

cadalyst



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Time-Tested Software Implementation Tips

When implementing new software, how do you best bring the whole team along? How do you inspire (or cajole) them into learning the new program?

I had a great conversation with a couple of CAD managers the other day and two big topics came up — one of them being best practices for new software implementation. The actual question was this:

We're rolling out some new design and visualization software in our company that replaces a legacy application and we're having trouble bringing users around to the new way of doing things. What should we be concerned about and how can we best perform the implementation?

Of course, any conversation about new software must include installation, setup, training, etc., but the CAD managers really wanted to know what mistakes to avoid while navigating the minefield of implementation. In this edition of The CAD Manager's Newsletter, I'll share some of my time-tested tips for implementation success as we discussed during our call. Here goes.



Image source: fizkes/stock.adobe.com.

Start Strong and Sustain Support

Nothing inspires confidence like a strong start to any new software implementation. Conversely, nothing takes implementation offline as fast as starting out strong and then letting users flounder. This leads me to my first section of tips that have worked for me:

Implementation is an ongoing process: Once new software is installed and users start to use it, you're not done with implementation — you're really just beginning.

Communication: Make users, managers, and your vendors/customers aware that the transition to new design processes is an ongoing task and show your intention to make sure the job is completed. Simply sending this message multiple times during the process shows your commitment to seeing the implementation through to a successful conclusion.

Do reality-based training: Take the time to create training examples based on your specific usage by recreating a completed project. If your new software is a BIMspecific glass design module, then redesign something you've already done. If your new software is a rendering tool, then use some existing models and output files as guides to recreate the same materials. The point is to teach people using something they know so they can learn the features of the software that they really need to use.

Keep supporting and training: As soon as people start to use new software, they start to make new mistakes and they start to ask questions. If you don't address these questions promptly, bad habits take root and perpetuate themselves. An ongoing training program helps mitigate these problems.

Train in short bursts: Consider a weekly "Lunch & Learn" or short debriefing sessions for new software users, then keep them going for those who want to learn more. By getting the questions out in the open and solving them in a collaborative environment, everyone is much more likely to accept the new methods they learn. The key with this approach is to ruthlessly focus on solving problems guickly.

Update your standards as you go: As you find new problems and solutions, document what you find and append your standards for the new software. I suggest making these changes during or right after your training sessions so you capture the knowledge before you forget it.

Psychology over Technology

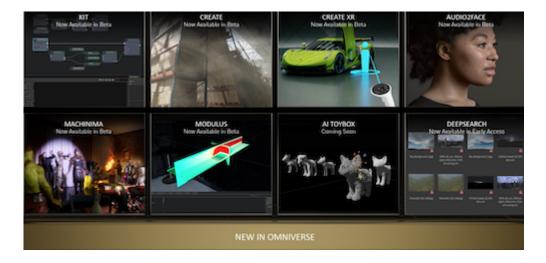
As the implement continues you'll see a big shift in terms of user attitudes. Some users will welcome the challenge, while others may feel threatened by change. Handling the positive and negative psychology of implementation can help keep your team on track. Here are the ways I deal with both ends of the spectrum that have worked through the years:

Reward those who make the switch well and challenge them: There's nothing wrong with recognizing users who made great strides in educating themselves. Get creative by giving away gift cards or computer accessories as a way of saying, "Nice job," to users who've achieved a lot in a short time. At the same time, challenge these users and ask them to mentor those who aren't picking up the new software as easily. By turning your best and brightest into power tutors, you'll build everyone's skills, keep everyone more motivated, and keep yourself sane at the same time.

Do not let negatives fester: If you have a group of users who don't want to change and demonstrate a negative attitude towards your new software, you must intervene and handle the situation promptly. Frequently when discontented users are left on their own, they will not learn the new software and will continue to spread their negative thoughts throughout the company.

Find out how to improve any negative attidudes. Plus, as you continue to iron out issues with the new software, keep encouraging users to learn more and maximize the benefits of the software. Read more >>

Tools & Resources



NVIDIA News at SIGGRAPH 2022

This week at SIGGRAPH, NVIDIA unveiled a series of new products and research designed to transform industries with AI, the metaverse, and digital humans. NVIDIA execs described the forces driving the next era in graphics, and the company's expanding range of tools to accelerate them. "The combination of Al and computer

graphics will power the metaverse, the next evolution of the internet," said Jensen Huang, founder and CEO of NVIDIA.

It will be home to connected virtual worlds and digital twins, a place for real work as well as play. And, Huang said, it will be vibrant with what will become one of the most popular forms of robots: digital human avatars.

In addition, NVIDIA announced:

- A new platform for creating avatars, NVIDIA Omniverse Avatar Cloud Engine
- Plans to build out Universal Scene Description (USD), the language of the metaverse.
- Major extensions to NVIDIA Omniverse, the computing platform for creating virtual worlds and digital twins.
- Tools to supercharge graphics workflows with machine learning.

