When considering a 3D printer, the industry in which you work for has a huge play in what you get. There are quite a few printers that exist today; in fact, over 60 are currently being sold commercially. Thankfully, this industry is growing so that product developers, concept artists, engineers, and hobbyists can afford to take part in this fascinating technology. Currently, 3D printing is worth about 1.7 billion dollars. The 3D printing industry is projected to be worth 3.7 billion in the year 2015. As this growth continues, 3D printing will continue to grow more and more available.

Until recently, 3D Printing has been targeted mainly at big engineering firms, Hollywood, dental, and casting industries. This technology is incredible in my opinion, but it is also expensive in quite a few situations. The chances of the average consumer owning a 3D printer in their home would be like the chances of an average American owning a television in the 1940's and 1950's. It is possible, but expensive! Even then, the television would be 4 inches by 4 inches in some cases! However, 3D printing is just now becoming available for everyone.

Let's take a look in some of the newer 2012 3D printers, particularly the "desktop" printers.



## #1 Stratasys's Mojo Printer

Very recently, Stratasys launched the Mojo 3D Printer which is exceptionally helpful for this home-printer-movement. This printer holds the width of a large traditional paper printer with a taller build that offers large prints for its size, offering 5 inch x 5 inch x 5 inch prints out of ABS thermoplastic. The detail and speed is exceptional for a printer at this price; prototypes can be developed within a day! This printer costs less than \$5,000, and in my opinion, is the number one contender for the home 3D printing movement. Technology like this is incredibly helpful for consumers and small businesses, as it introduces them to the fascinating technology known as 3D printing!



## #2 3D System's Cubify

3D Systems recently came out with its newest home 3D printer, Cubify. This printer comes at a low price of \$1299, and creates larger prints than Mojo with a larger variety in color! It may not have quite the detail level of Mojo, and it doesn't offer support materials, but this printer may be putting Makerbot out of business. Cubify will support an open source 3D printing design community similar to Thingiverse.



#### #3 Objet30 Pro Desktop

On May 22nd, Objet launched its newest printer – the Objet30 Pro Desktop. This machine has a price that's relevant to small businesses and desktops, but it has a couple special "powers". This 3D printer uses 7 materials with Objet's patented multi-jet technology. That means that the Objet30 Pro can use 7 materials in one print! This is an awesome printer in my opinion!



#### #4 PP3D's UP Mini Printer

PP3D just launched their newest printer, the UP Mini Printer series. It is small, and creates small prints at 4.7" x 4.7" x 4.7" but this machine comes at an awesome price of \$899. This machine might not be the absolute best for rapid-prototyping excellent parts, but it definitely holds its own when compared to other hobbyist printers. Oh, and did I mention that it only costs \$899. That's cheap!



## #5 Michael Joyce's B9 Creator

Michael Joyce turned to kickstarter for funding for his new 3D printer idea, and he found it! The B9 Creator is the first home SLA printer. This machine uses ultraviolet light to cure liquid resins into real figurines at only \$2,375. It's interesting in my opinion to see a quality 3D printer manufactured for cheap – by an individual.

#### Pretty interesting stuff in my opinion, which is your favorite?

Published in <u>Blogs</u> Tagged under

- home 3d printer

<u>1 Comment</u> Read more... Thursday, 10 May 2012 09:24 **10 Ways 3D** 

**Printing Will Blow Your Mind** 

Written by Chris Waldo What Is This 3D Printing?

The technology I'm going to talk to you about is 3D Printing. It is a pretty interesting technology, and nowadays it can create some serious stuff! If you don't know much about 3D printing, it's essentially the layer by layer assembly of three dimensional products out of various materials through laser melting or other methods. I want to show you some of the more interesting applications of 3D printing. Check out the top 10 applications!

#### **#1 3D Printing Artificial Veins**



(Photo credit: Inhabit.com)

Wow, that's all I have to say towards this. 3D printers are using cells, or "bio-ink" as the material to create functional parts! Simple body parts such as this artificial vein, urethras, and bladders are already being developed. How awesome will it be when we can print hearts, lungs, and kidneys?

