

cadalyst



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CAD Management is Less About CAD These Days

As the software becomes more stable, the work of being a CAD manager has become less about CAD and more about process and technology than ever before.

In the last few years, I've noticed a steady progression towards CAD manager's jobs being less CAD-focused. That trend has only accelerated as COVID work-from-home policies have become the norm. So, what is our focus if not CAD, you may ask? Increasingly, it seems that IT issues such as dealing with Cloud systems, login credential problems, firewall/VPN issues, and complex support ticketing systems demand more time than CAD. In short, we're now managing a lot more than CAD applications.

Being a CAD manager now requires proficiency in a wide variety of skills that have no obvious connection to CAD, until you think about the problem more deeply. So, what types of skills should we now be focused on? That's the question we'll answer in this edition of The CAD Manager's Newsletter. Here goes.



CAD Requires Less Attention

The actual software we use to capture CAD data is the one detail that has changed the least during the past several years. Sure, we have new software updates, but they are hardly revolutionary. I mean is there anything really that different in the latest AutoCAD, SOLIDWORKS, Revit, or MicroStation releases that requires training or new workflows to implement? Yes, software is changing, but it is changing in subtle ways that don't require users or CAD managers to fundamentally rethink software strategy.

While there are new functions within CAD tools that require investigation — things such as point clouds and reality capture come to mind — the basic concept of modeling and documenting designs isn't all that different. Plus, now that big design paradigm changes like 3D modeling and BIM have been absorbed, CAD tools have become more stable.

Can We Just Coast Now?

So, if we now use CAD tools that are largely familiar, that means our typical struggles with training and implementing new features should lead us to a more relaxed period of stability and user acceptance, right? After all, if users are familiar with their software, what else do we need to manage? If only things could be easy!

As it turns out, almost everything besides the user's software knowledge is changing, and that change has led to problems that are anything but relaxing for CAD managers. In fact, these changes impact CAD managers in ways we've not seen for years (on some fronts) or in ways we've never dealt with at all.

Think about the following trends in technology for a moment:

- Work teams on different networks, in different countries.
- More complex security issues requiring VPN and firewall configurations.
- Cloud data storage and the accompanying security/bandwidth issues.
- Employees using their own mobile devices.
- Divergent file standards running on a variety of different operating systems.

What all these trends point towards in my mind is an extended CAD environment where simply getting logged in and having the security settings correct to do our CAD work becomes problematic at best. Let's think through the possible problems.

The Work Team/Data Management Problem

You've been informed by your senior management that the new building design project you'll be working on for a flash freeze facility in Costa Rica will be completed using Revit for most of the design work but, in addition, local refrigeration contractors will use SOLIDWORKS and AutoCAD for their documentation. Coordination will be done from HQ in Atlanta, but the work teams in Costa Rica will have to be looped into Cloud tools for interference studies and most of the users will be in work-from-home mode for the duration of the project. And, just to make things even more fun, the facility will be located in an agrarian area — where Internet bandwidth is problematic — so that produce can be collected and frozen rapidly.

Do you see potential problems here? My immediate questions are:

- Where will the data be authored?
- Where will it reside?
- How will we overcome the bandwidth problems we'll encounter as remote workforces try to access large data sets at the same time?
- And, I haven't even begun to think of how the remote job site will be managed.

Does your senior management or IT department understand? Or do they just think you'll setup a Dropbox account or FTP site to deal with "simple file sharing" on your project?

Whose job is it to explain how complex this will be? Unless you work with an experienced IT staff that has been through this scenario before, I assure you that the CAD

manager will become responsible for the project workflow planning.

Welcome to the “CAD is the least of our problems” zone.

Find out more about how the CAD manager's job has changed and what skills you need to be successful! [Read More >>](#)

Tools & Resources



Going Digital Awards in Infrastructure

Bentley Systems has announced the winners of the 2021 *Going Digital Awards in Infrastructure*. The annual awards program recognizes the extraordinary work of Bentley software users advancing infrastructure design, construction, and operations throughout the world.

Sixteen independent jury panels selected the 57 finalists from nearly 300 nominations submitted by more than 230 organizations from 45 countries encompassing 19 categories. To see the *Going Digital Awards in Infrastructure* finalists present their projects, click [here](#).

Webinar: Digital Twins — Bridging the Gap Between Vision and Reality. What Do Clients Really Want?

AMC Bridge hosted industry experts from Autodesk, Epic Games, BrandSafway, Tech-Clarity, UK BIM Alliance, and AMC Bridge to discuss the current state of the digital twin utilization, technology, and process gaps companies face.

