

MOVING TO SIEMENS XCELERATOR AS A SERVICE

REMOVE FRICTION & SPEED INNOVATION

A DAY IN THE LIFE OF A DESIGNER

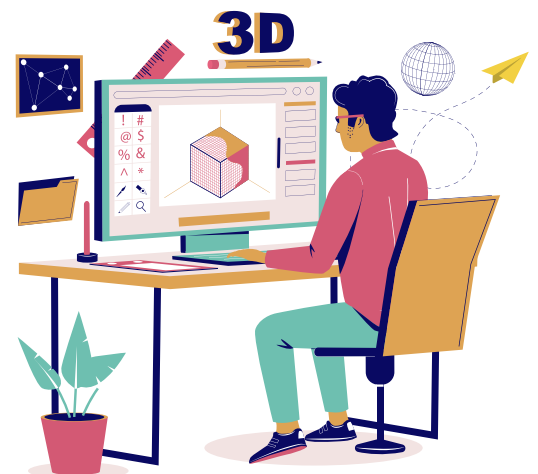
Many designers are stuck in the past, using capable—but old-fashioned—software to do their jobs. These tools often require expensive desktop machines, create data that's stuck in silos because of formatting and access issues, and limit the designer's ability to innovate. Designers deserve better. They deserve a modern, personalized, connected environment.

Siemens' Xcelerator as a Service is an open digital platform with Siemens' engineering, design, simulation, and manufacturing apps, connected using domain-specific interfaces. The platform handles the connections, and the business model offers the flexibility to scale up and down as needed and automatically delivers the latest software and security updates. Connecting from anywhere, anytime and from any device means faster innovation in a more productive and collaborative environment.

STUCK IN A LEGACY ENVIRONMENT

We're at Modern Robotics, a hypothetical firm that wants to revolutionize in-store retail using autonomous robots. The new MRone can count items for inventory management, identify when products are improperly shelved, and look for trash and trip hazards. If the MRone finds a problem, it notifies humans who can add inventory, mop up spills or reshelve items. The plan is to get the MRone to early adopters in the next six months, an ambitious timeline.

Yousef is an experienced designer working on the MRone platform. He's been at MR a long time and has used many traditional desktop tools to design manufacturing robots. He's seen many shortcomings that he hopes to avoid on the fast-paced MRone project. Yousef creates CAD models and drawings so



that his MR colleagues can source components, define manufacturing strategies, and assemble the final product. A big part of his job is to minimize downstream issues in production, translating design ideas into something that can be produced to spec, economically, and with high quality.

Email used to rule Yousef's day. He'd get messages about new requirements, supplier questions, and work assignments; keeping track of everything was challenging. He was also frustrated at how much time he wasted looking for information.

Yousef can't build a CAD model to drive drawing production, generate bills of material, create machine tool instructions, and create images for user manuals until he has everything he needs. Too much information and no certainty that it was the latest.

Yousef's primary CAD tool did the job but needed a lot of workarounds and didn't have the look or feel of newer releases. A significant roadblock is supplier parts: Yousef can't easily import or reference them, and he spends too much time re-modeling. It's frustrating, and he's sure there's a better solution.

YOUSEF'S WISHLIST

Put another way, Yousef wants a modern, agile, and connected environment. He'd like:

- A modern CAD solution that can support his desire to work from anywhere, even on his tablet
- The ability to easily use models from different CAD systems
- Automations that enable him to quickly and easily create drawings, lists, and other documentation to the company's standards
- A repository for requirements and other parameters, so he knows what he's aiming for in each iteration of the MRone release plan
- Project management and workflow tools that control the flow of information, with tasks prioritized by his manager, and
- Collaboration tools that enable him to work with colleagues to resolve open items and keep track of decisions.

THE SOLUTION

The MRone robot will create many new opportunities for MR. Senior management let the MRone Engineering team define its own IT setup, from hardware to software. They could define work processes and make connections to other parts of MR and its partner network — as long as they met the release plan.

Engineering decided it needed best-of-breed discipline-specific apps; there was no compromise. They also saw cloud-enabled apps as a way to work more collaboratively and from anywhere. And they knew that they couldn't anticipate every need, so the infrastructure they decided upon had to be scalable and flexible.

Their IT partner, Sofia, told them that an integrated platform is designed to meet their needs. APIs connected native and third-party apps. These apps could be modular for easy scaling and

personalization. Platforms also typically incorporate workflow engines that control who has access to what data and is responsible for the following action in a process.

Software-as-a-Service (SaaS) delivery seemed to be the best way to keep everyone current while reducing cost. The vendor's managed service would lighten the load on IT. Software is hosted by the software vendor (or a third party) and delivered to the user via a browser. The buyer doesn't maintain an expensive IT setup; they typically need only a laptop and internet access. The vendor handles maintenance, version updates, and other support.

For the Engineering team, a SaaS platform means instant access to the latest apps and data, anytime and anywhere — real-time, from an office computer, a laptop from home, and even from a smartphone while at a child's soccer game. In each case, the managed environment ensures that MRone's IP is secure and that all data he accesses is up-to-the-minute.

The team agreed that the most exciting thing about moving to a modern platform is its future potential. An engineering platform that is open and flexible would be able to see MR into the future, perhaps with more CAE, custom-made apps, or deeper supplier collaboration.

SO, HOW DID IT GO?

Yousef and his colleagues did an in-depth evaluation of their domain-specific apps and underlying platform technologies (where those existed). They chose the Siemens Xcelerator platform because its apps are best-in-class. The platform met their current needs and is scalable and flexible enough to adapt to future needs.

The selection process took several months, then Engineering and IT spent several more months on the initial implementation and training. Fine-tuning took place during the initial phases of the MRone design sprint. Even with the move to Xcelerator as a Service, Engineering is meeting its deadlines. The MRone is on schedule, and the prototype shipment will be on plan and budget.

A DAY IN THE LIFE ... NOW

Yousef has seen his productivity soar. He logs in via his browser and quickly navigates to his CAD models, simulation results, requirements repository, and other tools. He can even work from his daughter's soccer game on his smartphone. Yousef uses NXX, the Xcelerator as a Service NX CAD offering, and efficiently collaborates with colleagues using other modeling and simulation apps on the platform. Without constant IT hassles, he's free to let his engineering expertise take over.

Xcelerator as a Service supports Yousef as he works with his team to create exciting and innovative new designs — starting with the MRone.

Cloud, Connected, SaaS. Changing how designers work to be faster, smarter, better.

Schnitger Corporation created this brief at the request of Siemens Digital Industries Software, Inc. For more information or to comment, please visit www.schnitgercorp.com