Making the Most of CAD

A PTC University CAD Optimization engagement helps customers increase their MCAD efficiency by 30% and more

Computer-Aided Design (CAD) today is so much more than just a design tool. Never before has using PTC Creo been easier and more intuitive. And never before has it offered so much interface with other applications to allow for an effortless and integrated product development process. Still, life isn’t perfect.

Companies are facing challenges today that affect their use of CAD – and their use of CAD can affect their business performance. Examples include:

- Organizations today need to manage a distributed workforce. Oftentimes, various local teams are tasked to collaborate to build one global team, but struggle to establish the required processes and routines. As a result, productivity and performance are not at the desired level.

- Market forces are pushing organizations to speed up time-to-market without putting quality of their products at risk. Downstream re-work or other delays in the design process negatively impact their market performance.

- Finally, even the most defined processes and workflows are only as good as the diligence with which people are following them. Oftentimes, engineers have worked with “their” tools for many years and they stick with their established routines. Often new functionality available to them is insufficiently leveraged – if at all.

What is CAD Optimization?

Customers often know they have an issue “somewhere” which they would like to address “somehow”. CAD often does not get the same attention as other projects, such as PLM, ERP or CRM-related activities and companies don’t know how to get started.

This is where PTC University can help with a clearly defined approach that includes analysis of the status quo, definition of goals and measures as well as the desired outcomes. Each CAD Optimization engagement has a value roadmap and set timeframe and is executed at pre-determined efforts/cost. Customers who engaged with PTC University in previous CAD Optimization projects report increases in MCAD efficiency of 30% and more.

No two customer engagements are the same, but many customers have similar struggles and needs. Customers get access to PTC University’s many years of successful consulting experience and best practice learnings that led to the development of PTC University Expert Model Analysis (XMA).
PTC University Expert Model Analysis

This powerful technology helps to evaluate the modeling expertise in an organization and thus defines the baseline for all subsequent action. PTC University Expert Model Analysis (XMA) assesses models in 50 areas of analysis around geometry quality, design intent strength, and model complexity. Each assessment presents the results in a rich, graphical format and explains why the results matter. In other words, each report provides detailed information on what the findings mean and what impact a potential improvement can have to overall productivity.

The wealth of information generated by XMA allows PTC University experts to pinpoint where an organization struggles in their use of PTC Creo, identify practices that need improvement, and to implement the consulting and training initiatives that will ensure a more efficient use of their CAD.

More than half the companies achieved less than 49% effective software usage

<table>
<thead>
<tr>
<th>Estimated Level of Effective Software Usage</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Less than 15%</td>
<td>7.4%</td>
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<tr>
<td>15%-49%</td>
<td>44.8%</td>
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<tr>
<td>50%-74%</td>
<td>36%</td>
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<tr>
<td>75% or above</td>
<td>11.9%</td>
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Source: TSIA/Neochange/Sand Hill Group

CAD Optimization Step-by-Step

Each CAD Optimization engagement follows a proven methodology:

- **Analysis**
  A thorough analysis is the key to each successful engagement. PTC University provides tools and methods to facilitate a deep dive into the customer’s as-is situation. Tools include an XMA scan, key user interviews, proof of concepts, and more.

- **Recommendation**
  Experienced PTC University consultants discuss their findings with the customer and provide their recommendations. In dialog with the customer, the next steps of the CAD Optimization initiative are defined, such as timeline, investment, and desired outcome.

- **Development of CAD Methods and Guidelines**
  Based on the defined goals and initiatives, the specific CAD methods and guidelines for the organization are developed and/or optimized.

- **Roll-Out of CAD Methods and Guidelines**
  In this important step, the CAD workforce is being trained on the new or refined CAD methods and guidelines. To ensure full adoption and long-term success of the initiative, it is critical that all contributing staff understands the why and how of the engagement and supports these measures.

- **Role-Based CAD Training**
  This is the actual software training phase. Users are being trained according to their roles in the workflow to ensure everyone in the team has the PTC Creo skills that are needed to successfully complete their tasks.
New CAD Optimization Kit

A CAD Optimization engagement is a well-defined service engagement with a clear timeline. For customers, however, who would like to drive this more independently, we also offer a new package giving them access to the required tools, but with the opportunity to manage the project at their own pace. The package gives them access to the XMA technology which is also available as a standalone desktop application, **PTC University Expert Model Analysis Desktop**.

The package includes a defined number of hours of consulting to get them up to speed with setting up and successfully using XMA, as well as access to targeted PTC University training content in order to immediately execute on their new findings and initiatives.

Learn More

The PTC University consultants look forward to discussing your needs and helping you increase your MCAD efficiency. **Talk to a Training Advisor today**, to discuss our CAD Optimization options and maximize the ROI of your PTC Creo investment.

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JS696-CAD Optimization-DS-EN-0615