



Data, Technology and People: Shifting Capabilities for the Hybrid World

By Kobi Elbaz

Nobody needed a car until Henry Ford made one that cost only \$850. He didn't invent the automobile, but Ford revolutionized its capabilities by making a car that more closely reflected what people needed at the time. Many of the tech innovations spurred by the disruption of this year and last will follow a similar trajectory.

Most of the tech tools facilitating office-based work today, such as video conferencing technology, have been around for a while, just like the car existed prior to the Model T. But while confidence in—and applications for—technology have grown tremendously during the pandemic, we are bumping up against the limitations of our capabilities. What's needed now are solutions that make tech better, easier and more human.

Society is already embracing a hybrid model where work, home and school will remain blended and linked by technology. Tapping into the best of all worlds requires innovations in business models, devices and infrastructure. It requires staying close to customers, understanding their needs and the outcomes they want to achieve in a hybrid world and being a step ahead in delivering them.

Business models must change

According to a pulse survey conducted by HPⁱ in February, our reliance on virtual forms of connection contributed to a 70 percent increase in internet usage and a 12 percent increase in streaming services. We've also seen the rapid acceleration of business being conducted online by service providers—from doctors to lawyers to made-to-measure shirtmakers. This is happening as much as 10 years fasterⁱ than was anticipated pre-COVID-19.

As more customers see the benefits of online interaction, technology device and service providers must continue to improve online offerings and routes to market, in a virtual spiral that will continue to attract more customers. Those customers won't settle for "good." Any friction in the process will send them to a competitor with a click of their mouse. Amazing digital experiences, the data capabilities to meet customers where they are and the expertise to tailor hybrid solutions for the unique needs of an industry or company are all essential components of earning and maintaining customer loyalty.

Devices designed for a hybrid world

The same HP survey showed that since the pandemic, 94 percentⁱ of people are spending more time on their devices. They're also buying more tech that flexes between professional and personal needs, with growing sales of peripherals like photography kits, video conferencing systems, 12-stream networking routers and powerful port expansion hubs.

But the biggest opportunity lies in the capabilities of our PCs and similar devices, which in the past have not been designed for eight hours of daily video conferencing. For example, most computers still have a 1-megapixel cameraⁱⁱ, compared to 12 megapixels for a smartphone. Yet a global survey HP conducted earlier this year showed that three-quarters of people say they judge the competencyⁱⁱ of others based on the quality of their video and audio in virtual meetings.



Our needs go beyond better cameras and microphones. When you meet in person, even in a formal conference room, you don't just sit there staring at a point on the wall. Your eyes move around the room, and you pick up body language from others. You might even walk around, which for many people inspires new ideas. Maybe you go up to a whiteboard and add some insights. This natural rhythm encourages what's been called "accidental learning."

Our devices must understand these real-world interactions, with cameras that follow us around the room and AI sensors that intuit the cadence of a meeting while backgrounding distractions like doorbells and text messages. These are the demands of the modern workforce that HP and our partners are well-positioned to deliver thanks to HP's expanding suite of hybrid-first devices and solutions.

Infrastructure that gets us where we're going

The greatest new devices will only be as good as the system they plug into. In a school, these systems might consist of targeted online materials to facilitate remote learning. In a business, they might include the cloud technology to share massive amounts of data and complex documents seamlessly.

Bandwidth is key, and here we see glaring inequities around the world. Almost [half the world's population has no access to the internet](#). This bottleneck is throttling everything from education to healthcare to business development. To that end, companies everywhere must commit significant financial and technical resources toward improving digital equity. As part of our rigorous sustainable impact strategy, HP has committed to improving digital equity for 150 million people by 2030. We're advancing that goal, in part, by making solutions and products that are sustainable and equitable by design. Through HP Amplify Impact, our partners are also contributing to the betterment of communities everywhere through technology innovation—an increasingly important differentiator for companies and consumers worldwide.

The essentials needed to evolve

Despite the demands we're all facing to adapt our capabilities, I believe it is possible to feel a sense of balance and connection within the hybrid living we're practicing today. Before the Industrial Revolution, everyone lived and worked in the same place—an agrarian, craft-centered lifestyle that now seems idyllic. So, as we evolve more confidently toward a future with a little office at home and a little home at the office, the next chapter of tech innovation that HP and our partners enable must take us forward—but also a little bit backward, by rediscovering those essential human interactions that defined our lives before 2020 and reimagining them for a more hybridized world.

ⁱ HP 'The One Life + Prosumer Opportunity' Proprietary Report, February 2021

ⁱⁱ HP 'Collaboration Insights' Proprietary Report, January 2021