cadalyst
Navigate the world of design technology

March 08, 2023
Issue #508

Your Personal Learning Plan — Part 2

To get your training approved, do your homework and find out the ROI on learning new skills.

In the previous issue of the CAD Manager's Newsletter, I challenged you to come up with a learning plan to keep yourself technically current and more valuable to your company. If you didn't think about your learning plan, you may want to take a look at the previous column before proceeding to gain context.

In this issue, I'll show you how to prioritize your list of learning objectives in a way that will get your boss's attention and get your training plan approved. Here goes.

Image source: Cacaroot/stock.adobe.com.

Getting Started
In order to get the learning plan process rolling, you have to identify your own shortcomings and figure out how to eliminate them via training. The real trick is to craft a personal learning plan that meets the company's needs by making you more productive. Once you have that plan, it's time to talk with the boss. Let's continue using our fictional CAD manager, Bill, to illustrate how to sell your education plan to your boss.

Financially Selling the Training
Now, Bill finds himself in the position of having to prove why his learning plan is financially worthwhile for the company. At first glance, the plan seems reasonable, but how can he prove it? And, since implementing the plan will require training, how can training be made a priority?

The short answers to these questions are:

Prove worthiness: Contrast the cost of training with the cost of doing nothing, which causes errors and rework. I frequently sum this up by saying "It is cheaper to train someone to solve our problem than to keep having the problem" or by asking the rhetorical question "Why can't we afford to train yet can afford to keep messing up?"

Get priority: Show that the sooner training is completed, the sooner the company will reap the financial rewards. Use phrases like, "The sooner I know what I'm doing, the sooner I can solve the problem," to get management's attention.

Financial Impact of Doing Nothing
Let's say that Bill has gathered some information about the financial impact of not coordinating jobs well. Here's what he's learned:

- Every month, Bill must coordinate the files for a facility project that will be ongoing for 2 years. Bill must work with a site plan being created in Civil 3D, IFC building geometry, and a variety of components must be placed inside the building that are created with AutoCAD and SOLIDWORKS.
- Presently, Bill must send the IFC files to a consultant for processing to import and cleanup the files to generate a building envelope file. This process costs $300 per month (3 hours @ $100/hour).
- Three times per year, on average, the consultant can't complete the IFC translations quickly enough and work would be delayed if Bill doesn't step in. In these cases, Bill struggles to do the work in house, but takes 10 hours on overtime at 150% of his normal $50/hour labor rate.

So, here's what we know about the financial problems associated with Bill not being able to perform his own coordination activities:

- $2,700 dollars is spent on outside consultants per year (9 months * $300/month)
- $2,250 dollars is spent on overtime for Bill per year (3 projects per year * 10 hours per project * $75/hour overhead)

In summary: $4,950 per year is spent simply dealing with IFC file manipulations that Bill isn't efficient at doing.

Once you ascertain the costs of doing nothing (above), next find out the costs for you to attend training. Once you have those figures, you can discover your ROI for training and have a strong case to attend! Click through and READ MORE >>

Tools & Resources

Blog Watch: What's New in NX? BIM
Siemens continues its new series, showcasing the latest and greatest features within NX software. This entry focuses on Building Information Modeling (BIM) and how you can design and optimize your building structures. **Read more >>**

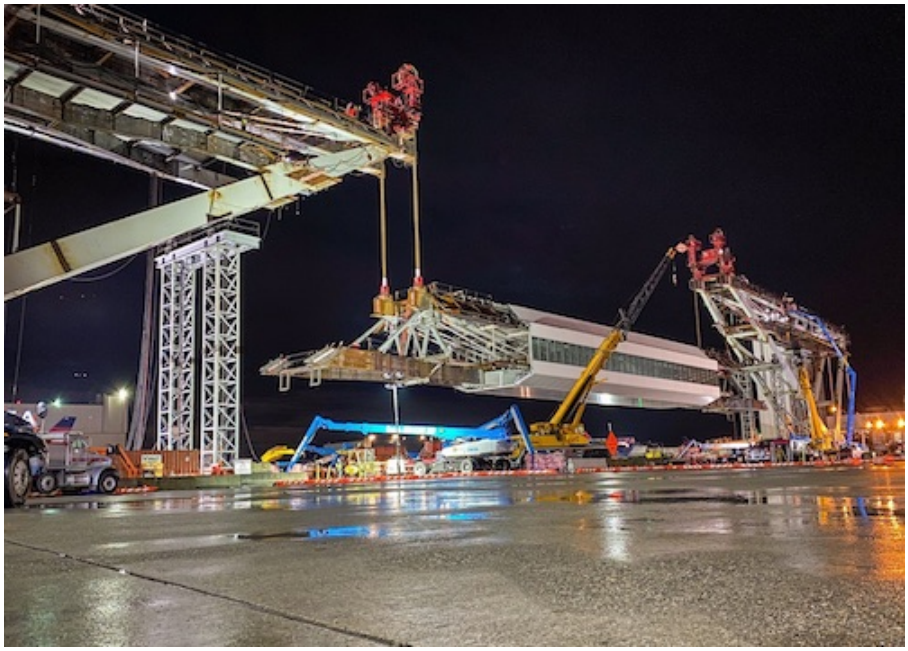
Blog Watch: Why "Excel as a Process" Is Holding Back Your Production and 3 Steps To Fix It
A recent blog from OpenBOM discusses why designers sometimes use Excel for bills of materials, but how this can lead to problems. Plus what you should look for when choosing a system that works best for your operations, according to the company. **Read more >>**

Case Study: Plant Design at a Glance – Individual Sectors and Trades Explained in Detail
Plant design involves many different design disciplines, some of which represent different industrial sectors and industries in their own right. However, there are ways and means of maintaining an overview of all the disciplines involved in plant design. **Read more >>**

