# AutoCAD to PowerDraft:
## How Do You Know If You're Ready for a Change?

Implementing a new software platform requires a significant investment — of time, money, and effort. How do you know when it's time to make a change? That depends on many factors. For both your existing and potential new software, what benefits can you expect to realize? What are the associated costs of change — and of doing nothing? No single answer holds true for everyone, so this white paper provides considerations and guidelines to help you identify whether you're a good candidate for a move to PowerDraft.

# AutoCAD to PowerDraft: How Do You Know If You're Ready for a Change?

If you've used AutoCAD for any length of time, then you've put a lot into it. Your company has invested money; you've invested intellectual resources. You've explored the features, and learned the ins and outs. You've grown familiar with the software and can get it to do what you need it to, for the most part.

Once you've put all this money and effort into mastering one CAD application, why would you even consider changing to another? There are a variety of reasons: Perhaps you are advancing to workflows, such as building information modeling (BIM), that demand new capabilities; you're dissatisfied with the time required to complete certain tasks; or changes in licensing and pricing are making AutoCAD less attractive financially.

For some AutoCAD users, the benefits of switching to a new application, such as PowerDraft, will justify the costs of making a change. For others, it may not be worth the effort and investment needed to switch; they're better off staying put. But how can you determine whether you should be thinking about switching — or even just adding PowerDraft to diversify your CAD software investment? And what are the costs of not changing? To answer these questions, start by taking a clear-eyed look at your current situation.

## 1 Step 1: Determine if AutoCAD Is Holding You Back

Some of the burdens associated with any software — such as the financial costs — are obvious, and easy to calculate. Others require closer inspection.

**Ownership costs.** When comparing the prices or fees charged for software applications, keep in mind that the option to choose between perpetual (purchase) and subscription (rental) licenses gives your company more flexibility in when costs are incurred and whether they are classified as operational or capital expenditures. Autodesk no longer sells perpetual licenses; Bentley Systems, the developer of PowerDraft, offers both perpetual licenses and subscriptions of varying lengths.

**Upgrade on your schedule; use your version of PowerDraft for as long as necessary.**

**File interoperability costs.** Other costs are not so obvious. For example, AutoCAD users can face a hidden cost of interoperability obstacles when moving data between versions or titles of Autodesk products that use different file formats, necessitating time-consuming and error-prone work-arounds and data translation. The opposite is true of PowerDraft and other Bentley Systems tools, which have been developed on a common platform so they "speak the same language," and include authentic RealDWG and Revit RFA support to eliminate interoperability barriers. Any work completed in PowerDraft can be moved on to Bentley's design and analytical modeling applications for building, civil engineering, plant, and other disciplines as well as MicroStation — and back again — without a hitch.

**Upgrade burdens.** New software features can be a huge productivity boost, but implementing upgrades can be time- and labor-intensive, so organizations often use the same version for a few years to minimize disruption. Bentley supports the best of both worlds by releasing incremental PowerDraft updates every 3–4 months with a simple update installer that allows you to get the latest version with a push of a button and take advantage of the newest productivity enhancements immediately — if you're ready.

Autodesk customers, conversely, are forced to upgrade to new versions shortly after they are released. What is the risk when you're working on projects that may span 3, 5, or even 10 years? Bentley lets you use whatever version of the software you need, for as long as you need to.

As a bonus, PowerDraft allows users to learn from within the design environment, and even recommends tools and discipline-specific workflows — reducing the time and risk of getting new users up to speed, and ensuring that all team members continually improve their skills.

**Drawbacks of software development priorities.** Decreased vendor focus on a product is another way that software users can miss out over time. You might already be feeling the effects of Autodesk's growing emphasis on developing industry-specific software tools, such as Revit and InfraWorks, at the expense of AutoCAD. Bentley, on the other hand, doesn't have to make such trade-offs, and all customers benefit from enhancements to the common software platform.

**The cost of falling behind.** And of course, there is a trend toward advancing into BIM workflows across a wide spectrum of disciplines. Is the answer to abandon your CAD solution and force users to move to BIM-specific software? If you don't, do you run the risk of losing out on new work because you can't meet client requirements? Will you miss out on the opportunity to improve your team's productivity and software expertise? If you are losing money, wasting time, or missing out on business opportunities because of AutoCAD's limitations, now is the time to explore making a change — your competition already is.

# Switching — or Diversifying?
**You don't have to change all your seats or switch all at once.**

As you investigate your software options, keep in mind that a *full switchover* of all CAD seats in your company from AutoCAD to PowerDraft is *not mandatory*. Many companies prefer to ramp up slowly by replacing a few seats at a time, or even to keep all their AutoCAD seats and simply add new seats of Bentley software as their business grows. This diversified approach mitigates the risk of changing applications, doesn't interrupt project delivery, and enables companies to provide a wider range of CAD and BIM services. It's also a way for companies who are less certain about their need for a change to test the waters before committing to a full-scale move.

**2** **Step 2: Determine Whether PowerDraft Is Suitable for You**

If the writing on the wall indicates that it is indeed time for your company to look beyond AutoCAD, the next step is to understand whether you and PowerDraft will make a good match. As you read through the following questions, consider how many of these factors apply to your situation.

