



Aalto University  
Media Factory

# Digital\_Fabrication\_Studio.01

## Media, Business, Platforms

Massimo Menichinelli

massimo.menichinelli@aalto.fi

@openp2pdesign

<http://www.slideshare.net/openp2pdesign>





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This afternoon:

- \* **The Media ecosystem of Fabbing**
- \* **Platforms for Fabbing and projects**
- \* **Business models for Open projects**



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01.

# The Media ecosystem for Digital Fabrication, Open Design and DIY

# Wired

The screenshot shows the homepage of wired.com. At the top, the word "WIRED" is displayed in large white letters against a black background, with a "Subscribe" button to its right. Below this, there are several news articles:

- ULTRA-HIGH-SPEED INTERNET**: **Google Fiber Splits Along Kansas City's Digital Divide** (11 hours ago). Includes a map of Kansas City color-coded by Google Fiber coverage.
- GETTING A FACE LIFT**: **How Katy Perry Inspired LinkedIn's Global Redesign** (12 hours ago). Includes a photo of two men, one pointing at the other's face.
- NEW MOVIES**: **Underground Brings Drama to Julian Assange's Teenage Hacker Days** (10 hours ago).
- VIDEO GALLERY**: **12 Awesomely Inspiring Paralympic Moments** (18 hours ago). Includes a photo of a Paralympic athlete in mid-air.
- WIRED OPINION**: **AT&T's FaceTime Blocking Hurts the Deaf** (15 hours ago).

Below the main news section, there are more articles in a grid format:

- WAR PLANS**: **U.S. Attack on Iran Would Take Hundreds of Planes, Ships, and Missiles** (09.07.12). Includes a photo of three fighter jets in flight.
- A DIFFERENT MOLD**: **New App Lets Users Design and 3D-Print iPhone Cases** (11 hours ago). Includes photos of an iPhone and a red 3D-printed case.
- STORM WATCH**: **Why All Hurricanes Look the Same From Space** (13 hours ago). Includes a photo of two hurricanes from space.
- COMPUTER SECURITY**: **Sleuths Trace New Zero-Day Attacks to Chinese Hackers Who Hit Google** (09.07.12).
- THE FIRST AMENDMENT**: **ACLU Sues Police for Seizing Man's Phone After Recording Alleged Misconduct** (15 hours ago).
- CYBERSECURITY**: **Pirate Bay Founder Arrested for Alleged Hack** (14 hours ago).

On the right side, there is an advertisement for Marriott featuring a man in a plaid shirt and the text "EXPERIENCE THE WORLD OF MARRIOTT".

At the bottom of the page, there are navigation links: "SUBSCRIBE >", "SECTIONS >", "BLOGS >", "REVIEWS >", "VIDEO >", "HOW-TOS >", "MAGAZINE >". There is also a "WIRED ON YOUR TABLET >" link, a "Sign In | RSS Feeds" link, and a search bar with a "GO" button.

A monthly American magazine and on-line periodical (since 1993) that reports on how new and developing technology affects culture, the economy, and politics.

Source: <http://www.wired.com/>

# DIYDrones from Chris Anderson (Wired)

**DIY DRONES**  
AMATEUR UAV SUPERSTORE  
PROPELLED BY 

HOME VIEW CART MY ACCOUNT HELP

ALL PRODUCTS CUSTOMER SUPPORT ABOUT US BLOG SEARCH

DIY PRODUCTS

- > All Products
- > Arduino
- > ArduPilot
- > ArduPlane
- > ArduCopter
- > PX4 Autopilot
- > Planes & Multicopters RTF, ARF
- > GPS
- > Sensors and IMUs
- > Wireless/telemetry
- > Video/OSD
- > Ground Station
- > Servos
- > Cables/Connectors
- > R/C electronics
- > Other electronics
- > Apparel and other
- > R.I.P.

FOLLOW US 

**3D Robotics**  
**3DRobotics**

3DRobotics uBlox LEA-6 GPS will resume shipping tomorrow.  
yesterday · reply · retweet · favorite

3DRobotics ArduCopter kits are back in the store with new lower prices! Will begin shipping 9/12.  
8 days ago · reply · retweet · favorite

3DRobotics @bbatbileg Hi Batbileg, I just sent an email to our mold maker. We should know more tonight. My guess is 2 weeks :)  
11 days ago · reply · retweet · favorite

3DRobotics @albertoc end of next week is what we are shooting for.  
14 days ago · reply · retweet · favorite

Welcome.

