidifies the accuracy and speed of the project's completion. D-Tools simplifies the process by reducing the time and work required to create designs. Improving efficiencies during the design phase will result in reduced errors and assurance that budgetary expectations are met.

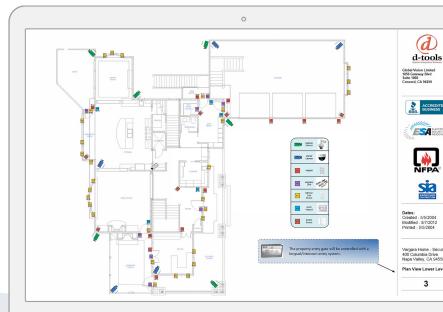
D-Tools' design offerings make SI crucial to our business as a one-stop shop. Every integrator knows that documentation is all about communication. SI's data-driven process allows for efficient communication with our customers and engineers, and we can now easily tie in all necessary data within products for our designs."

– Christian Broendbo, Atea

One way to do this is by including accurate and detailed data within the initial estimate, and using D-Tools to automatically integrate that data into the designs. D-Tools gives you the ability to eliminate the time-consuming documentation that often follows system design. The project can be started directly in Visio or AutoCAD—designers build desired drawings and layouts, and D-Tools produces all the documentation from budgetary proposals, equipment lists, and wire schedules to wire labels. You will no longer waste time with manual documentation that must be updated continuously during the project.

D-Tools software allows our AV design engineers to work on several projects at one time. We are able to juggle competing projects and client requests without having to hire additional or re-assign personnel. In addition, the software also helped KGI reduce errors thanks to its ability to recognize when a cable or device had been previously installed or connected."

- Western Carolina University



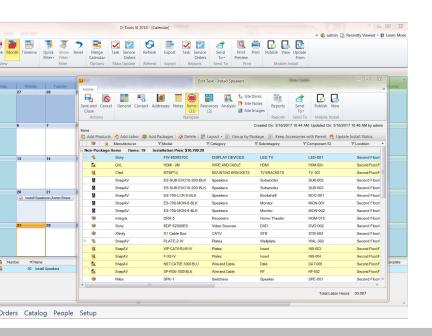
PROJECT MANAGEMENT

Project management is quite possibly the most important aspect of a system integration project because it's the framework that helps determine the overall success. Unfortunately, due to disorganization, it is often implemented improperly, which results in inaccurate time and cost tracking that can waste valuable resources, which could be used to complete projects as according to plan. Utilizing D-Tools' project scheduling, resource management, and powerful reporting capabilities can help ensure that the job is delivered on time and within budget.

SI facilitates project management by improving communication between not only you and the client, but also with internal team members and external contractors. SI makes it easy to assign tasks to internal installation and programming teams, schedule those tasks in a master project calendar, then communicate those tasks via email, task, or via the cloud-based Mobile Install feature.

SI allows you to track labor tasks, installations, and resource scheduling by generating a project work order. SI also provides functionality for creating and managing Service Orders for projects. Consistent use and tracking of work orders, used in conjunction with SI's new online project scheduling and resource management tools, helps improve product-based labor estimates' accuracy over time.

D-Tools also has the capability to report critical project and product information across multiple projects. This will allow you to provide your team with a powerful Business Intelligence engine to drive visual reports and dashboards of key performance indicators. In addition, D-Tools makes it easy to create custom visual reports and dashboards to understand important elements of business activity such as personnel performance assessment, vendor engagement, product usage, and more.



Because we are able to define users and assign roles relevant to their position, our processes have improved and we've become more efficient because everyone can access the information they require during any stage of the project. The power of the D-Tools database has allowed us to enter vast amounts of information in data fields that build continuity and accessibility throughout the team, further streamlining processes for our company."

- RJ Spurr, Access Technologies

Prior to System Integrator, we used Microsoft Project, Excel, Word and Visio for planning and design. For any given project, we had multiple versions of spreadsheets, project files and documents to create and maintain. Now, we no longer have to keep track of the various versions; D-Tools does it for us automatically. It allows us to keep all of the associated project documentation in a centralized location that can be easily accessed by anyone on our team. Moreover, updates are made in one place but are reflected throughout the system, so it's incredibly efficient." - Western Carolina University

SUMMARY:

Accurate product data is the link between the estimation, system design and project management phases, and provides technology managers with a synchronized process to track project elements including equipment, labor, and time management. By utilizing the comprehensive capabilities that D-Tools offers, thereby linking each phase cohesively, overall satisfaction is heightened. With better project tracking, it is far easier to address system adjustments and react to potential issues before they become major problems.

Implementing D-Tools will create a streamlined business process that promotes organization by assisting with the initial estimation phase, a method to create clean and concise designs, and a firm basis for project management for increased operational efficiency.

Quite simply, no other platform allows integration of the entire business process, enabling increased efficiencies, reduced time and costs, and increased overall satisfaction per project.



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