Selling the Standard: A CAD Manager’s Guide

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Learning Objectives

- Explore CAD management strategies that positively impact standards development, conformance and adoption
- Hear from experienced CAD managers on what has worked (and hasn’t worked) regarding standards implementation
- Best practices on support, troubleshooting and training – keeping staff informed on what they need to know
- Strategies for keeping staff engaged, providing options for feedback and tips for effective communication

Description

As CAD managers, we face a variety of challenges when developing, supporting, and coordinating adoption of a company’s CAD standards package. These tasks can include a variety of considerations, such as user acceptance, change management, production impacts (or disruptions), training prerequisites, collaboration techniques, solution architecture, rollout strategies, feedback protocols, and, of course, user pushback. Join the speaker for this roundtable discussion as we explore strategies that have worked (and those that have not) and discuss what you need to know as a CAD manager when “selling” the standard—from the single drawing-production staff member through upper-tier management. This is an opportunity to share your CAD management experiences with others in attendance. Participation is expected.
Chad is the Corporate CAD Coordinator for Associated Engineering, a multi-discipline engineering firm with 22 offices across Canada.

Chad provides development and implementation of drawing production standards, quality management, productivity and efficiency solutions and technical support/training across the company’s 400 Autodesk product users.

Having 25 years of experience primarily on civil infrastructure and transportation design, Chad has been utilized for the past 8 years dedicated full-time as AE’s CAD Coordinator.

Chad is an Autodesk Expert Elite Member, an Autodesk Certified Professional and a member of several Autodesk Customer Councils.

Chad has attended Autodesk University each year since 2013, a ‘Top Rated’ speaker at AU2017/AU2018 and contributes as an AU Speaker Mentor.

Chad operates the AutoCAD and CAD Management blog theCADcafé.
# Contact Information

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Roundtable Expectations and Class Format

The intent of this roundtable is to provide you with the opportunity to share and discuss your experiences with other attendees on a variety of topics revolving around CAD management. I have provided topics and discussion points within this handout which will provide some direction; however, this roundtable is largely based on your participation. In the end, this class is about you!

I will do my best to facilitate our discussion and have examples of my past experience as a CAD coordinator/manager to spur conversation. I have attended multiple AU roundtable classes in the past and I truly believe they offer attendees a chance to share their experiences with others in attendance – a unique class format for your AU experience!

Roundtable classes at Autodesk University are limited to 23 attendees, which creates a supportive environment where everyone is given equal rights to participate. Please come prepared (if your willing) to share your experiences, both positive and negative, which will foster group discussions how we, as CAD managers (and related) progress through the constant challenges of providing effective, efficient solutions – aimed to reduce frustration while applying best practices and protocols.

I look very forward to our discussions during the roundtable, see you all in Las Vegas!!!
Roundtable Discussion Topic Considerations

Change Management

“You can’t do today’s job with yesterday’s tools and still be in business tomorrow.” – Unknown

“Change Management is the process, tools and techniques to manage the people side of change to achieve the required business outcome. Change Management incorporates the organizational tools that can be utilized to help individuals make successful personal transitions resulting in the adoption and realization of change.” – Prosci, Definition of Change Management

“It is not the strongest of species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change.” – Charles Darwin
Suggested Topics, Concepts and Discussion Points

- Why are we doing this “thing”?
- SWOT, Vision and Mission Statement
- Analysis and corrective action
- Execution and engagement
- User Acceptance Testing (UAT)
- How to measure success?
- Teaming
- Improve efficiencies (bottom line)
- LCD = Lowest Common Denominator
- Short-Term and Long-Team Goals

Solution Architecture and Production Impacts (or Disruptions)

“Solution Architecture is a practice of defining and describing an architecture of a system delivered in context of a specific solution and as such it may encompass description of an entire system or only its specific parts. Solution Architecture typically applies to a single project, assisting in the transition of requirements into a solution vision and a portfolio of implementation tasks.” – Wikipedia, Solution Architecture

Production impacts and consideration of disruptions (i.e.: the act or process of interruption in the normal course or continuation of some activity, process, or event works) is critical in the development, implementation and support of a solution.
Suggested Topics, Concepts and Discussion Points

- **What is wrong with this “thing”?**
- Solution need: yesterday, today and tomorrow
- Management buy-in and leadership / championing
- Utilize staff resources
- Finding the tool / technology – cost considerations
- Test and test, validate then implement
- Application of solution / integration
- Tactics to avoid (or mitigate) production impacts and disruptions
- Staff capacity and knowledgebase / skillset
- Direct benefit (will sell itself) – ease of use

Training Prerequisites and Rollout Strategies

“Training is a program that helps employees learn specific knowledge or skills to improve performance in their current roles. Development is more expansive and focuses on employee growth and future performance, rather than an immediate job role.” – Allencom, Definition of Employee Training and Development

You can’t “train” experience so an immediate value or ROI (return on investment) is not quantifiable at the onset of implementation or rollout.

“The only thing worse than training your employees and having them leave is not training them and having them stay.”

Henry Ford
Suggested Topics, Concepts and Discussion Points

- How are we doing this “thing”?
- Capacity and coverage
- Who (direct and indirect)
- LCD = Lowest Common Denominator
- Considerations of audience
- Comprehensive
- Instructor-led and self-paced options (learning styles)
- Ongoing support and onboarding
- Impact analysis
- Release strategies

Collaboration and Feedback Techniques

“Collaboration is the process of two or more people, or organizations working together to complete a task or achieve a goal. Collaboration is similar to cooperation by definition. Most collaboration requires leadership. Teams that work collaboratively often access greater resources, recognition and rewards.” – Wikipedia, Collaboration

“Employee feedback is defined as the process of giving constructive suggestions to the employees by their reporting managers, supervisors, and peers. Feedback can help employees and their organizations constantly get better at what they do. (needs to be bi-directional).” – QuestionPro, Definition of Employee Feedback
Suggested Topics, Concepts and Discussion Points

- Who needs to be part of this “thing”?  
- Voice of the users (listen)  
- Foster honest and open communication  
- Encourage creativity and innovation  
- Define current and future goals  
- Communicate expectations  
- Transparency and availability  
- Feedforward  
- Awareness campaigns  
- Anonymous response opportunity

User Pushback

“Research suggests that happy employees are 12% more productive, with unhappy employees being 10% less productive. Disgruntled employees can have a serious impact on profits and the ultimate success of the business. Further, the mood of a disgruntled employee can have ripple effects through your business affecting (service) and other employees.” – Hubworks, Signs of Disgruntled Employees

“Pushback is defined as opposition or resistance to an idea, plan or strategy. You can plan on being on the receiving end of pushback at one time or another in your career from management, peers, and subordinates.” – Online, Multiple Resources
Suggested Topics, Concepts and Discussion Points

- **What strategies can I use to resolve “pushback”?**
- Be constructive
- Careful listening
- Always show respect
- Consensus building
- Provide opportunity to assist
- Be honest, ask for clarification
- Calmness and rational
- Proof of process / stand ground
- Anticipate / prepare ahead of time