


Bloomberg Businessweek
Go To Businessweek.com

Sign in with Facebook  Connect w/ Facebook Or use your Businessweek account
Email Password [Forgot password](#) ☐ Remember me Not registered? [Sign up.](#)
[Bloomberg.com](#) | [Businessweek.com](#) | [Bloomberg TV](#) | [Premium](#)
[Bloomberg Businessweek](#)

Technology



Search

- [Global Economics](#)



- [China: For Many Expats, It's Not Worth It](#)

With a slowing economy and endless red tape, foreigners decide it's time to pack up

- [Global Economics](#)

- [Are Asian Markets Ready for a New Global Shock?](#)
- [EU Forces Facebook to Kill Face Recognition \(for Now\)](#)
- [Is Now the Right Time to Invest in Libya?](#)
- [Salamworld, the Social Network for 'Core Muslim Values'](#)

- [Recent](#)

- [The Economics of Pussy Riot on YouTube](#)
- [A Federal Reserve Dove Emerges in Michigan Speech](#)
- [It's Just a Phone](#)
- [The Frontier Markets' Resurgence](#)
- [The Odyssey of a Greek in Search of Work](#)

- [Sections](#)

- [China](#)
- [Current Events Calendar](#)
- [U.S. Economy](#)
- [India](#)
- [Energy](#)
- [Housing](#)
- [Europe](#)
- [Global Economics](#)
- [Jobs](#)
- [Blog: EconoChat](#)

- [Companies & Industries](#)



[Turkey's TV Housewives Are Desperate, Too](#)

American TV shows increasingly are customized for foreign markets

◦ [Companies & Industries](#)

- [Apple Stores a Key Part of iPhone 5 Sales Strategy](#)
- [Why Should More Women Be on Corporate Boards?](#)
- [The Wheelman Driving Chrysler's Big Sales](#)
- [Gulf Fisheries Rebounding from BP Oil Spill](#)

◦ [Recent](#)

- [How Not to Catch a Terrorist](#)
- [Charlie Rose Talks to Twitter CEO Dick Costolo](#)
- [Foreign Versions of U.S. TV Shows](#)
- [Turkey's TV Housewives Are Desperate, Too](#)
- [Jim Rogers, the CEO Who Wouldn't Leave](#)

◦ [Sections](#)

- [Autos](#)
- [Sports](#)
- [Company Research](#)
- [Energy](#)
- [Executive Research](#)
- [Health Care](#)
- [Job Search](#)
- [Blog: The Management Blog](#)
- [Management](#)
- [Manufacturing](#)
- [Telecommunications](#)
- [Transportation](#)

• [Politics & Policy](#)



[Spoiler Alert: Meet Gary Johnson, Libertarian](#)

The third-party presidential candidate is on the ballot in 47 states

◦ [Politics & Policy](#)

- [Romney Releases 2011 Taxes: 14.1% Tax Rate](#)
- [Congress to Let Government Farm Programs Expire](#)

- [Do Personal Income Tax Cuts Foster Growth? Again, No](#)
- [Rethinking Robert Rubin](#)

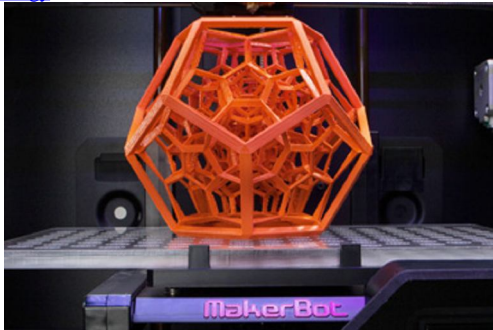
- [Recent](#)

- [A Federal Reserve Dove Emerges in Michigan Speech](#)
- [Deficit Hawks Balk as Government Cuts Become Real](#)
- [How Not to Catch a Terrorist](#)
- [Spoiler Alert: Meet Gary Johnson, Libertarian](#)
- [Ohio's Bruising Senate Fight](#)

- [Sections](#)

- [2012 Campaign](#)
- [Congress](#)
- [Courts](#)
- [Legislation](#)
- [White House](#)
- [Blog: Joshua Green on Politics](#)

- [Technology](#)



- [The Era of Retail 3D Printing Begins](#)

