Five Steps to Better Concept Design

When PTC surveyed designers*, many of them described a process that was disconnected and jeopardized their design intent while costing time and money. But it doesn’t need to be that way. Here are five steps you can take to improve this critical phase of product development.

1. Move to Digital Quickly

When you have an idea, then CAD can help. Toss that napkin and take up a digital canvas. When you’re done sketching, your concepts will already be in digital form, saving you time.

2. Don’t Recreate Work

Use integrated tools to limit—or eliminate—data recreation. Each time a colleague recreates your model, that person interprets your design intent, putting it at risk. You’ve spent days on your design and its every nuance; don’t allow data recreation to change your work!

3. Realize that Not All Concept Design Starts at the Same Point

• Have an existing design? Use direct modeling so you can start making changes at once. This is especially useful if you don’t know how the model was made or have “dumb” geometry.

• Maybe you want to rapidly conceptualize highly organic forms. Select a tool that allows for quick, intuitive surface creation so you can create the forms up front. You can always do highly detailed work later.

• If you need to create concept variations quickly, be sure your software lets you iterate, compare, return to any point and save your work. Designs unsuccessful now might be future winners.

4. Validate or Test Your Designs Early

Why shouldn’t analysts have all the fun? 3D CAD has evolved to the point where you can do basic analysis yourself. You’ll improve your product and also avoid sinking time into designs that won’t work.

5. Make It Easy for Everyone to Contribute

Valuable insight can come from anywhere. You’ll need software that allows colleagues outside engineering, and even customers, to see, interact with, and comment on your model in a format that works for them.

A Last Thought

We know as well as you do that no 3D design software can make you innovative, but we think you’ll agree that using the right tool for the job can be extremely powerful. Find out more about concept design and the tools PTC Creo offers to help you create fantastic products.