INNOVATION ENABLED!

In a world where people with **disabilities have been marginalized**—where products, places, and services have been less than accessible to people who didn't fit the **mainstream definition of *normal***—the next decade may deliver a big surprise. In a marketplace where new product development for disabilities has been seen as a niche undertaking at best, the disability space is now emerging as a major hot zone of innovation. Why? A combination of new technologies, new development platforms, and a new quest for ways to become better-than-normal is enabling people with disabilities to become co-innovators, co-producers, and co-marketers of an enhanced future for everyone.

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INNOVATION PUSH:
ENABLED COLLABORATION

Over the past decade, advances in materials, sensor systems, and pharmaceuticals have pushed disabilities solutions beyond crutches and therapies into the realm of *enhancements*. Rather than simply restoring lost functionality, disabilities interventions now seek to extend abilities beyond what has been lost or "missing." Enhancement and extension create new possibilities for everyone, and people with disabilities are defining themselves as the lead users of these enhancements—the first markets.

But they are not simply lead users; they're also becoming lead innovators. They're collaborating in networks to create open-source prosthetics. They're leveraging new rapid prototyping tools and today's flourishing do-it-yourself spirit to create custom solutions that embed intelligence and sensory technology in unexpected new materials. And even when they themselves are not the lead innovators, they're using collaborative tools to find each other, forming networks that amplify their voices and aggregate their power as a lucrative market.

INNOVATION PULL:
FAST FOLLOWERS

At the same time, the markets for adaptive solutions and human enhancement are growing. Of the estimated 54 million people living with disabilities in the United States, only 8 to 10 million self-identify as such. The rest are what we can think of as fast followers in the world of technology adoption: once the solution is out there, they will pull it into the mainstream. And once it's in the mainstream, even people without a disability champion the innovation—like stroller-pushing parents who take advantage of curb cuts designed to make sidewalks wheelchair-accessible.

But the pull forces go beyond new markets that want the advantage of proven utility. In a so-called experience economy, new adaptations and extensions developed for people with disabilities provide new ways for others to experience the world as well. Markets of all ages—from young people looking for a competitive edge to aging boomers hoping to maintain peak performance—are primed for better-than-normal solutions. Where once they sought convenience, performance, and aesthetic innovation in their environment, they are now seeking those same improvements in their bodies and minds.

INNOVATIVE WORLDVIEWS:
THE END OF NORMAL

If disabilities and their adaptations are both seen as sources of innovation, people may move through their days taking on disabilities or enhancements as needed—to provide strategic advantage or to experience the world in new ways. Alternative cognitive and sensory experiences may drive new ways of learning: emulating the brilliant perceptual capacities of a person with autism or using blind adaptations to transform visual data into music, for example, may stand side-by-side with simulations and games as both learning strategies and new forms of entertainment. In fact, turning off "normal" functionality that gets in the way of thinking and performing innovatively—using adaptations pioneered by and for people with disabilities—may ultimately signal the end of the very concept of normal.