MakerBot has just opened a retail store in New York to show off its 3D printers and related goods

- [Technology](#)

- [Apple Poised for Record-Breaking iPhone Debut](#)
- [Elon Musk: Disappointed Google Maps Isn't on iPhone 5](#)
- [Ancestry.com's Genealogical Juggernaut](#)
- [EA Sports FIFA Soccer's U.S. Boom](#)

- [Recent](#)

- [The Economics of Pussy Riot on YouTube](#)
- [EU Forces Facebook to Kill Face Recognition \(for Now\)](#)
- [It's Just a Phone](#)
- [Salamworld, the Social Network for 'Core Muslim Values'](#)
- [Charlie Rose Talks to Twitter CEO Dick Costolo](#)

- [Sections](#)

- [Apple](#)
- [Apps & Software](#)
- [CEO Tech Guide](#)
- [Consumer Electronics](#)
- [Facebook](#)
- [Google](#)
- [Mobile & Telecom](#)
- [Personal Technology](#)
- [Science & Research](#)
- [Social Media](#)

- [Markets & Finance](#)



[Welcome to Lehman Brothers. We're Open for Business](#)

It's going to be liquidating some \$39 trillion in assets until the year 2017

◦ [Markets & Finance](#)

- [Rethinking Robert Rubin](#)
- [Three Bailout Kingpins Make Good in the Private Sector](#)
- [Knight's Tom Joyce: 'Our Problem Was an Error'](#)
- [Bid & Ask: The Deals of the Week](#)

◦ [Recent](#)

- [The Frontier Markets' Resurgence](#)
- [Can Timber Rebuild Harvard's Endowment?](#)
- [A Shortage of Bonds to Back Derivatives Bets](#)
- [European Banks Postpone Their Diet](#)
- [Rethinking Robert Rubin](#)

◦ [Sections](#)

- [Banks](#)
- [Commodities](#)
- [Currencies](#)
- [Hedge Funds](#)
- [Investing](#)
- [Mutual Funds & ETFs](#)
- [Private Equity](#)
- [Real Estate](#)
- [Regulation](#)
- [Stocks & Bonds](#)
- [Wall Street](#)

• [Innovation](#)



[Book Review: 'Makers,' by Chris Anderson](#)

Can a new generation of do-it-yourselfers lead the next industrial revolution? The editor-in-chief of *Wired* thinks so

◦ [Innovation](#)

- [Musk: 1 Million Electric Cars on Road in 6-8 Years](#)
- [Wireless Stadiums: The Next Best Thing to Not Being There](#)

- [Pete Koomen: The Quest for More Clicks](#)
- [Wired Editor-In-Chief on the Future of 3D Printing](#)

◦ [Recent](#)

- [The Era of Retail 3D Printing Begins](#)
- [Pete Koomen: The Quest for More Clicks](#)
- [Smarter Robots, With No Wage Demands](#)
- [Sandy Antunes: Building Satellites to Listen to Space](#)
- [IBM Wants to Put a Watson in Your Pocket](#)

◦ [Sections](#)

- [Copyright](#)
- [Fix This/Cyber Security](#)
- [Innovators](#)
- [Patents](#)
- [Privacy](#)
- [Reinventing Business](#)
- [Trademarks](#)

• [Lifestyle](#)



◦ [Inside China's Star-Making Machine](#)

The Chinese government wants to create a pop star who'll outshine its dissidents on the world stage. Enter Ruhan Jia

◦ [Lifestyle](#)

- [Wristwatches for the Boardroom](#)
- [Turkey's TV Housewives Are Desperate, Too](#)
- [Ancestry.com's Genealogical Juggernaut](#)
- [Book Review: 'Makers,' by Chris Anderson](#)

◦ [Recent](#)

- [Office Bag Lunch: BBQ Chicken Sandwich From Dinosaur Bar-B-Que's Pit Master John Stage](#)
- [Preteen Oversees Doll Mini-Empire](#)
- [Turkey's TV Housewives Are Desperate, Too](#)
- [Wireless Stadiums: The Next Best Thing to Not Being There](#)
- [Dial It Up](#)

◦ [Sections](#)

- [Books](#)
- [Entertainment](#)
- [Fashion](#)
- [Food & Drink](#)
- [Gadgets & Accessories](#)
- [Hard Choices](#)
- [Next Life](#)
- [Sports](#)
- [Travel](#)
- [Workplace](#)

