



# DATA-DRIVEN: STREAMLINING A SYSTEM INTEGRATION PROCESS

**Understanding How a Data Driven Process Can Help Streamline a System Integration Company**

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# EXECUTIVE SUMMARY

## **Introduction and D-Tools System Integrator Overview**

In today's challenging and ever-changing market conditions, System Integrators have to wear multiple hats more than ever in order to complete projects that are satisfactory to their clients' expectations. Many of the phases of a low-voltage system integration project (audio/visual, security, energy, IT) tend to overlap and as the lines blur, productivity and profitability can depreciate. Three main project areas (Estimation, System Design, and Project Management), are all crucial to the system integration process, and are often managed separately or not at all. Central and critical to any successful project is the management of product and pricing information, product specifications, as well as the time and labor associated with the installation and integration of project equipment. Managing this successfully can be a challenge and is often the single most time consuming element, ultimately costing money associated with that time. When these project phases are managed with a software application and dynamically linked together by product and labor data, the benefits immediately become apparent.

In this article, we'll explore these challenges that integrators face and how implementing a solid data-driven software solution such as D-tools System Integrator can help overcome them. D-Tools data-driven process provides users with up-to-date and detailed product information, in a format that can be utilized in a cross-functional capacity for maximum workflow efficiency. Having a data-driven process enables integrators to track key elements of a project such as installation time, costs, pricing and ultimately profitability. The key concepts of tying product information to all project documentation through D-Tools' database-driven process ties each element together into a singular, connected process that produces accurate, proposals and estimates, reduces time, reduces errors, and ultimately produces profound bottom line results.

## **D-Tools System Integrator Software Solution Overview**

D-Tools System Integrator (SI) is a complete estimation, design, and project management software solution that fits the needs of any business. From large commercial integration firms and small residential companies, SI can help increase revenue while reducing time and costs associated with the design, installation, and integration of AV, Energy, Automation, Lighting, Security, and IT/Networking systems.

# SYSTEM INTEGRATOR (SI) FEATURES

## **Catalog Management:**

SI provides access to a comprehensive library of manufacturer products – providing detailed information such as model number, product images, descriptions, dimensions, MSRP, and vital engineering information to help users manage product information and pricing – which is the main driver of D-Tools' data-driven process.

## **Proposals:**

SI helps generate fast, accurate proposals based on product information and labor, along with a number of client facing templates for Proposals, Contracts, Scope of Work documents and more. Simply choose from one of D-Tools' report templates or download themes. SI takes the information from the integrator's project file and automatically creates the proposal. Filter the information shown in the proposal by category, location, system, hide or show model numbers or line item pricing.

## **Drawings:**

SI allows the integrator to create detailed designs by leveraging the industry standards for drawing tools: Microsoft Visio and AutoDesk AutoCAD. Because everything in System Integrator is data-driven, the user can quickly and easily generate detailed Line, Plan, Elevation, and Schematic drawings by simply dragging and dropping products from their catalog or project file to your drawing surface to create drawings.

## **Project Management:**

SI has complete project scheduling, resource management and powerful reporting capabilities to help ensure that integrators deliver the job on-time and to budget. SI makes it easy to assign tasks to the internal installation and programming teams, schedule those tasks, then communicate those tasks via email, task, or appointment via our integration with Microsoft Outlook 2007 or 2013.

## **Reports:**

SI's powerful reporting capabilities enable users to quickly and easily create Client, Installation, and Management Reports. Integrators can also create customized Orders and Scheduling reports that can be sent directly to Microsoft Outlook 2007 or 2013. SI comes out-of-the-box with many report templates, and users can also modify any existing report or create their own with the D-Tools Report Designer available in SI.

## **QuickBooks:**

D-Tools provides a seamless integration with QuickBooks in order to further streamline the business processes and ensure accurate billing for products, labor, and project revision management. QuickBooks integration allows users to create items in QuickBooks directly from products/labor items in SI.

## **Calendars:**

Multiple calendar types are available for viewing currently signed in users, a specific project, or specific service orders only.