## Do you…

- **juggle multiple projects, coordinating input from a variety of contractors, clients, and other outside collaborators?** PowerDraft makes it easier to keep track of project-specific files and apply standards consistently with a project-centric environment, standards management and checking tools, and support for a comprehensive range of file formats and data types that you can open, reference, import, save, and export. In addition, cloud-based transmittal management services help ensure you're always delivering the right files to the right people.

- **require the ability to extensively customize your software workflows?** PowerDraft features advanced handling of extended attribute data and a customizable user interface. If you don't work out-of-the-box, you have a robust range of options to make the software support your unique workflows.

- **need sharable network licenses?** You may face a surcharge for sharing AutoCAD licenses, but there is no incremental cost to share PowerDraft licenses among users in the same country. Bentley's SELECT subscribers also have a wide range of additional unique licensing options, including quarterly term licensing, where they can use as many licenses as needed at any time, and can be easily billed for that use at the end of each quarter at an advantageous subscription rate.

- **regularly take on projects that are demanding due to their large size or complexity?** PowerDraft is more stable than AutoCAD when handling large data sets, and better equipped to conquer

the interoperability challenges that inevitably arise in large projects, easily integrating multiple file formats from CAD, BIM, and geographic information systems (GIS).

- **have evolving needs that would benefit from access to new software titles?** Bentley Systems subscription customers can periodically "rebalance their portfolios," exchanging licenses for different software titles without an extra cost. Customers can reallocate their perpetual license investment once a year, and can choose an entirely new mix of software titles and quantities each time, provided the new mix of perpetual licenses is the same total current list price value.

- **frequently work with geospatial data such as federal, state, or local maps, SHP data, KMZ, GeoTIFFs in a wide range of coordinate systems?** Although you can import this data into AutoCAD, it's up to you to transfer it to a common coordinate system and place it in your model in exactly the right spot. PowerDraft allows you to automatically snap any geospatial data in any one of hundreds of coordinate systems into its precise position automatically without the risk of errors.

- **considering advancing into 3D modeling workflows?** PowerDraft can be upgraded to a full license of MicroStation which adds a wide range of benefits including a comprehensive range of surface, mesh and solids modeling, rendering, animation, and the ability to develop custom VBA, .NET, C++, and C# applications.
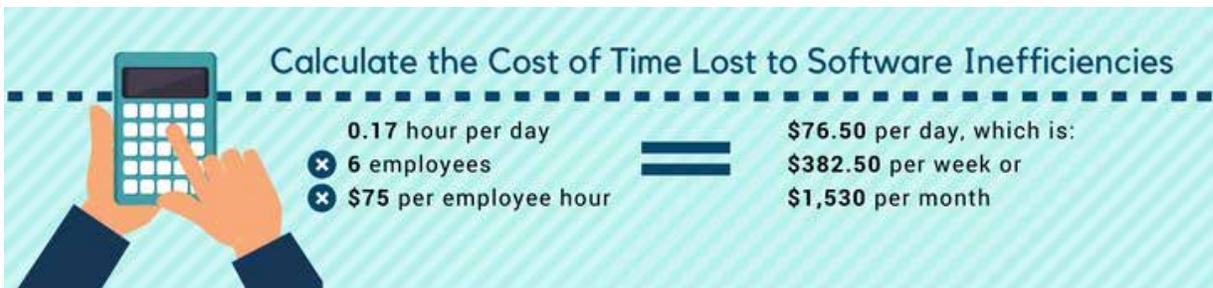
If you answered "Yes" to most of these questions, then PowerDraft may well be the right solution for you. For a more in-depth exploration of your workflows and geometry needs, take the "Drafting Software Change Assessment" quiz.

**3** **Step 3: Determine the Cost to Implement PowerDraft**

Implementing a new software application will entail a variety of costs, including the licenses themselves, support, and training. And if customization is required, that will incur an additional cost.

Although the exact numbers will be different for every company, you can start creating an estimate with the help of these resources:

- Bentley's online store provides the current price for a PowerDraft perpetual license. License and support costs for MicroStation are comparable with prices for AutoCAD; they

> "Does our company require customized workflows? What are our licensing needs?"