- [Business Schools](#)



- [Hot Jobs: Google, KPMG, P&G Top 2012 Ranking](#)

For the fourth consecutive year, Google takes the top spot in Universum's global ranking of the most coveted employers among business students

- [Business Schools](#)

- [USC Unveils Unique Business Program on Three Continents](#)
- [Top B-Schools With the Best Financial Aid](#)
- [MBA Pay: Peering Into the Future](#)
- [Special Report: Best Undergraduate B-Schools 2012](#)

- [Recent](#)

- [Rival B-Schools Hit the MBA Admissions Trail, Together](#)
- [B-School Highlights: Sept. 21](#)
- [B-School News Roundup](#)
- [MBA Alumni in the News: Sept. 20](#)
- [College Students Top Employers 2012](#)

- [Sections](#)

- [B-School Calendar](#)
- [Compare B-Schools](#)
- [Financial Aid](#)
- [Finding a Job](#)
- [Forums](#)
- [MBA Admissions](#)
- [Rankings & Profiles](#)
- [Undergrad Programs](#)
- [Blog: Getting In](#)
- [Blog: Business School Explained](#)

- [Small Business](#)



- [Salamworld, the Social Network for 'Core Muslim Values'](#)

Istanbul-based Salamworld will foster Islamic values and filter out objectionable content

- [Small Business](#)

- [Smarter Robots, With No Wage Demands](#)
- [Big Data Can Make a Big Difference in Marketing](#)

- [South Korea's Startup Surge](#)
- [Sell More Online This Holiday Season](#)

- [Recent](#)

- [Deficit Hawks Balk as Government Cuts Become Real](#)
- [When Moms Who Run Businesses Take Maternity Leave](#)
- [Sell More Online This Holiday Season](#)
- [States Pass 'Baker's Bills' to Lift Struggling Households](#)
- [My Life as a TaskRabbit](#)

- [Sections](#)

- [Advice](#)
- [Benefits](#)
- [Blog: The New Entrepreneur](#)
- [Commentary](#)
- [Financing](#)
- [Legal Documents](#)
- [Logistics](#)
- [Marketing](#)
- [Policy](#)
- [Profiles](#)
- [Taxes](#)
- [Technology](#)

- [Video & Multimedia](#)

- [Slideshows](#)



▪ [Wristwatches for the Boardroom](#)



▪ [Foreign Versions of U.S. TV Shows](#)



▪ [College Students' Top Employers 2012](#)



▪ [Parent Power: The School Takeover Movement](#)

- [Photo Essays](#)



▪ [Tin Mining on Bangka Island](#)



[Bob Iger at Disney California Adventure](#)

○ [Charts](#)



[An IOU for Every Man, Woman, and Child](#)



[Long-Distance Relationships](#)

○ [Videos](#)



[See the Pablo Picasso Pen That Retails for \\$33,000](#)



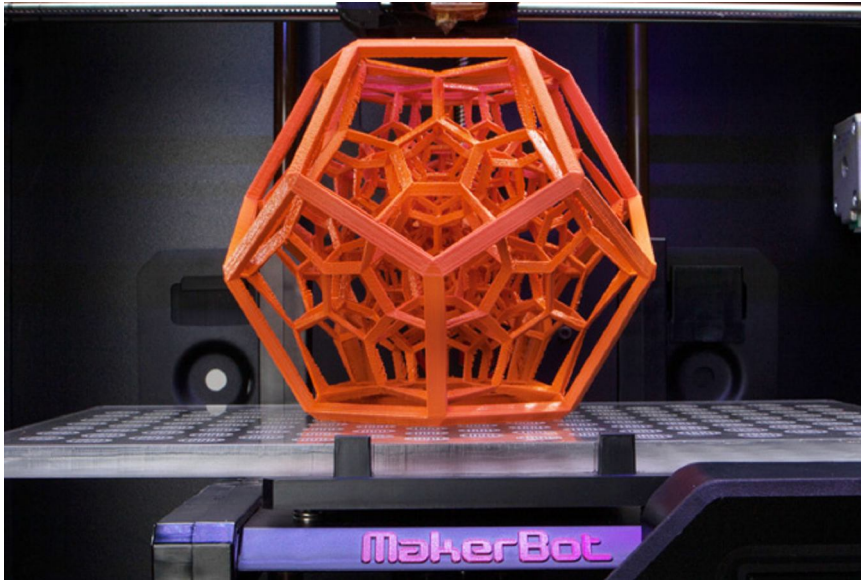
[Musk: Tesla Will Make Cars of All Kind](#)