# 3 MAJOR AREAS OF FOCUS

**Integrators face three major stages of a system integration business process:**

## Estimation:

Integrators can potentially find it difficult to find the essential products for a given project, which can lead to confusion and loss of potential revenue.

Estimation can also be extremely time-consuming when each proposal consists of the repetitive task of copy and pasting and fruiting of locating necessary products, which can lead to overlooked equipment and underestimated labor time. Without proper project estimation, proposals can appear unprofessional and incomplete to the client, potentially resulting in a loss of business, which directly affects company revenue.

It can also be difficult to accurately determine profitability 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, potentially result in an overall lower bottom-line.

Implementing a software solution such as D-Tools System Integrator can help create a fast, accurate sales proposals and because all pricing and product data is driven from a constantly updated database, integrators gain the opportunity to work with current product data – ensuring that their proposals are accurate. Because data is central to the entire system integration process, SI's data driven process gives integrators updated current pricing and product information in real time, as it happens. With all of the information is right there, integrators can drastically reduce the time needed to research products to their proposals which gives them the ability to react to the customer request more quickly, ensuring the best chance to land the business.

*“After working with System Integrator, it has cut down my proposal generation time by about 25% - 30% giving me more time to concentrate on other parts of my business. I have found some of the hidden secrets SI has to offer and sure there are many more to come. If you have sat and asked yourself on whether or not it if SI is a worthwhile investment, I can truly tell you the answer is yes.”*

Pat Molettieri, Xtreme Audio & Video

*“Before implementing D-Tools, we found our previous estimate process to be far too time consuming and inaccurate in that labor time was not allocated correctly. Not only was money being lost, but I also noticed a lot of time being wasted that we could spend out in the field or reaching new clientele, making more money as a result”*

Larry Assayag, DL Technologies, Inc.

## System Design:

Successful System Integration companies establish a series of project phases in order to complete projects satisfactory to the client's expectations and System Design is no exception. This particular project phase is extremely important to a system integration project because it's the clearest way to communicate the parameters of the project to the end customer as well as to in-house team members. Concise designs provide a guide for the project installers and team members to follow, ensuring accuracy and efficient project execution.

*“I can see for sure that D-Tools SI software will shave off up to 50% of my design time due to the ability to open multiple projects at the same time and save complete projects as templates. One of the key elements that I really love is the enhanced reporting abilities that make detail filtering a thing of the past.”* - Christian Broendbo, Atea AS

*“SI has provided us functionality and extraordinary flexibility. Some of the key new features for us is the search engine and templates for system creation. These features have allowed us to reduce a considerable amount of time in proposal generation and design for our clients, translating into increased productivity and revenue.”* - Miguel Soto, Diamond Technology

While some integrators contract their design work out which can be very costly, many other System Integration companies lack an in-house Engineering resource to create these designs so this phase is completely omitted, which could result in a loss of business. Including professional system designs in proposals will drastically boost the overall aesthetics of the proposal and set Integrators apart from competitors. It also provides the client with a tangible representation of their finished system so they are able to visualize the end product. Having a solid System Design in place can easily be the differentiator that helps win the bid for a project.

Including accurate and detailed data within the initial estimate streamlines the entire design phase because the data is automatically carried over from the estimate phase to the design phase, saving the integrator a sizable amount of time. By utilizing D-Tools System Integrator software, integrators can design systems with Visio and AutoCAD, the industry's top standards for drawing tools. SI allows users to get going quickly when they need product data. It contains not only access to a library of over 1 million products ready for download, but also an extensive suite of data management tools, allowing users to import or add data from almost any source. Because everything in SI is data-driven, users can quickly create proposals and drawings by adding products from D-Tools' extensive manufacturers database. From there, users can quickly and easily design floor plans, line diagrams, schematics and elevations, creating an accurate system designs for both the end--customer and the installation team. In addition, users can bring rack elevations to life with D-Tools "RealPic" Library, featuring new photo-realistic elevation shapes from select manufacturers for stunning system designs.

