Mass personalization
The end of “one-size-fits-all.”

In 1909, Henry Ford announced that Ford was going to build only one car, the model "Model T," and that the chassis would be the same for all cars. He remarked: *"Any customer can have a car painted any color that he wants so long as it is black."* This is a bit of an exaggeration, because the “Model T” was also available in fire-engine red and hunter green.

The “Model T” was a huge success, but as strange as it seems, just as soon as a product becomes popular, somebody starts to think that it would be better if only it were more personalized to their needs. Maybe it’s just human nature, but people like options, and things that speak to their personal style.

Enter the era of mass personalization, where each individual consumer can get what he or she wants. Maybe that’s why 1 in 5 consumers said they would be willing to pay a 20% premium for products or services personalized for them. And brands who are willing to personalize products are also able to build greater trust with their customers. According to an article on digitaltrends.com, the majority of consumers in both the U.S. and U.K. are willing to have trusted retailers use some of their personal data in order to present personalized and targeted products, services, recommendations, and offers.

The results are evident. Today, you can order a personalized storybook with your child as the star. Or, you can use 3D printing to metaphorically unchain people from the idea that they need to rely on certain vendors for goods. Consider, for example, the enterprising college student who 3D printed his own orthodontic retainers for less than $60. People can now 3D print ear plugs that are customized to their ear drums. Almost anything can be personalized. It’s a whole new world, and the consumer is in charge.

Manufacturers are driving and benefiting from the trend, too, for many reasons. Advances in manufacturing and 3D printing enable mass personalization at lower costs and allow manufacturers to rethink their supply chains—all catered to consumer demand. New 3D printing products such as the tiny HP Voxel are allowing radical prototyping, accelerating manufacturing, and increasing the precision and strength of today’s products.

The digitization of manufacturing is bringing long tail economics to physical products. Businesses can postpone production until the last possible moment to allow individual customization. This alleviates inventory excesses and enables “just-in-time” manufacturing with the virtual guarantee that the consumer will purchase the product, because they

designed and asked for it. Businesses that embrace personalization have an opportunity to create a differentiated proposition that may command a premium price, improve consumer traffic, and increase engagement.

The greatest benefit is that personalization does not come with the high expense you'd expect: digital commerce and content, artificial intelligence, and 3D printing are driving costs down. Customers are likely to start co-creating their products. Customers, for example, may start designing and 3D printing their own products for manufacturing. This will have various changes on business strategies and operating models. For instance:

- The use of customer data for both personalized marketing and the development of customized products and services will require a new data governance process and framework that gives consumers control over how their data is used.
- Businesses will have to rethink their supply chains. Suppliers' systems are mostly optimized and designed for producing prearranged amounts of products rather than catering to any unforeseen demand. The supply chain, of necessity, is going to move from the push to the pull model, a difficult premise, but doable and necessary.
- Connected devices used for fitness, communication, and more, will continue to fuel the Internet of Things (IoT) and big data platform, and they can't be ignored for personalization.
- Telecommunications will be radically transformed. The phone's personal assistant will integrate with the user's calendar and location and inform the recipient that the user is in a meeting or traveling, and fix an appointment for the user to call back—all in real-time.

In this heavily personalized world, it's vital to have a centralized, real-time analytical data platform. It must interconnect with several touch points in IoT and leverage XaaS services. Most companies can't do this all on their own. They need assistance and a consistent source of consumer data, as well to put it into action in their supply chains and overall business models.

Whether in B2B or B2C markets, the audience is now reduced to one. This forces a shift from a mass production mindset to one of mass personalization, using the power of data to understand and serve individual customers on their own terms.

4AA7-3475ENW, Rev 1, July 2018