cadalyst
Navigate the world of design technology

CAD Manager's Newsletter
STRATEGIES AND SOLUTIONS FOR THE REAL WORLD
By Robert Green

December 20, 2023
Issue #519

The AI Hype Tsunami — Can It Actually Help Us?

Treat AI like any new technology and figure out how it can help you do your job better.

I recently gave a presentation for a user group where I bemoaned how much hype we're hearing about how AI (artificial intelligence) will change CAD and how we do our jobs. I advised everyone to treat AI like any other innovative technology, to not fall victim to all the marketing hype, and to get on with their jobs while the tsunami-like wave of hype passes by. Afterwards I was met with feedback that ranged from, "I agree with you," on the one end, all the way to, "You must be a Luddite to not see the benefit of AI," on the other. Clearly, this is an emotional topic for many.

In this edition of The CAD Manager's Newsletter, I'll articulate what I mean when I recommend treating AI just like you would any other technology and share some practical strategies for doing so as we go along. Here goes.
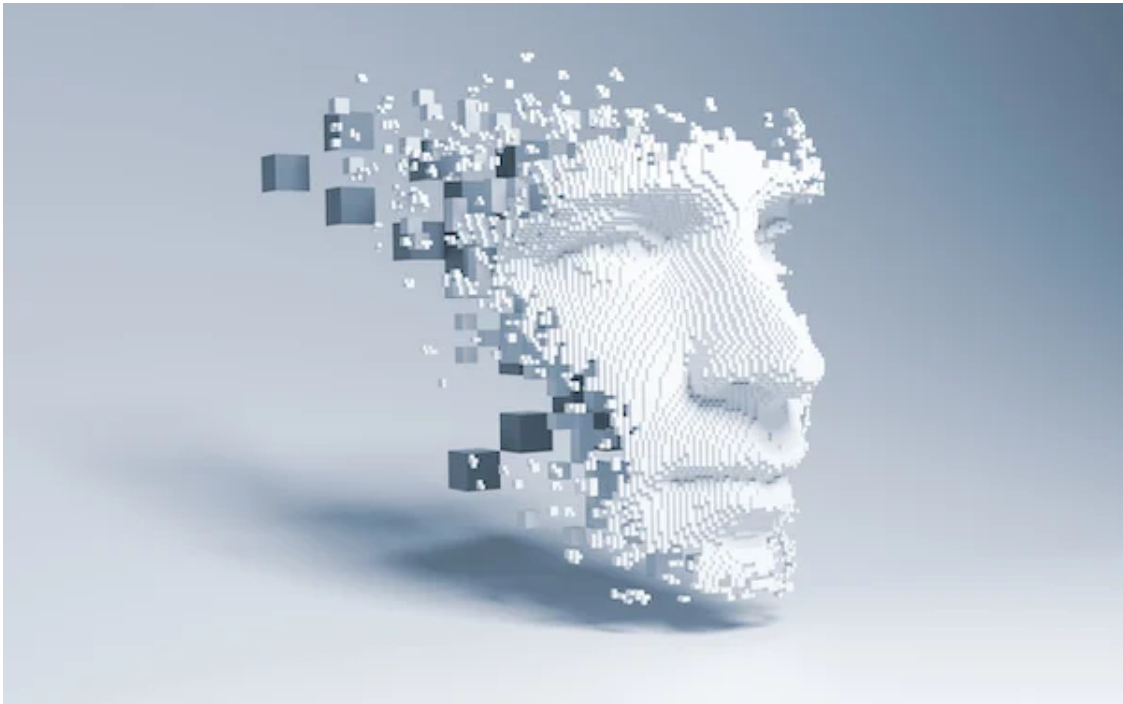
Image source: pinkeyes/stock.adobe.com.

Assess: What is My Job?

As a CAD manager, it is my job to facilitate production, make sure software is correctly configured and optimally customized, get people to understand and follow standards, make sure files are in the right place and secure, capture the correct output for project documentation, and be responsive to clients/management to make sure jobs are completed correctly.

This job description will be slightly different for everyone, but it will suffice for our discussion here. Most of us have dealt with these tasks for years without the benefit of AI tools. The challenge is that AI tools must help me do my job better — because if they can't, then what's the point?