D-Tools SI Data Library is built on D-Tools' Cloud architecture and SI provides advanced tools and functionality geared towards increased efficiency and ease of use when creating, managing, and updating a product catalog.

## 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 of a company. Due to disorganization, it is often implemented improperly resulting in tracking time and costs inaccurately, which can negatively affect end profitability and waste time that could be used to complete projects and gain additional business. Utilizing SI's project scheduling, resource management and powerful reporting capabilities can help ensure that integrators deliver the job on- time and to budget.

SI also facilitates project management by improving communication between not only the system integrator and the client but also with internal team members. 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 appointment via integration with Microsoft Outlook 2007 or 2013. SI can help create sales orders that can be used to track products that have been sold and ready to be installed, or they can be used to push project data information to other software applications such as QuickBooks or CRM systems for accounting and inventory tracking. Additionally, SI can track labor tasks, installations, and resource scheduling by generating a project work order. Consistent use and tracking of work orders used in conjunction with SI's new project scheduling and resource management tools will help integrators improve product-based labor estimates' accuracy over time.

*"D-Tools SI is improving our team's day-to-day operations. From the simple designing of proposals to viewing of project status, ordering, scheduling, and managing our client database, SIX has far surpassed our expectations." - John McDermott, Tailor-Made Audio + Video*

*"D-Tools has saved us a ton of time because it moved us away from spreadsheets into primarily running reports. The data is all there for us to use which has saved us an immense amount of time and money." - Zack Campbell, Forefront Innovation*

By utilizing the comprehensive project management capability that D-Tools SI offers, overall customer satisfaction is heightened. With SI, product data is the link between the estimation, design and project management project phase and gives an integrator a solid foundation to focus projects around. Because these phases can be tracked, the inaccuracies will better equip integrators to make system adjustments to meet client's needs and react to potential issues before they become major problems.

# RETURN ON INVESTMENT

**Below are examples from D-Tools users that describe how System Integrator has been beneficial to their companies in the areas of estimation, system design, and project management.**

- Due to streamlining the business as a whole, J. Becher has experienced a 50% business increase year by year and has increased profitability by 25-30% per job.
- DL Technologies has saved 2-6 hours per quote depending on the size as a result of implementing D-Tools Software
- Before Twilight Sounds implemented D-Tools, only 80% of the items in a proposal were accounted for, now they can account for about 98% for all elements of the job. Their bids went up at least 15% since using D-Tools –and it's justified because everything is accounted for.
- Have Audio Video Systems has experienced an increase in revenue by as much as 45% compared to prior the adoption of D-Tools throughout the company. D-Tools has also reduced costs by 20% in part because all items are accounted for from the start of a project.
- Audio Video Designers have experienced a 25% increase in revenues subsequent to their incorporation of SI and the ability to create professional designs.
- Audio Video Lifestyles has reduced their product costs \$300,000-\$500,000 by accounting for all equipment while increasing product revenue by 15% by accurately charging clients
- By utilizing D-Tools full capabilities, Delaware Audio Visual Integration & Design is accurately estimating labor within 5% or less, thus resulting in reduced errors, enabling them to ensure that their projects are profitable
- AVCON is experiencing an increase of as much as 50% in generating proposals, and they are able to close more business in less time than previous methods. Additionally, costs have been reduced by 25% in the area of engineering productivity with regards to data and management.
- The average size of job AudioPerfection Inc. wins has increased by 20%, while profitability has increased by 25% per job. Additionally, the amount of time it takes them to put a proposal together and get it out has decreased by 35%.

## CONCLUSION

Implementing D-Tools System Integrator will create a dynamic business process that promotes company organization by assisting with the initial estimation phase, a method to create clean and concise designs, and a firm basis for project management. Accurate product data that is linked between project phases provides integrators with a synchronized process to track project elements including equipment, labor, and time management.

No other application allows integrators to bring together the entire business process enabling increased revenues, reduced time and costs, and increased overall profitability per project.

