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Accelerating Product Innovation with the Cloud

How leading companies are using cloud-native solutions to transform product development

Today, leading companies are digitalizing their operations to address the challenges of increased remote work by employees, and the disruption to supply chain and manufacturing caused by the global pandemic. Increasingly, these firms are recognizing that digital-first, cloud-based platforms and solutions are critical not only for the immediate needs they are facing, but also to increase business agility and resiliency for an uncertain future. While it began before the pandemic, the trend towards digitalization has only accelerated. According to *McKinsey & Company*, businesses have "*vaulted five years forward in consumer and business digital adoption in a matter of around eight weeks*" because of the pandemic.

● Moving to the Cloud Accelerates Time to Market

Within product development, digitalization is taking on a new importance. A global survey by industry analyst firm *Tech-Clarity* found that 65% of product executives regard digitalization as "important or critical" to the future of their business. Today, many product organizations are undertaking transformation to improve business agility, ensure access for remote employees, streamline the product development process and accelerate time to market.

One example of this digitalization trend is seen in the work by the world's leading logistics company, DHL. DHL's Digital Manufacturing Group is an internal R&D unit that designs and builds robot-assisted packaging assembly lines for Customers. Using Onshape's built in data management and real time collaboration tools, DHL accelerates the design of business-critical custom machinery, enabling it to deliver on tight deadlines.

Redland Sanders, Technical Director of DHL's Digital Manufacturing Group notes that,

> "*Onshape removes the need for you to manage your own versions. With traditional CAD, you've got a file and you have to make sure that you're really strict and disciplined with your naming convention. That's now baked in and integrated into the design process. You've always got that full chronology, and that's massive.*"

● Remote Real-Time Collaboration Drives Product Innovation

Truly inspired product design increasingly requires agile and flexible solutions that enable remote teamwork and collaboration. In the early days of the global pandemic, medical and government officials issued an urgent call for new design ideas for respiratory ventilators. Boston-based startup *Meter* responded by quickly assembling a design team of a dozen engineers and three dozen extended team members. Their mission: to design and build an affordable, scalable, portable ventilator.

Facing the logistical challenge of almost 50 team members working remotely, Meter used Onshape's cloud-native CAD platform to allow the team to rapidly share ideas, revise concepts and develop a workable design. Against a tight timeline, the Meter engineering team went through *six iterations* to design and manufacture an innovative emergency ventilator in a record 21 days.

● Digitalization Reduces Cost of Product Development

As product firms seek to accelerate time to market and ensure high quality from manufacturing partners, they are seeing the value of cloud-based solutions in the production process.

Kichler Lighting is a leader in energy-efficient, fashion-forward residential lighting solutions. For Kichler, the need for fast, real-time collaboration with its distributed design and manufacturing teams was a primary reason for switching to cloud-based Onshape. Mehul Gala, Sr. Product Development Engineer at Kichler, highlighted the challenge:

> "*Our legacy systems were all file-based and were 2D. We were sending drawings back and forth with manufacturing partners all over the world. It was a cumbersome process that didn't allow for very rich collaboration. (Using file-based CAD), we would end up at factories where we were on revision C, but our team in China would be on revision D and our suppliers would be on revision E somehow. That caused a lot of confusion. (With Onshape), there was a lot of opportunity just around the single source of truth to get all the key players on the same page.*"

One clear benefit of digitalization and the Onshape platform cited by leaders at all three firms has been the reduction of wasted time spent on administrative tasks, including: version control issues, file management problems and lost data. Instead, design and engineering teams can now focus on the work they are most passionate about – designing innovative products.

At a time of accelerating change, cloud-based solutions are helping firms address critical challenges. These include enabling remote access for distributed employees, improving collaboration in the design process, and ensuring manufacturing quality through a more agile and digital approach to business.

Interested in learning more about how Onshape drives business agility with the cloud?

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