Breaking Down Tasks and Acknowledging Problems

Here's where it starts to get interesting — and where AI becomes a paper tiger in my mind. If I consider each piece of what I must do each day and be honest with myself about the problems I encounter, the internal dialog goes something like this:

Facilitating production. Just knowing who's doing what and which project manager made what commitment to each client, so I can keep projects on track is a major challenge for me. No matter what kind of system I implement to stay on top of the chaos, there's always someone who doesn't enter their data, makes an undocumented phone call, or just stubbornly refuses to keep me in the loop. I've talked to enough CAD managers over the years to know this is true for most of us.

Making sure software is correctly configured and optimally customized. This is more within my control and once I get the software properly setup, I can usually work with IT to put a deployment strategy in place that largely automates the process. Customizing software takes more time and requires me to always think about what I can do to make software simpler for users.

Getting people to understand and follow standards. This is to some extent a training problem, but mainly a human management problem. I find that standards are a psychology issue much more than a technology issue and this has been true as long as I've been a CAD manager.

Making sure files are in the right place and secure. This seems like the simplest of all my tasks, but, in reality, it often vexes me. With all the places users can store

files these days, I never know if they've done everything right. I don't always know if they've kept a local copy on a workstation that has the latest changes, I never know what they may have sent to a client via email, etc. Much like standards, trying to ensure compliance takes way more time than it should.

Capturing the correct output for project documentation. What should be a simple matter of people following the standards becomes coordination with project managers, clients, and CAD users to be sure that all the right file versions are used and mistakes are fixed before going out to clients or manufacturing.

Be responsive to clients/management. Hard to know exactly what this means on any given project and it never seems to be the same twice. Mainly I find that handling problems promptly and efficiently is most important, but sometimes getting to the bottom of the problem is the tough part.

With these tasks in mind, how can AI best assist you? Find out more as Robert Green breaks down the possibilities.

READ MORE >>

Tools & Resources

Hydraulically Powered Weed Brush Designed in IRONCAD by Broddson
Rendered in KeyShot by Solidmakama AB.

Product Watch: IronCAD 2024
IronCAD announced the release of IronCAD 2024 which, according to the company, showcases new features and enhancements to elevate key functionalities, streamline the design process, and better user experience. This year's development efforts have centered around fortifying IronCAD's fundamental design capabilities in

machinery and fabrication industries. The primary focus areas include: bulk view creation and common component process (automated drawing processes); 3D design environment; large assembly capabilities and ease of use; enhanced 2D mechanical detailed design environment; and import/export of additional formats.
Learn more >>

Call for Speakers: GEO Business
Applications due 23 February 2024. GEO Business is a two-day conference and exhibition hosted at ExCeL London on the 5–6 June 2024. Are you a geospatial expert? Sign up to speak at the 2024 GEO Business show. Ideas for topics: 3D visualisation, AEC workflows, digital twins, reality capture, visualisation, augmented reality (AR) and virtual reality (VR), to name just a few.
Read more >>

Whitepaper Watch: Transforming 3D Content Pipelines
Teams in visual industries have long-faced challenges streamlining workflows as the number of applications required to handle heavy 3D production pipelines continue to expand and workforces become increasingly globalized. Learn how creators are optimizing their creative workflows with NVIDIA Omniverse in a new way to create by Jon Peddie Research.
Download paper >>

Hardware for AI
Intel introduced a portfolio of AI products to enable customers' AI solutions everywhere — across the data center, cloud, network, edge and PC. At Intel's "AI Everywhere" event, Chief Executive Officer Pat Gelsinger joined Michelle Johnston Holthaus, general manager of the Client Computing Group, Sandra Rivera, general manager of the Data Center and AI Group, and Christoph Schell, chief commercial officer, at the launch of 5th Gen Intel Xeon processors and Intel Core Ultra processors.
Watch the Video >>

Blog Watch: Revit Shortcuts

ASCENT training resources teaches you built-in shortcuts and how to make custom shortcuts to speed your daily work with Revit.
Read More >>

AMC Bridge Demos for Infrastructure, Construction
These demos illustrate how AI, machine learning, 3D printing, and digitalization enhance the accessibility of construction drawings, streamline architectural communication, and optimize real-time problem-solving. Watch these demos at:
Concrete 3D Printing for Autodesk Revit
Digitalization of Construction Drawings
Architectural Chatbot for Revit
Construction Coordination Issue Tracker

