

Planning for CAD Success in Four Phases

BY AARON POWELL



Aside from investment in engineering talent—the human capital that accomplishes great work—it’s the investment in CAD solutions and CAD program protocols (e.g., training, manuals, workflows, deliverables, etc.) that’s most likely to distinguish great and successful consulting firms from merely good firms. U.S. CAD, an ARKANCE Company, has always recognized this basic truth of the industry, never defining ourselves as simply design solution vendors, but rather as consultants and partners that work with AECO firms to optimize CAD programs, resulting in higher-quality design work, more-efficient construction, and overall more-efficient and profitable project delivery.

Whether working with small shops of 10 or fewer technical employees or large government agencies and Departments of Transportation, U.S. CAD implements a four-phase success planning program that analyzes and reforms CAD use to achieve measurably better project results.

Phase One: Analyze and Evaluate Current CAD Programs

In phase one, an investigative workbook is compiled from questionnaires issued to staff in the CAD program. Questions range from name and title to details of the employee’s workflow, training, typical project (e.g., civil, land development, structural, etc.), pain points, resources (e.g., available training, standards and manuals, templates, etc.) and their perception of the firm’s CAD practice uniformity. From these questionnaires, U.S. CAD compiles an extensive workbook detailing the state of a firm’s CAD program in terms of assets and resources available, technology stack, standards applied, uniformity of deliverables and workflows among departments and offices, available training programs, state of CAD manuals and practices, and typical client and staff personas. A comprehensive picture of the CAD program’s strengths and weaknesses is developed, and this is compared to industry standards.

And what good is an investigative workbook if it doesn't identify areas of weakness where a firm can make changes that optimize practices and workflows? In this phase alone, U.S. CAD provides a valuable free service by analyzing and evaluating consulting firms' current CAD programs as well as identifying weaknesses to be addressed and strengths to be built on. Leadership can immediately use these insights to improve project outcomes.

And this is just phase one.

Phase Two: Interactive Presentation of Findings

In phase two, U.S. CAD presents a "Success Planning Workshop" that provides an overview of a firm's CAD program strengths and weaknesses. This workshop can be presented in person, but more often (especially since the COVID era) U.S. CAD has been doing this work in an interactive virtual whiteboard format in Mural, a secure, flexible and visual work environment supporting interactive seminars with large or small groups. The workshop explores information provided by the client and compiled in the Success Planning Workbook and describes the current state of a firm's CAD program, the desired or optimal state, mapping of workflows, staff-perceived "pain points," state of standards and manuals compared to industry examples, and quite a bit more—it's a thorough and useful presentation.

The workshop concludes with preliminary recommendations customized to client needs, including but not limited to:

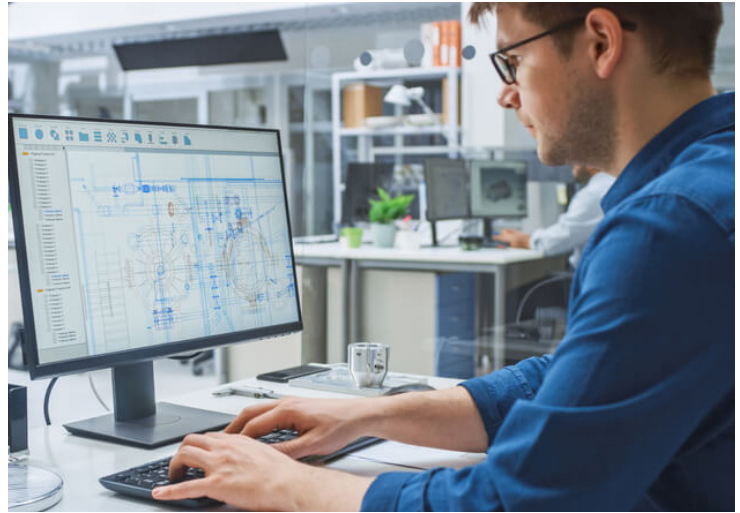
- Suggested training courses
- Standards to be adopted
- Manual revisions
- Technology stack additions
- Expertise to acquire

Most Success Planning Workshops will last between two to four hours. Depending on complexity, size and other factors, the workshop may need to be longer and spread over several sessions. This is most common in large organizations that have multiple offices and/or departments/divisions. In all cases, the workshop is a free service organized by U.S. CAD.

Phase Three: Optimize CAD Programs

Based on the investigative workbook compiled from questionnaires and interactive feedback received during the workshop, U.S. CAD then prepares and submits a report that includes:

- Executive summary
- Company profile
- Current state and desired state of CAD program
- Pain points and wish-list items
- U.S. CAD's recommendations and scope of work



This report, along with the workbook and workshop, is a valuable service provided free to U.S. CAD partners—it amounts to expert consultation on a critical aspect of any AECO firm's operations.

Of course, optimizing operations requires investment. And we can help with that.

Phase Four: Findings and Recommendations Presentation

In phase four, U.S. CAD presents its findings and recommendations directly to the company's leadership team, hosting a one-hour presentation and answering in detail the questions that naturally arise during the thorough success-planning and reporting process.

U.S. CAD has been in the CAD consulting business for a quarter of a century, assembling enormous resources to offer AECO technology and consulting firms in the United States. Whether it's training, technology solutions, digital delivery, BIM expertise or any other aspect of CAD program success, this nationally present firm is poised to quickly deliver customized optimization for large and small consulting firms or agencies.



Aaron Powell has been Solutions Consultant at U.S. CAD, an ARKANCE Company, for more than 10 years.