The main questions panelists addressed during the webinar are:

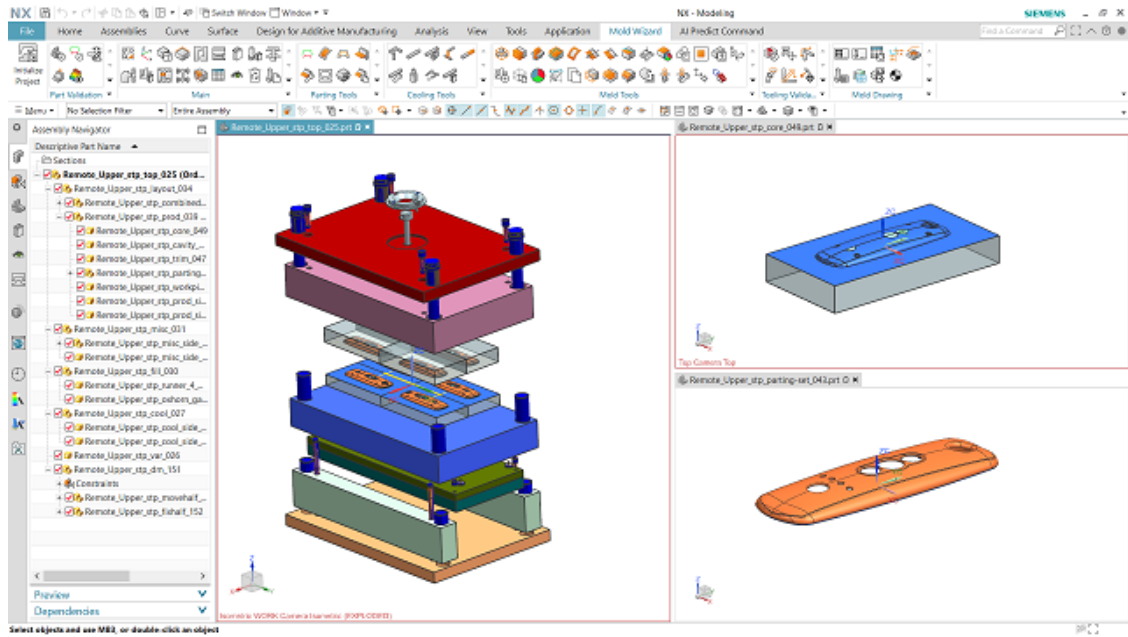
- What do companies really want from a digital twin?
- What are the requirements for an effective digital twin?
- Where are companies today with implementing a digital thread?
- Polls to compare experts' and audience's opinions

[Watch the webinar >>](#)

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When is the Best Time to Make the Switch to Cloud?

A look at cloud-based mold design and the new NX Mold Connect design XaaS app, plus how do you prepare to implement this technology. *By Cynthia Kustush* [Read more >>](#)



RESOURCES: GET MORE FROM YOUR REVIT PROJECTS!

Did you know companies using IMAGINiT Clarity on their Revit projects save an average 200+ hours per project in addition to substantial qualitative benefits? [Get to know Clarity](#) in the IMAGINiT Resource Center!

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What's New at Cadalyst

Civil Engineers Digitally Manage Utility Assets

Software helps agencies match repair actions with risk.

By *Andrew G. Roe* [Read more >>](#)

Herrera on Hardware:**HP's Z2 and Intel's 11th Generation Core: Surveying Today's****Quintessential CAD Workstation Hardware**

An opportunity to check out the state of the art in mainstream fixed workstations, as well as assess the CAD performance of Intel's Rocket Lake CPU. *By Alex Herrera*

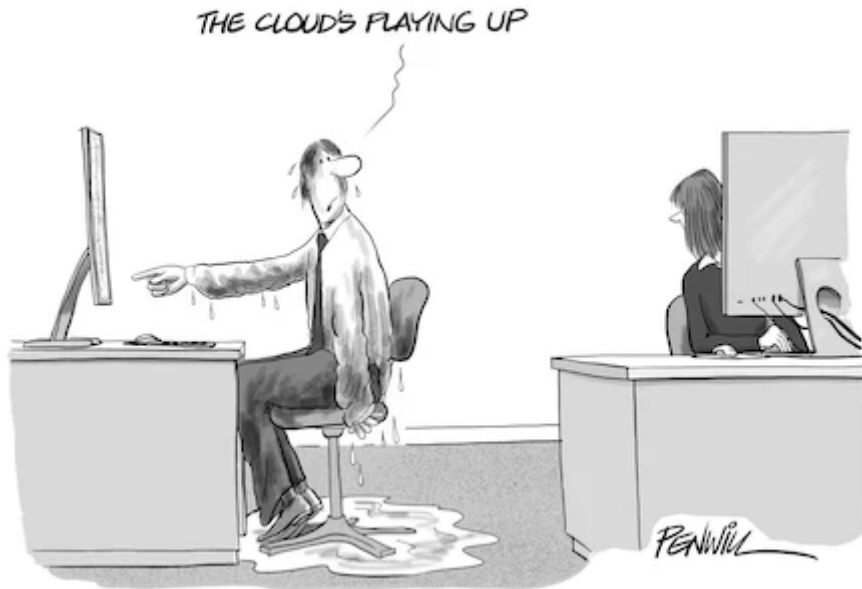
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Putting Pedal to the Metal — HP and Partners Move Metal Jet Printing to the Fast Lane

VIEWPOINT: Case Study: Find out how metal jet printing works and how the technology is helping bring new products to market faster than ever. *By Ramon Pastor* [Read more >>](#)

CAD Cartoon



— By [Roger Penwill](#)

[Keep on laughing!](#)

Free Resources



White Paper

Implementing Generative Design for AEC

Cadalyst and Z by HP joined forces to write this white paper on generative design for AEC. Find out how you can get your design firm bought into this technology, what hardware you require, and how to secure funding for any upgrades you may need.

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