[How to Sell Candy-Apple Red Ferraris in a Recession](#)



[Apple Stores a Key Part of iPhone 5 Sales Strategy](#)



Photograph Courtesy Makerbot

Consumer Electronics

The Era of Retail 3D Printing Begins

By [Ashlee Vance](#) on September 21, 2012

- [Tweet](#)
- [Facebook](#)
- [LinkedIn](#)
- [Google Plus](#)
- [12 Comments](#)
- [Email](#)
- [Print](#)

Related



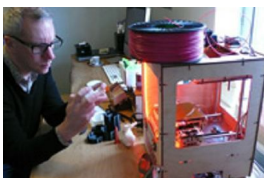
[Slideshow](#)

[Why Your Office Needs a MakerBot Printer](#)



[Video](#)

[3D Printing Goes Mainstream](#)



[Story](#)

[A MakerBot for the Office](#)



[Video](#)

[3D Systems CEO Shows Model Printing Technology](#)



[Video](#)

[DIY: The Magic of 3D Printing](#)



[Video](#)

[Wired Editor-In-Chief on the Future of 3D Printing](#)



[Story](#)

[Tanorexic Mom Now an Action Figure, Thanks to 3D Printing](#)



[Story](#)

[Bre Pettis: 3D Printing's First Celebrity](#)



[Story](#)

[How About Them Gams: 3D Printing Custom Legs](#)



[Slideshow](#)

[3D Printing Is Getting Cool](#)



[Story](#)

[3D Printers: Make Whatever You Want](#)

Companies Mentioned

- [AMZN](#)

Amazon.com Inc

- \$257.47 USD
- -3.34

- -1.3%

- [DDD](#)

3D Systems Corp

- \$35.07 USD
- -0.12
- -0.34%

- [HPQ](#)

Hewlett-Packard Co

- \$17.59 USD
- -0.17
- -0.97%

Market data is delayed at least 15 minutes.

Company Lookup



A quirky kind of store has opened up at 298 Mulberry Street in downtown Manhattan. It's the first retail location for MakerBot, one of the leading consumer 3D printer companies. People can come in, look at a variety of printed objects, and buy 3D printed knickknacks like watch bands and little plastic squirrels for their friends. They can also check out the just-released [Replicator 2](#) printer from MakerBot that costs \$2,199 and lets people build larger, more precise objects than its predecessors could. (It's aimed at professional designers who want an object factory on their desk.)

I've been waiting a while for one of the 3D printer makers to go the retail route, and it's quite something to see the initial store appear in New York. Through MakerBot and Shapeways, in particular, New York has emerged at the hotbed of the consumer 3D printing scene. ([Shapeways](#) is sort of like the Amazon.com ([AMZN](#)) of 3D printing. It lets people order objects made out of plastic, glass, metal, and other materials, and then prints the objects and mails them off.) Later this year, in fact, Shapeways will also open a 3D printing factory in Long Island City and have an area where people can see how these objects get made.

Silicon Valley, for some reason, has shown very little interest in 3D printing. There's a couple of startups like Bespoke Innovations, newly acquired by the giant 3D Systems ([DDD](#)) (which I profiled [earlier this year](#)); and Made In Space, a company that is experimenting with zero-gravity 3D printing so that one day space missions could save weight by printing objects they need after launch. Overall, though, venture capitalists have ignored the technology, and even a printing giant like Hewlett-Packard ([HPQ](#)) has only managed a reseller deal around commercial 3D printing systems. It's said nothing about making its own machines or having consumer aspirations.

To have a look at how good the consumer models have gotten, check out Bre Pettis, the MakerBot chief executive officer, in [this demo](#) of the new Replicator. Or have a peek at [the Cube](#) from 3D Systems, which costs \$1,299. With these two systems, the hardware has started to move well beyond the crude, hobbyist stage. Just as important, the software is catching up, so that true amateurs—and not just engineers—can design their own models and print them with relative ease.