PLM Event Watch: Aras Community Event
ACE 2024, March 4-7, 2024, Fort Worth, Texas. Join product lifecycle management experts from around the world to explore the latest in PLM and digital thread innovation at the Aras ACE event. Explore new perspectives on the technology and industry trends reshaping the business of innovation.
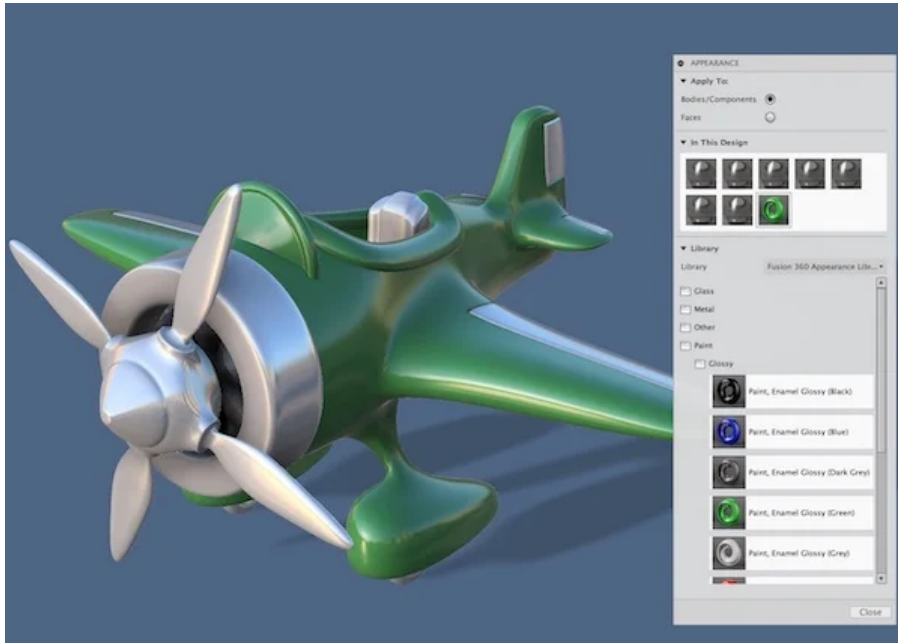**Read More >>**

What's New at Cadalyst

Sponsored Article: iLab Provides Immersive Digital Twin Experience
Attendees of Bentley Systems' YII Conference explore Singapore cityscape and its infrastructure using a live digital twin.
Read more >>

20/12/2023, 16:03

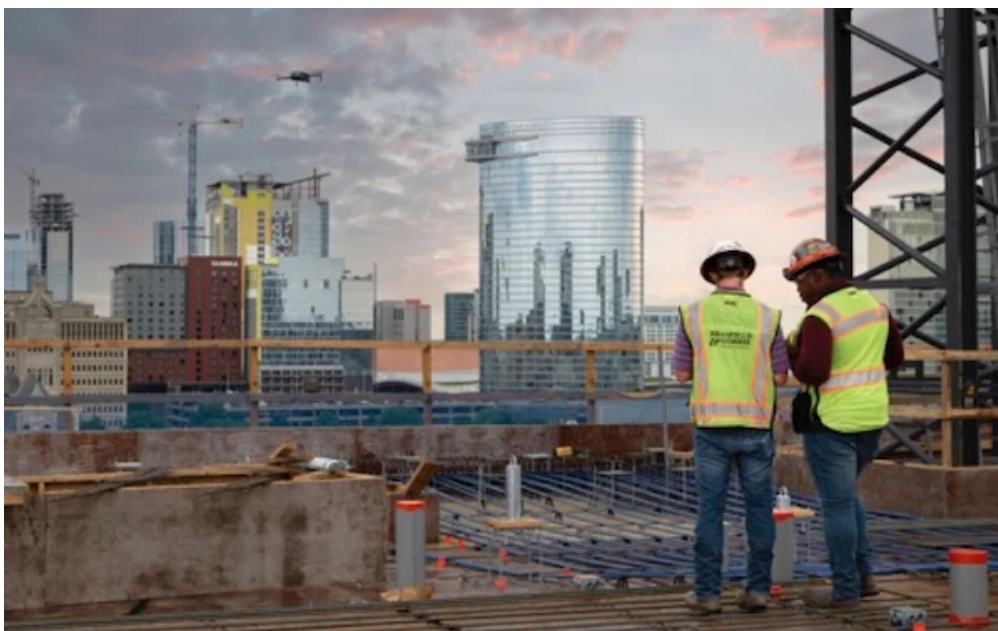CAD Manager's Newsletter: The AI Hype Tsunami — Can It Actually Help Us?