### Calculate the Cost of Time Lost to Software Inefficiencies

- 0.17 hour per day
- ✖ 6 employees
- ✖ $75 per employee hour

= $76.50 per day, which is:
$382.50 per week or
$1,530 per month

vary by region and include tiered volume discounts. There are a wide range of options from perpetual licenses to quarterly and annual subscription licensing, as well as enterprise subscriptions.
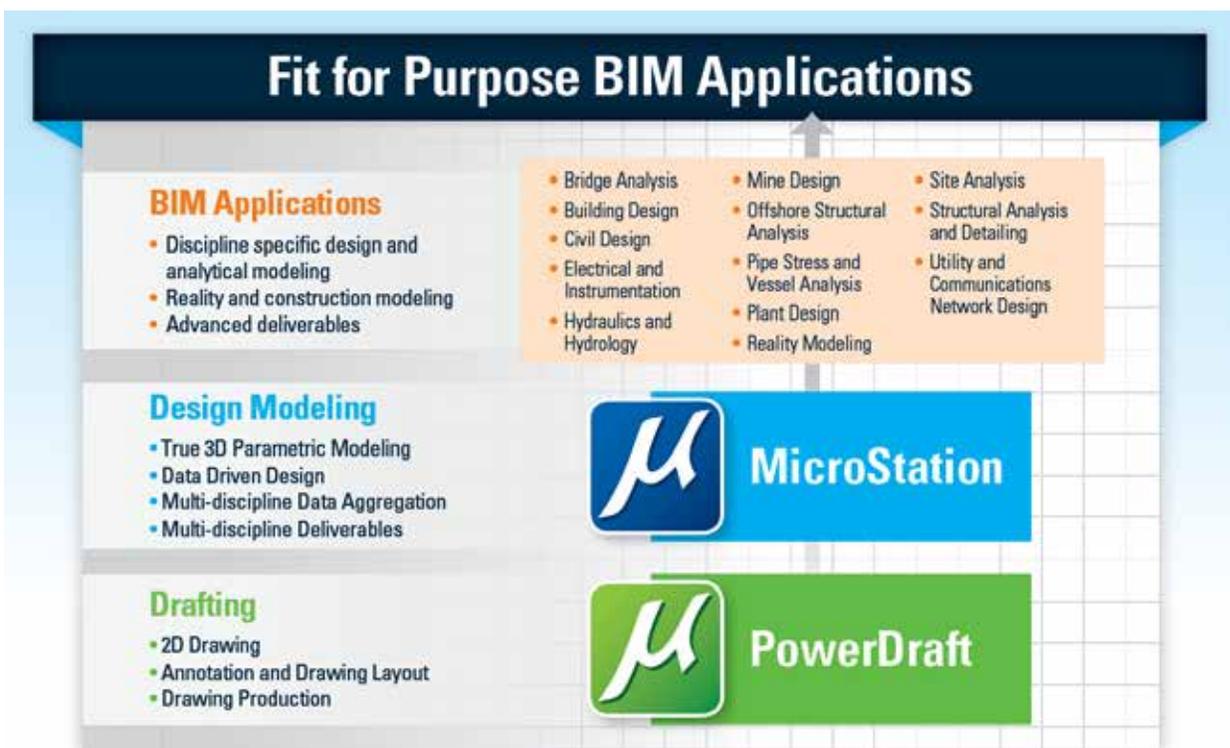
- To estimate the costs of professional training and learning time, try this Labor Costs Calculator.

- Check system requirements to determine whether your existing hardware or operating system will need an upgrade.

### 4 Step 4: Determine the Cost of Staying with the Same Software

To calculate the cost of doing nothing — that is, staying with your current software — start with what you pay for licenses. Be sure to check Autodesk announcements so you can factor any forthcoming price increases into your calculations.

Next, calculate how much time you are losing by using work-arounds or inefficient workflows. To convert this to a dollar amount, multiply the wasted time by the number of people affected by their hourly rate. For example, if six people in the department are each spending just 10 minutes per day on file format conversion problems, that can total $1,530 per month!

If your current software hinders business growth, its "costs" can be tremendous. Does your current software performance and scalability support the size and complexity of jobs you want to be able to deliver? Did you have to pass on a $15 million project last year because you didn't have the capabilities and collaborative infrastructure in place to complete the job successfully? Look not only at work you have missed out on, but also how your



**Fit for Purpose BIM Applications**

**BIM Applications**
- Discipline specific design and analytical modeling
- Reality and construction modeling
- Advanced deliverables

- Bridge Analysis
- Building Design
- Civil Design
- Electrical and Instrumentation
- Hydraulics and Hydrology
- Mine Design
- Offshore Structural Analysis
- Pipe Stress and Vessel Analysis
- Plant Design
- Reality Modeling
- Site Analysis
- Structural Analysis and Detailing
- Utility and Communications Network Design

**MicroStation**

**Design Modeling**
- True 3D Parametric Modeling
- Data Driven Design
- Multi-discipline Data Aggregation
- Multi-discipline Deliverables

**PowerDraft**

**Drafting**
- 2D Drawing
- Annotation and Drawing Layout
- Drawing Production

*Visit the online Switching Center from Bentley Systems and Cadalyst for articles, videos, and other resources.*

competitiveness may degrade in the future if you retain your current software.

## 5   Step 5: Determine Your Next Move

To help you understand more about the costs and benefits of moving from AutoCAD to PowerDraft, refer to the online Switching Center from Bentley Systems and Cadalyst for articles, videos, and other resources. Ultimately, to make an informed decision about what's right for you, you should try the software yourself. You can request a free trial of PowerDraft.

*Bentley Systems provides architects, engineers, constructors, and owner-operators with comprehensive architecture and engineering solutions for advancing infrastructure.*

*For more than 30 years, Cadalyst has delivered independent, expert guidance about the software and hardware technologies that support design and engineering workflows in the AEC, civil engineering, and manufacturing markets. Visit the Cadalyst Library for our full line of white papers, Pro Tips, and other exclusive content.*