Blog Watch: Mapping the Challenges of Climate Change

Major flooding events have become part of our weather culture. Every year we see the dramatic and often tragic consequences and economic losses of wide area flooding. In the battle with climate change, surveyors have a vital contribution to make providing the accurate maps and plans upon which hydrologists and engineers depend for their computer models and engineering designs. Guest blogger, Edwin Danson a chartered surveyor at TSA Survey School, delves into the key differentiators between inland water body hydrospatial surveying, land surveying, and coastal/offshore surveys. **Read more >>**

What's New from Our Sponsors



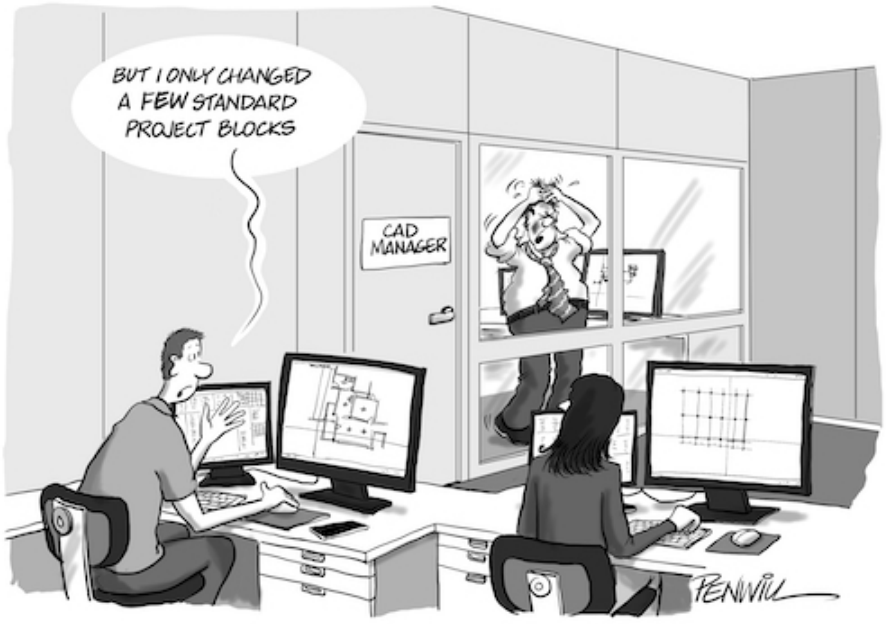
Embracing Construction's Digital Opportunity
The construction industry is primed for a digital future, but the keys to success are implementation, distribution, and workforce buy-in. How best can organizations embrace this new technology? *By Paul King, Bentley Systems, March 7, 2023*. **Read more >>**

What's New at Cadalyst

Civil Engineering:
Avoiding Data Overload in Civil Engineering and Surveying
A look at how firms can navigate large datasets with BricsCAD and other tools. *By Andrew G. Roe, March 1, 2023.* **Read more >>**

Viewpoint: Systems Thinking and How to Engineer to Possible
How manufacturers use systems thinking and digital transformation to manage their complex designs, minimize failures, and bring new products to market faster. *By Paweł Chądzyński, Aras Software, February 15, 2023.* **Read more >>**

CAD Cartoon



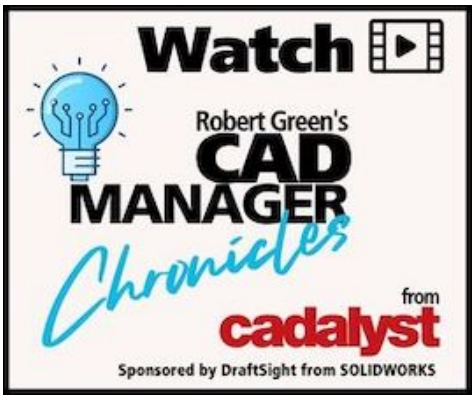
By Roger Penwill **Keep 'em Laughin'!**

Free Resources

Additive Manufacturing 101

Find out more about additive manufacturing technology and the companies who produce AM products. Plus, read two case studies on how companies are using this technology to bring products to market faster and save money! *By Cadalyst Editors*

DOWNLOAD NOW

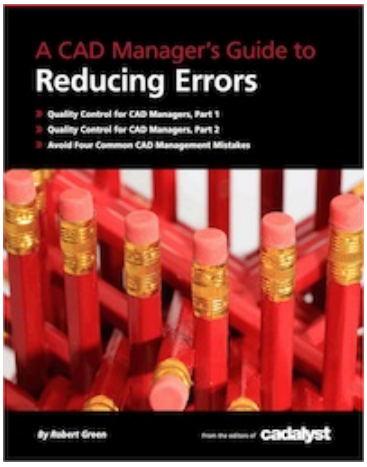


CAD Manager Chronicles Video Series

Episode 4: Making Upgrade Decisions

In this fourth episode of Cadalyst's CAD Chronicles, Robert Green discusses how best to make decisions around upgrading your software. When, what, how much, which seats? Find out how to make the best decisions for your work place. *By Robert Green*

WATCH NOW



A CAD Manager's Guide to Reducing Errors

Whether your problems stem from users who ignore standards, a company culture that doesn't prioritize quality, or self-sabotaging management techniques, this guide will set you on the path to greater efficiency, fewer mistakes, and better results. *(Compiled from Robert Green's CAD Manager's Column.)*

DOWNLOAD NOW

More Digital Design Solutions

Product Design

Building Design

Civil Engineering

Prototyping

Design Testing

Conceptual Design

Reality Capture

Drafting & 2D