The Home 3D Printer Movement

Posted by Waldo - 2012/05/21 11:56

When considering a 3D Printing machine, 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.

Currently, 3D Printing is 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! This is a great analogy in comparison to 3D Printing.

3D printers can cost just over a thousand dollars, but typically range well over $50,000. It all depends on what you're getting. Many Selective Laser Sintering (SLS) and Stereolithography (SLA) printers cost well over $100,000, and jump over $400,000 in many cases. This number can be compared to purchasing a nice house in suburbia. Some large scale engineering firms can afford to have a printer like this laying around in the office for prototyping, while others contract 3D printing services.

However, recently there has been a trend for the production of office and home 3D printing machines. Makerbot has launched a line of "thing-o-matic" machines which focus on Fused Deposition Modeling (FDM) technologies in September of 2010. This 3D printer did a mediocre at best job of assembling products in comparison to the "big" printers, but placed 3D printing technologies in the hands of hobbyists. This technology was sold at $1,099 unassembled, and $2,400 fully assembled as of December 11th, 2011. The Makerbot industry helped create a series of crude 3D printers which could do some manufacturing under limited terms, but nonetheless it put 3D printing technologies in the hands of hobbyists and consumers!

Stratasys's Uprint Plus series helped influence the home printer movement as well. This printer also offered FDM technology like Makerbot, but was much more efficient and effective. Through payment plans and leasing, this technology could be considered available for consumers and small businesses, but still stands at a hefty price. It costs over $20,000.

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!

3D systems recently just launched the cube 3D printer which hosts FDM technologies similar to the Mojo. The cube offers a build envelope of 5.5 inches x 5.5 inches x 5.5 inches and multiple colors to choose from.

This could change very quickly however; Objet is launching a new 3D printer on May 22nd, 2012. The specs aren't released just yet, but Objet has implied through previews that this model may be a home

printer. Only time will tell!

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Either way, 3D printing is on the rise and the trend is focused at home printers. Maybe in the next few years, we'll be able to swing by walmart and grab a desktop 3D printer!

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