Our office will be closed on Monday, September 3rd in observance of Labor Day. No shipments will be made; we will resume regular shipping and operations on Tuesday.

  
SAME DAY SHIPPING IN STOCKED ITEMS!  
FEDEX BEFORE 3PM PST      USPS BEFORE 12PM PST

**Top Sellers**

3DR ArduCopter Hexa-B Frame + Motors Kit  
►more info  
Price: \$349.99  


3DR ArduCopter Hexa-B Frame + Motors kit contains the following :

- 2 Main frame boards
- 7 Aluminum arms
- 2 Carrier boards
- Landing gear
- Power distribution board, power cables and signal cables for PDB-APM. All hardware needed to assemble the components above
- 6 Motors
- 6 ESCs
- 6 Propellers

**FEATURED PRODUCTS**

**Dean Y Cable (Female to Male connectors)**  
Price: \$2.95 [►more info](#)



**Servo Y Splitter Cable 15cm (BACKORDER)**  
Price: \$1.75 [►more info](#)



**Remzibi OSD 3DR**  
Price: \$89.99 [►more info](#)



**Female T plug - Male XT60 adapter**  
Price: \$2.75

**Df13 7 Position Connector 17.7 cm**  
Price: \$3.00

**Mb1200 Xl-MaxSonar-EZ0**  
Price: \$44.95

**Pre-crimped cables for DF13 connectors 5cm**  
Price: \$2.00

**I2C Splitter**  
Price: \$5.00

**Futaba "Y" servo extension. 15 cm**

This Y dean cable has one Female mated with two Male connectors, allowing you to connect two LIPO batteries in parallel!

**Servo Extensions Cable 15cm Male-Female**  
Price with option: \$1.75 [►more info](#)



**Remzibi OSD cable**  
Price: \$14.95 [►more info](#)



**ArduStation**  
Price: \$57.20 [►more info](#)



Funded in 2007, a store and an online community with 26,000 members.

Source: <http://diydrones.com/> + <https://store.diydrones.com/>  
<http://diydrones.com/profiles/blogs/tour-of-the-new-3d-robotics-factory>

# DIYDrones from Chris Anderson (Wired)



**How I Accidentally Kickstarted the Domestic Drone Boom**

By Chris Anderson | June 22, 2012 | 6:32 am | Categories: Drones

615 123 105  
Tweet +1 Share

Like Send 1,437 people like this. Be the first of your friends.

Open source drones, like this ArduCopter Quad from 3D Robotics, now outnumber military drones in the US. Photo: Misha Gravenvor

At last year's Paris Air Show, some of the hottest aircraft were the autonomous unmanned helicopters—a few of them small enough to carry in one hand—that would allow military buyers to put a camera in the sky anywhere, anytime. Manufactured by major defense contractors, and ranging in design from a single-bladed camcopter to four-bladed multicopters, these drones were being sold as the future of warfare at prices in the tens to hundreds of thousands of dollars.

The role of Media in promoting DIY projects ...

# “Makers” from Chris Anderson

The screenshot shows the Amazon product page for the book "Makers: The New Industrial Revolution" by Chris Anderson. At the top, the search bar contains "makers". The main image is the book cover, which features the title "MAKERS" in large white letters on a dark background, with "THE NEW INDUSTRIAL REVOLUTION" and "CHRIS ANDERSON" below it. The price is listed as \$13.98, marked down from \$26.00. A "Like" button indicates 3 likes. The book is eligible for free shipping on orders over \$25. The publication date is October 2, 2012. The book is pre-ordered and ships from and is sold by Amazon.com. Gift-wrap is available. A table shows the availability of different formats: Kindle Edition (\$19.04), Hardcover (\$13.98), and Audio, CD, Audiobook, Unabridged (\$23.10). The book is described as a "Wired magazine editor and bestselling author Chris Anderson takes you to the front lines of a new industrial revolution as today's garage tinkerers and enthusiasts is about to be unleashed, driving a resurgence of American manufacturing. A generation of "Ma

Formats	Amazon Price	New from	Used from
Kindle Edition	\$19.04	--	--
Hardcover	\$13.98	\$13.98	--
Audio, CD, Audiobook, Unabridged	\$23.10	\$23.10	--

**Book Description**  
Publication Date: **October 2, 2012**  
*Wired* magazine editor and bestselling author Chris Anderson takes you to the front lines of a new industrial revolution as today's garage tinkerers and enthusiasts is about to be unleashed, driving a resurgence of American manufacturing. A generation of "Ma

Not only magazine, but also books...

