Quincy

Anderson is a great guide to help one understand not only just how much has changed, but the nature of that change—a way to take a slow-motion look at the bullet train of technology. Before deciding one is not a "maker," he or she should reconsider. Looking at creativity through a wide lens, we are all makers, running the gamut from hobbyists, tinkerers, bakers and chefs to gardeners, beaders, scrapbookers and cross-stitchers. Follow the bliss and one might be surprised with where it might lead - in a very short time. And because of the internet, we are all connected in ways we are just beginning to imagine, must less utilize.

That printed violin, an acoustical marvel, was made possible because in the digital world, computers can reduce physical objects to a series of algorithms, thereby revolutionizing the way we create. Digital tools allow global manufacturing to work on any scale, in a wide range from a few to million units and in moments, rather than weeks or months. "Small Batch" production can be as lucrative and certainly infinitely more local, yet local can also be global. We have to rethink communication, collaboration and company. Anderson: "This ability _ to manufacture 'local or global' at will - is a huge advantage. That simple menu option compresses three centuries of industrial revolution into a single mouse click...Think of a digital product not as a picture of what it should be, but instead as a mathematical equation of how to make it."

Whereas, we have spent the last decade discovering how to invent, create and collaborate through the Web, a kind of "weightless" economy trading intangible information rather than physical goods, the next decade will be spent learning how digital tools can transform the physical world by simplifying and customizing manufacturing.

This is all brand new. Anderson marks the beginning of the "Maker Movement" with the 2005 launch of Make Magazine and the first Maker Fair gatherings in Silicon Valley, and the 2007 launch of the first open-source desktop 3D printer. Anderson: "Projects, shared, become group projects and more ambitious than any one person would attempt alone. And those projects can become the seeds of products, movements, even industries."

Digital has become universal and is transforming do-it-yourself with a cultural "norm" based upon online sharing and common digital design standards that allow anyone to access commercial manufacturing processes and then take a product to market from the desktop.

Enter the "Maker Spaces" movement. MakeIt Labs, located at 25 Crown St., is New Hampshire's first Maker Space—an all-volunteer non-profit company open 24/7 to its membership. I applaud Mayor Jim Donchess and the city of Nashua for offering this 12,000 square foot building to the Nashua community of "makers" and the volunteers who turned building, which was likely destined for demolition, into an amazing conglomeration of maker spaces. Workstations include an electronic/computer lab, wood shop, machine shop, welding and metal fabrication shop, automotive garage bay, rapid prototyping areas, extensive 3D printing and laser cutting shop. textile station, and plans for a pottery station complete with kilns. It's all free, and available, with a little training.

What began in 2010 as a community of 50 has grown to 250 members. MakeIt Labs, as the largest and most comprehensive maker space in New Hampshire, has since spawned other maker spaces in Portsmouth and Manchester. Anyone can join. Members are taught how to use all the equipment and can sign up for classes in rapid prototyping; woodworking; metal fabrication – you name it.

When I visited MakeIt Labs last week, Adam Shrey and Mike Sullivan gave me a tour, and echoed the MakeIt philosophy: "We're more than a place to work on projects; we're a community. We're a 100 percent volunteer organization, run by people passionate about helping others learn and create. Need help with your idea? Just like discovering new things? Come and be a part of our community of students, hobbyists, engineers, artists and more."

Imagine, as Anderson said, "a market where customers help you develop your products and then pay you for them?"

Visiting MakeIt Labs was an object lesson for me. While I still cherish the object made by hand, from scratch, most of us cannot afford to buy such an object. The fact that someone invented a great-sounding \$70 violin means that suddenly many more children can learn to play the violin. Digital tools transform possibilities—for the hobbyist, the inventor and the customer.

Now is the toughest step of all: to give yourself permission to create. The motto of MakeIt Labs is: "Dream it. Learn it. Make it." What do you want to make?

Van Gogh said: "If you hear a voice within you say, 'You cannot paint,' then by all means paint, and that voice will be silenced."

MakeIt Labs hosts an open house every Thursday – tonight – from 6-9 p.m. Stop by and introduce yourself – no appointment needed. www.makeitlabs.com.

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