Product Design & Manufacturing Solutions: The Cloud Trend is Still Your Friend
What engineers are looking for to improve workflows and the products vendors deliver. *By Cadalyst Staff*
Read more >>

Cadalyst Video: Cadalyst and IMAGINiT Technologies Discuss Reality Capture
At Autodesk University 2023, IMAGINiT Technologies' James Branagan, Reality Capture Solutions Consultant at IMAGINiT, answered a few questions for Cadalyst readers about reality capture technology, the differences between Unreal Engine and Twinmotion from Epic Games, and how this technology can be used in construction, design, and manufacturing.
Watch the video >>

GIS Solutions: GIS and Drones Find Common Ground in Construction
Contractors combine GIS and drone technology to produce more precise, real-world data that can assist workers in real time. With this combination, firms can accomplish more complex tasks, such as monitoring underground utilities,

determining earthwork quantities, and linking real-time construction data with CAD models and digital twins. *By Andrew G. Roe.*
Read more >>

CAD Cartoon

By Roger Penwill   Keep 'em Laughing!
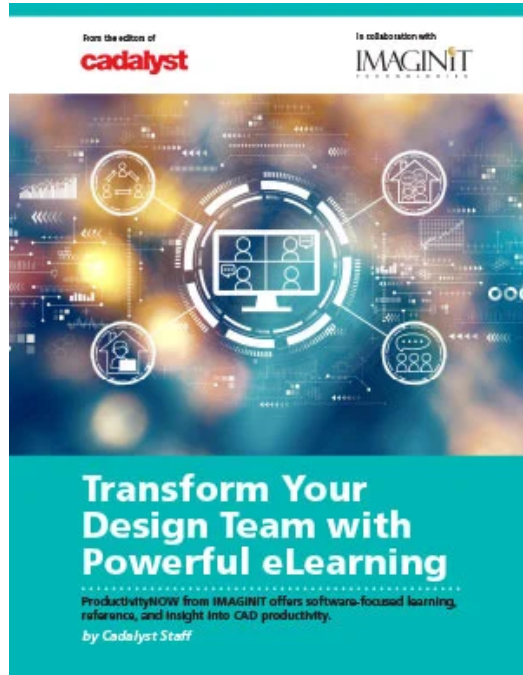

Free Resources

Take the Gradual Path to BIM

Implementing BIM can be an overwhelming challenge, but you don't have to take on everything at once — Bentley MicroStation allows design and construction firms to progress one step at a time.

To learn how incremental advances leveraging your existing investments in CAD and related technologies can yield big benefits over time — for both your company

and the project owner — download your copy of this free white paper today.
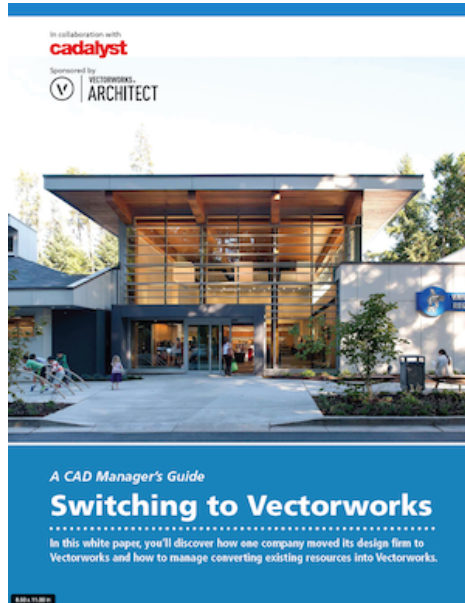
DOWNLOAD NOW

Transform Your Design Team with Powerful eLearning

Training your workforce continues to be one of the most important pillars to forming a strong and efficient team. The challenge becomes making sure your staff are using their design software to the best of their abilities and following your CAD standards. How do you build this foundation and continue to invest in your employees?

Find out how ProductivityNOW from IMAGINiT offers you software-focused learning, reference, and insight into CAD productivity. *By Cadalyst Staff*

DOWNLOAD NOW

A CAD Manager's Guide to Switching to Vectorworks

Discover how one company moved its design firm to Vectorworks and how to manage converting existing resources into Vectorworks.

DOWNLOAD NOW

More Digital Design Solutions

Product Design

Building Design

Civil Engineering

Prototyping

Design Testing

Conceptual Design

Reality Capture

Drafting & 2D