Huang asserts that Metaverse applications are already here; he pointed to consumers trying out virtual 3D products with augmented reality, telcos creating digital twins of their radio networks to optimize and deploy radio towers, and companies creating digital twins of warehouses and factories to optimize their layout and logistics. Read more >>

On-Demand Video:

Know If Your Plastic Part Designs are Ready to Manufacture

Knowing if a plastic part will shrink, warp, have excessive sink marks, or potentially fail due to a short shot is very important to both designers and mold makers. Learn how injection molding simulation is used to predict short shots, weld lines, air traps, and sink marks as well as provide an entire view of the fill and pack process along with insight into cooling and warping. Plus, learn how mold makers, designers, analysts, and manufacturers benefit by using SOLIDWORKS Plastics to identify costly issues before they occur.

Watch the video >>



Lenovo at SIGGRAPH

At SIGGRAPH 2022, Lenovo announced the addition of two new mobile workstations to its expanded product portfolio of AMD-powered workstations. The ThinkPad P15v (above) includes the mobile AMD Ryzen PRO 6000 H-series processors with integrated security features, professional graphics from NVIDIA, and a 15.6" UHD display. The ThinkPad P14s features the latest AMD Ryzen PRO 6000 U-series processors with next generation Radeon PRO integrated graphics. Read more >>

Vectorworks Users: Subscription Update

With the next release of Vectorworks 2023, coming in September, the company is updating its purchasing options and will offer monthly and annual subscriptions. It is retiring the option to purchase new perpetual licenses. Read more >>

What's New from Our Sponsors

IIJA Act Triggers Flood of Infrastructure Work

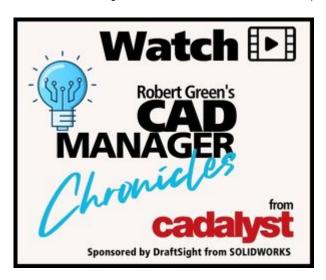
With the signing of the \$1.2 trillion Infrastructure Investment and Jobs Act last November, scores of public agencies and private architecture, engineering, and construction (AEC) firms are seeing a big wave of new work on the horizon. The IIJA includes \$550-billion in new federal investment for infrastructure projects, along with appropriation of previously approved funding.

While distribution of the funds is still unfolding, the effect of the IIJA on AEC professionals appears to be immense, with more than \$100-billion targeted for roads and bridges, and additional amounts targeted for road safety, rail, transit, airports, broadband, energy, water, and other projects. Specific grants have also been established for digital delivery of infrastructure projects, and existing grants include "innovation" criteria, opening the door for technology to play a key role in performing the work.

"We definitely see more work coming online as a result of the IIJA," said Dustin Parkman, vice-president of mobility and transportation at Bentley. With state departments of transportation (DOTs) and their consulting firms already shortstaffed, he sees industry professionals leaning heavily on technology to help carry the increased workload, while also expanding their technical capabilities. "We see a massive opportunity for the DOTs and their suppliers to advance their state of the art [technology]," said Parkman.

Find out more about how the IIJA will challenge AEC professionals and how technology will help them deliver. Read more >>

What's New at Cadalyst



CAD Manager Chronicles, Episode 2: CAD Management Plan

Having a plan is your first step towards success. Watch this easy-to-follow introduction on how to streamline your process, ensure you have the right software and hardware, keep your team up-to-date with training, and save money. By Robert Green View video >>

Civil Engineering:

Modular Design and Construction Transform Building Processes

AEC industry applies manufacturing-borne techniques to accelerate construction. With construction project teams continually seeking to gain efficiency, some AEC firms are implementing techniques more commonly found in manufacturing. Leveraging digital technology, AEC professionals are modularizing design and construction to break projects into smaller pieces that can be reused across projects and programs. By Andrew G. Roe Read more >>

CAD Cartoon



- By Roger Penwill

Keep on Laughing!

Free Resources





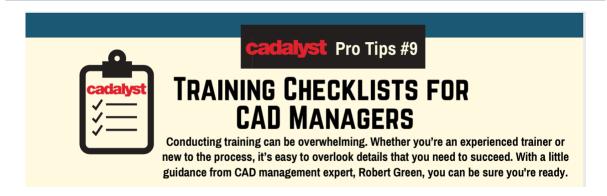
Herrera on Hardware: The Evolving Role of the Mobile Workstation

White Paper Mobile vs. Desktop Workstations for CAD

The Evolving Role of the Mobile Workstation

It comes down to physics — a deskside can always outperform a mobile workstation. Cadalyst hardware expert, Alex Herrera, looks under the hood of both to break down the pros and cons of each form factor.

DOWNLOAD NOW



Cadalyst Pro Tip: Training Checklist for CAD Managers

Training is an essential task on every CAD manager's to-do list. But with all those little details to remember, preparing a clear, informative training session can ve overwhelming. Use this handy checklist from CAD management expert Robert Green to help you be successful.

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