[Vance](#) is a technology writer for *Bloomberg Businessweek*.

- [Tweet](#)
- [Facebook](#)
- [LinkedIn](#)
- [Google Plus](#)
- [12 Comments](#)
- [Email](#)
- [Print](#)

SPECIAL OFFER • SUBSCRIBE NOW & SAVE UP TO 81% ▶

Reader Discussion Showing 12 [Comment now](#)

[Email alerts](#) [RSS](#) Real-time **paused**. ([Resume](#)) [Sort by Popular now](#)

[Malcolm White](#), 09/21/2012 01:43 PM

The Playboy centerfold will never be the same again.

6 people liked this. [Like](#) [Reply](#)

[AdamSmith](#), Yesterday 03:54 AM

...

goo.gl/zVCyI

Like

AdamSmith, Yesterday 03:54 AM

Michael replied I am taken by surprise that any one can earn \$6151 in 4 weeks on the network. did you look at this(Click on menu Home)

Like

Jules Ryckebusch, 09/21/2012 08:50 PM

This is the start of a real revolution. Just as the first digital camera's and ink jet printer did. At the time Kodak said "They will never replace film" Even though they invented the digital camera... How wrong they were. Game changer in so many ways.

1 person liked this.

Like

Reply

cas127, 09/21/2012 08:18 PM

Pffft!!

Dropping a store into insanely overpriced downtown Manhattan (where next, Rodeo Drive?) - says one thing - insanely overpriced hipster toy (think currently successful reality-distortion-field supremo *Apple*).

If there were a real market in the offing then this product would be getting pitched to engineers - not the blue-hair dowagers and trust-afarians who shop in Manhattan.

1 person liked this.

Like

Reply

LevonTostig, Yesterday 08:37 AM

Hate is your blindfold, ignorance, your chains.

1 person liked this.

Like

sanchit12, Yesterday 03:13 PM

lol reality distortion field. good job stealing that from Walter Isaacson's book.. in case you haven't heard, 3D printing can be used for much more than "toys". by the way, I am an engineer and fyi: 3D printing has been used for rapid prototyping for quite a while now.

Like

Dennis Werner, 09/21/2012 04:46 PM

I've been waiting over 15 years for these things to come down to our level. The days of the old XYZ laser solidifying in a tank of liquid are finally gone.

1 person liked this.

Like

Reply

Don, Today 04:41 AM

Donald F. Mackay, P.E.

It could have possibilities as a means to create complex 3-D shapes in plastic. These shapes could then be used as patterns in traditional molding processes to mass produce metal or plastic castngs.

Like

Reply

Jim Bullis, Miastrada Company, Today 02:54 AM

Sorry folks, this is not what it seems from the promotions.

It could be useful, but in very limited ways.

First, we are talking about plastic products. That only gets us so far. Then we are looking at a process that is much slower than injecting molding.

It is a cute trick when plastic serves and a complex item is needed.

Look at the Miastrada Dragon on youtube and see what parts could be printed. I don't see much.

Like

Reply

Arif Fatehi, Yesterday 06:42 AM

I hope it cannot create more guns

Like

Reply

Ryan O'Boril, Yesterday 03:31 PM

Anything can be used for good or evil

1 person liked this.

Like

Like

Join the Discussion

Post as ...

Comments without profanity or abusive language are automatically posted to the site. Bloomberg BusinessWeek reserves the right to delete comments that are off-topic or offensive. Excessively long comments may be moderated as well. Bloomberg cannot facilitate requests to remove comments or explain individual moderation decisions.



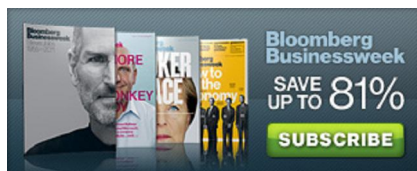
Business Exchange What your peers are reading.