# O'Reilly Media

The screenshot shows the O'Reilly Media website homepage. At the top left is the O'Reilly logo with a cartoon owl icon. To the right are links for 'Your Account' and 'Shopping Cart'. Below the header is a navigation bar with links for Home, Shop, Radar: News & Commentary, Answers, Safari Books Online, Conferences, School of Technology, and Community. A 'Popular Topics' section lists Programming, JavaScript, iPhone, Android, Python, Head First, HTML5 & CSS, Microsoft, Java, Perl, and Linux. Social media icons for YouTube, Flickr, Facebook, Twitter, Google+, and RSS are also present.

**Free to Choose**  
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Save up to 50% on ebooks, videos, print books, and courses.  
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[Learn More](#) Deal Expires Sep 18, 2012 at 11:59pm PT

**Free Online Events**

**The Joy of Combining Images with Photoshop**  
Presented by **Lesa Snider**  
Date: Tuesday, Sep 11 at 10 PT

**Upcoming Events**

- Designing for jQuery Mobile
- Writing Extensible JavaScript Without Getting Too Enterprisey
- The Economic Impact of Open Source on Small Business
- An Introduction to Machine Learning

**JavaScript Starter Kit**

**Find the Tools You Need to Get Started with JavaScript**

*"JavaScript is now a language every developer should know."*  
— Mike Loukides, Vice President of Content Strategy

JavaScript is everywhere: servers, rich web client libraries, HTML5, databases, even JavaScript-based languages. If you've avoided JavaScript, this is the year to learn it. And if you don't, you risk being left behind.

[View the Full Starter Kit](#)

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[SHOP NOW](#)

**Deals of the Day**

**Shipping Greatness**  
Ebook – \$7.99 (Save 50%)  
Use code: **DEAL**

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Enter your email here [Join](#)

**Microsoft SharePoint 2010 Administrator's Companion**  
Ebook – \$23.99 (Save 50%)  
Use code: **MSDEAL**

**Get Microsoft Press Deals**  
Enter your email here [Join](#)

**Deal of the Week**

An American media company (since 1978) that publishes books and Web sites and produces conferences on computer technology topics.

Source: <http://oreilly.com/>

# Make: a magazine



An American quarterly magazine published by O'Reilly Media which focuses on do it yourself (DIY) and/or DIWO (Do It With Others) projects.

Source: <http://makezine.com/magazine/> + <http://make-digital.com/make/>

# Maker Media

The screenshot shows the homepage of the Maker Media website. At the top center is the Maker Media logo, featuring a blue circle with a white 'M' and the text 'MAKER MEDIA™'. Below the logo is a navigation bar with links: ABOUT US, BRANDS, PRESS CENTER, WORK WITH US, and CONTACT US. The main content area contains several images: a portrait of a man, a boy working on a project, a 'Make:' magazine cover, a 'Raspberry Pi Starter Kit' box, a close-up of a sensor module, and a collage of people at a maker event.

LEADING THE MAKER MOVEMENT

Maker Media is a global platform for connecting makers with each other, with products and services, and with our partners.

Source: <http://makermedia.com/>

# Make: a blog

The screenshot shows the homepage of the Make: blog. At the top, there's a navigation bar with links to 'MAKE', 'Kits', 'Maker Faire', 'Make: Projects', 'Maker Shed', and a search bar. Below the navigation is a banner for 'MyLifeScoop.com' with social media icons for Facebook and Twitter. To the right of the banner is a 'SUBSCRIBE!' button with the text 'BUILD THIS DOG BALL LAUNCHER!' and an image of a magazine cover.

The main content area features three articles:

- DIY Ten Step Sequencer**: A green circuit board with various electronic components and red push buttons. The article is by Michael Colombo and was published on 2012/09/07 at 12:00 pm.
- Mini Maker Faire Action**: A photograph of a crowded indoor event with many people and colorful bunting. The article is by Sabrina Merlo and was published on 2012/09/07 at 11:15 am.
- Nominate Companies For The Makey Awards!**: An illustration of a red robot wearing a top hat and bow tie, with a large letter 'M' on its chest.

