



## 3d-Printing!

Don't worry if you've never heard of 3D printing coz it's brand new and in early stages yet, but destined to have a huge impact on the entire global economy.

By the end of this decade, everyone consumers, designers or inventors, not to talk about medical products, will be able to fire up a 3D printer. Those 3D printed models weighed

less than the original but worked just as well and strong. This technology starts a new Era of Radical Change where anyone who knows computer basics can make or invent products on the fly.

Hewlett-Packard, e.g. now offers a high-end unit made for professional use, called "DesignJet Color 3D printer" for \$20,000. As soon it comes to masses those prices become affordable to anyone. SoHo products are already available below \$2k. MakerBot sells their Replicator for \$1,749. Users can download modeling software like TinkerCAD or Sketchup for free to print their own products. 3D Systems recently launched the Cube for \$1,299.

Now just think of what will happen when those prices drop to \$500!

## A definite "wow" factor

Now we talk about mass customization of a wide range of goods, from toys to jewelries to high-tech goods. When this happens, it will doubt free unleash the power of imagination and a massive wave of new innovations. Creativity will increase exponentially. No more need to spend thousands just to have one make a mold before even a prototype can be build.

Two British researchers printed their own spy plane, small, unmanned with a wingspan of about 4.5 feet that soared at 100 MPH in a week. Watch at YouTube, the <u>first flight of its kind.</u>

The European aerospace EADS also uses this technology to make specialty aircraft parts. Yet just with small items, but with a long-term goal to print the entire wing of a jet.

German supplier EOS says it gets parts orders from car and aerospace firms and dentists. They says they can create up to 450 dental crowns a day, even make parts for a violin that was then played by a concert violinist.

## \$1 trillion in this decade...

Manufacturing accounts for 17% or \$10.2 trillion of the global economy. If 3D printing captures 10% of that, it a \$1 trillion! Hence lots will invest directly in this technology, or in firms using it. **Time to open your eyes on its possibilities, if you won't miss the Next Big Bang that will change the future!** 

http://www.youtube.com/watch?v=jQ-aWFYT\_SU&feature=player\_embedded%23! http://www.youtube.com/watch?v=kRDg4UB9Ajg&feature=player\_embedded http://www.wired.co.uk/news/archive/2011-09/20/3d-printed-stradivarius-violin-eos

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