Last Update 07:15 am Most Popular

- [Read](#)
- [Shared](#)
- [Discussed](#)
- [China: For Many Expats, It's Not Worth It](#)
- [The Era of Retail 3D Printing Begins](#)
- [David Pogue, John Gruber on iPhone 5 Debut](#)
- [Apple's Lightning Connector Heralds the End of Docks](#)
- [Rethinking Robert Rubin](#)
- [The Economics of Pussy Riot on YouTube](#)
- [Wireless Stadiums: The Next Best Thing to Not Being There](#)
- [Ancestry.com's Genealogical Juggernaut](#)
- [China: For Many Expats, It's Not Worth It](#)
- [The Era of Retail 3D Printing Begins](#)
- [David Pogue, John Gruber on iPhone 5 Debut](#)
- [Ronald Reagan and the 47 Percent](#)
- [IBM Wants to Put a Watson in Your Pocket](#)
- [Harvard-Grad Model Ditches Goldman, Lights Up Web](#)
- [Elon Musk, the 21st Century Industrialist](#)
- [Report: 4 injured after explosion at kosher store](#)
- ['Berlin Man,' doctor convinced HIV cure is real](#)
- [Romney Faces Challenges Amid Republican Criticism After Stumbles](#)
- [Romney Reframes Donor Remarks While Refocusing on Economy](#)
- [Romney Distracted by Comments on Government-Dependent 'Victims'](#)
- [What Mitt Romney Got Wrong About the 47 Percent](#)
- [Romney refocuses as Obama decries 'victim' claim](#)
- [Apple Maps Lose Way With iPhone App Victim to Google Feud](#)

Last Update 07:21 am [News from Bloomberg](#)

- [Romney Delays Swing-State Visit to Woo Donors in California](#)
- [Daredevil Enders Woos Governments He Wants Out of EADS-BAE](#)
- [Redbox-Verizon Streaming to Challenge Netflix by Year-End](#)
- [Harvard-Grad Model Ditches Goldman, Lights Up Web](#)
- [Wal-Mart Must Face California Bias Case, Judge Rules](#)
- [Apple Asks Judge for More Damages in Samsung Patent Case](#)
- [Rebels Move Command to Syria as Activists Say Military Kills 180](#)
- [Libya Gives Militias 48 Hours to Abandon Bases Near Capital](#)



[Ads by Google](#)

- [MBA Without Bachelor](#) For Managers Top British Online MBA in 18 Months -Recognized Worldwide [college.ch](#)
- [Top Ranked Global MBA](#) Ranked #2 in the World by Financial Times. Designed for Top Executives. [www.triუმemba.org](#)
- [Executive MBA \(Part-time\)](#) The City University of New York EMBA (Finance) - \$53000 Grant [www.Aventis.edu.sg](#)

Videos You Might Like

by Taboola





Seen from Space: Billionaire Sheikh's Nam...



Harvard-Grad Model Ditches Goldman, Lights ...



Sponsored Links

[Buy a link now!](#)

Bloomberg Businessweek special reports offer valuable perspectives and analysis. Visit today to join an important business conversation.

Elsewhere on Businessweek.com



[Fix This/Cyber Security](#)



[Welcome to Lehman Brothers. We're Open for Business](#)



[New Jersey Proposes Law Requiring Dog Seat Belts](#)



[Preteen Oversees Doll Mini-Empire](#)



[Harvard-Educated Model's High Fashion Site](#)



[How Not to Catch a Terrorist](#)



[Rare 2-Ton Blue Whale Spotted Off Aussie Coast](#)



[Apple Fans Line Up in London for iPhone 5](#)



[End of the Arab Spring?](#)



[One Europe, Many Tribes](#)



[Eccentric Entrepreneurs: Giant Jelly & Alcohol Mist](#)



[CEO Guide to Virtual Offices](#)

Social

- [Follow us on Twitter](#)
- [Join us on Facebook](#)
- [Connect with us on LinkedIn](#)
- [Subscribe to Bloomberg Businessweek](#)
- [Bloomberg](#)

Links

- [Our Company](#)
- [Advertising](#)
- [Careers](#)
- [Feedback](#)
- [Custom Publishing](#)
- [Manage Subscription](#)
- [Mobile](#)
- [Newsletters](#)
- [Privacy Policy](#)
- [Reprints & Permissions](#)
- [Sitemap](#)
- [Terms of Use](#)
- [\[+\] Rate This Page](#)

Get Businessweek Delivered



[Rethinking Robert Rubin](#)

[Subscribe](#)

@2012 Bloomberg L.P. All Rights Reserved. Made in NYC [Ad Choices](#)

blog comments powered by [DISQUS](#)