On the right side of the page, there's a sidebar with the text 'the master of your digital domain Simplify your life through technology.' and a link to 'Get MyLifeScoop.com'. Below this is a section for 'Get Free Exclusive Content!' with a form to enter an email address and a 'GO!' button. It also encourages joining the newsletter for exclusive discounts and news. A list of categories is provided:

- Art & Design
- Desktop Manufacturing
- Computers & Mobile
- Craft
- Electronics
- Imaging
- Kids
- Makers
- Microcontrollers
- Recreation & Entertainment
- Robotics

Beside the magazine...

# Make: an online store

MAKE Magazine Kits Maker Faire Make: Projects Maker Shed

Search our store... Search

Login / My Account / Help  
Shopping Cart: (Your shopping cart is empty.)

\$5 SHIPPING! ON ORDERS OVER \$50 [Twitter](#) [Facebook](#) [RSS](#)

[Home](#) ALL PRODUCTS NEW ARRIVALS GIFT GUIDES GIFT CERTIFICATES MAKE CATALOG (PDF)

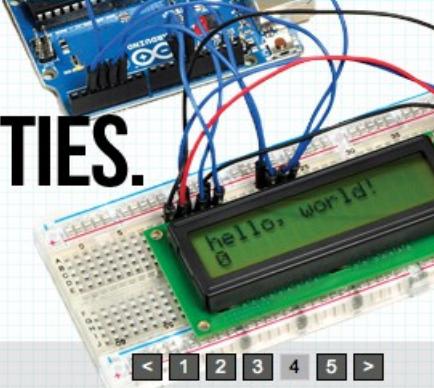
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## ONE BOX. MILLIONS OF POSSIBILITIES.

Ultimate Microcontroller Pack

[Learn More »](#)



< 1 2 3 4 5 >

### NEW ARRIVALS

Just arrived in the warehouse! The latest selections from the staff of MAKE.

[LEARN MORE](#)



### MAKE: VOLUME 31

Come check out our newest magazine filled with awesome things to create!

[LEARN MORE](#)



### WEEKLY DEAL

Use it Quick Sugru

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Beside the magazine...

Source: <http://www.makershed.com/>

# Make: a series of local faires

MAKE Kits Magazine Maker Faire Make: Projects Maker Shed  Search

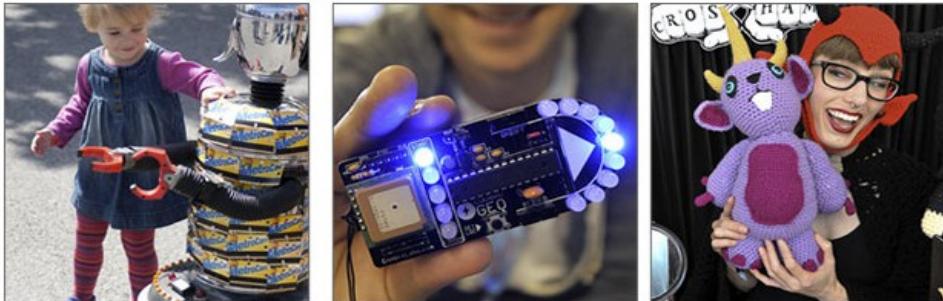
*A two-day, family-friendly festival of invention, creativity and resourcefulness, and a celebration of the Maker movement.*

## Maker Faire

ATTEND CHECK OUT THE PROGRAM HOW TO PARTICIPATE IN THE MEDIA SEE ALL THE FAIRES

### World Maker Faire New York

New York Hall of Science, Queens, NY  
Saturday, September 29, 2012 - 10am - 7pm  
Sunday, September 30, 2012 - 10am - 6pm



## Over 500 Maker Exhibits!

The World's most diverse showcase of creativity and innovation in technology, craft, science, fashion, art, food and more!

3D Printer Village • Arduino Tent • BUST Craftacular Marketplace • Maker Shed Store



GET NEWS AND UPDATES ON ALL FAIRES AND CALLS FOR MAKERS  
Enter your email  Go!



WORLD MAKER FAIRE NEW YORK 2012 COUNTDOWN!

20 : 19 : 20 : 21  
DAYS HOURS MINUTES SECONDS

 GET YOUR TICKETS TODAY!