"The printer is meant to be used in regenerative medicine. Instead of borrowing body parts from someone else — or yourself — the printer will just make a new part for you. The printer is loaded with cartridges of "bio-ink" a substance that acts as a kind of scaffolding for the cells to retain their shape"

Read more from the source Here

#### **#2 3D Printing Minecraft Creations**



[Photo credit: Postapocalyptic]

With Mineways, a new 3D software, you can export your Minecraft models into a 3D printable format. What does this mean? You can now create your Minecraft creations!

"Sure, those gigantic tributes to Italian plumbers look great on your PC screen, but sometimes you want something a little more tangible. That's exactly what Mineways lets you do. Yep, it's another demonstration of why we all need a 3D printer in our life."

Read more from the source Here

## #3 3D Printing In The Movie Industry



(Photo credit: Objet)

3D Printing has done it again, this time with the movie industry. When it came down to actually creating parts to the Ironman suit, Objet, a 3D printing company, didn't have a problem doing it!

"When director Jon Favreau and Paramount Pictures were making the hit 2010 film, they needed to find the best way to put together a physical Iron Man suit for certain scenes in the movie that couldn't be computer generated."

Read more from the source Here

## #4 3D Printing An Engine



(Photo credit: Stratasys)

Stratasys, a 3D printer manufacturer, has outdone itself with the prototyping and testing of the AMR-One engine.

"The Stratasys Dimension Printer was used to mock up the chassis, driver controls and engine of the race-car. The 3D printer produced prototypes for concept and testing of Aston Martin's new chassis."

Read more from the source Here

#### **#5 3D Printing In The Dental World**



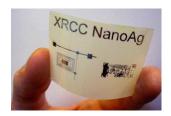
(Photo credit: engatech.com)

Need to have a crown put in? Look no further, 3D printing can save the day! With the option to scan and x-ray your jaw, precise parts can be created specifically for you.

"By incorporated CAD/CAM automation into their strategic business models, dental labs are able to save time and labor, while at the same time improve the quality and precision of dental parts they manufacture."

Read more from the source Here

#6 Paper Thin Solar Energy?



(Photo credit: Xerox)

Xerox is beginning to print silver at a melting temperature below the point of plastic. What does this mean? Conductors, semiconductors, or dielectrics are being developed now through this technology; what is next? With this advancement, we are one step closer to creating paper thin solar strips – possibly through 3D printing. "Crafted into different versions which can act as conductors, semiconductors, or dielectrics, this silver ink could allow users to print integrated circuits onto plastic, fabric, or film. Thin and flexible, this technology may be the key to paper-thin solar cells, adaptable sensors, and many other sought after devices."

Read more from the source Here #7 A 3D Chocolate Printer



(Photo credit: Cornucopia)

Prototyping new products and creating custom models is what the 3D printing industry revolves around. Now it's being used to create snacks?! I felt that I had to mention this 3D printer. "The Digital Chocolatier is a prototype for a machine that allows users to quickly

design, assemble and taste different chocolate candies. This machine is composed of three primary elements: a carousel of ingredients, a thermoelectric deposition cup and a user interface."

Read more from the source Here #8 3D Printing For Architecture



(photo credit: oficynagroup.com)

Architects are using 3D printing as a new way to show off their prospects to clients. A full color model is cooler than a sheet of paper if you ask me!

"3D printing technology is a new method of prototyping. It is perfect for creating professional architectural mock-ups and prototypes for production, advertising, medicine, education."

Read more from the source Here

#### **#9 3D Printing A Titanium Jaw Implant**



(Photo credit: ZDNET.de)

Doctors and engineers in Belgium developed a titanium jaw replacement for an 83 year old woman! I think it's pretty significant to watch how much the 3D printing industry will be affecting the medical world.

"3D printers are continuing to force their way into medical circles and the latest beneficiary is an 83-year old woman. She's the first to receive a titanium jaw crafted by those not-so dimensionally-challenged printers."

Read more from the source Here

# **#10 Custom 3D Printing**



(Photo credit: Kraftwurx)

3D printing can create custom parts for virtually anything. If you're trying to restore a 50's Bentley, where are you going to find a spare door handle? Maybe you're a character developer, and simply want to put your work out there. 3D printing can be the solution you need to create custom parts. 3D printing is a crazy technology -- you can create virtually anything! Anyone can be involved with 3D printing. If you have a computer, and free 3D software, you can create your own custom products! This laser technology isn't as expensive as you'd think!