Maker Faire Sponsors



Beside the magazine ...

# Make: a series of local faires



Beside the magazine ...

# Make: a TV / online series

[Blog](#) [MAKE Magazine](#) [Videos/Podcasts](#) [Make: Projects](#) [Forum/Community](#) [Maker Shed Store](#)

[RSS](#)

Google Custom Search

**Introducing Make: television**

Presenting a new national series from MAKE magazine, Twin Cities Public Television, and American Public Television.

Make: is the DIY series for a new generation! It celebrates "Makers" - the inventors, artists, geeks and just plain everyday folks who mix new and old technology to create new-fangled marvels. Check out the [Episode Guide](#) to watch segments and read descriptions of previous episodes.

**MAKE: television Episode 1: Bicycle Rodeo & VCR Powered Cat Feeder »**

 For those of you who like to see the whole episodes of Make: television, here's a chance to see episode 1 in all its glory. Meet Cyclecide, an inventive band of performance artists who build outrageous bicycle contraptions straight... [Read More](#)

**MAKE: television Episode 2: Aerial Kite Photography & Burrito Blaster »**

 Make: television Episode 2: Maker Cris Benton takes spectacular aerial photographs by rigging remote-controlled cameras to high flying kites. In the Maker Workshop John Park builds a Burrito Blaster, which can propel a burrito 50 yards, and Mister Jalopy... [Read More](#)

**MAKE: television Episode 3: Steampunk & Pole Camera »**

 Enter the alternative universe of Jake Von Slatt, a leading Steampunk Maker, who turns modern technology into Victorian works of art. In the Maker Workshop, John Park mounts a remote control camera on a painter's pole to take stunning... [Read More](#)

**MAKE: television Episode 4: Fire Sculpture & DTV Antenna »**

 Meet the Flaming Lotus Girls, a women-centric maker collaborative that creates gargantuan, fire-breathing sculptures. In the Workshop, John Park builds a digital TV antenna from wire coat hangers and a \$10 video camera stabilizer. William Gurstelle shows surprising uses... [Read More](#)

VISIT OUR OTHER SITES:

**Make: Craft:**  

**FREE TRIAL ISSUE**  **TAKE A SHORT SURVEY!**

**Welcome to Make: television**

[Episode guide and PDFs »](#)  
[Broadcast listings »](#)  
[Submit your video »](#)  
[About Make: television »](#)  
[MAKE: Day »](#)  
[Make: television Outreach »](#)  
[Make: television press »](#)  
[About our sponsors »](#)  
[Make: television on iTunes »](#)  
[Make: television forums »](#)  
[Flickr photo group »](#)  
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Make: television is a television show produced by Twin Cities Public Television and hosted by John Edgar Park which premiered in January 2009 on PBS stations.

# Make: a controller kit

[Login / My Account / Help](#)  
[Shopping Cart:](#) (Your shopping cart is empty.)

**\$5 SHIPPING!**  
ON ORDERS OVER \$50

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[ALL PRODUCTS](#) [NEW ARRIVALS](#) [GIFT GUIDES](#) [GIFT CERTIFICATES](#) [MAKE CATALOG \(PDF\)](#)

[Weekly Deal](#)

[Home > Product Archive >](#)  
**DISCONTINUED - MakeController Kit v2.0**

**SALE**

[Arduino & Microcontrollers](#)  
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[Intro Electronics](#)  
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[Shipping Info](#)

  
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**Please note:** This product has been discontinued by the maker. We're looking into a replacement. If you'd like to be notified if we find one, please click on the "e-mail me when back in stock" link and we'll let you know if/when we find a substitute.

**Our Price: \$120.00** **DISCONTINUED** [+ Add To Wish List](#) [Click Here To Be Emailed When Back-In-Stock](#)

**You might also like...**

[DISCONTINUED -Building The Perfect PC 2nd Edition](#)

Make teamed up with MakingThings, LLC, to produce the Make Controller Kit, an open hardware solution to create interactive applications.

Source: [http://www.makershed.com/product\\_p/mkmt3.htm](http://www.makershed.com/product_p/mkmt3.htm)

# Make: Craft

The screenshot shows the homepage of the Make: Craft website. At the top, there is a navigation bar with links for MAKE, Kits, Maker Faire, Make: Projects, Maker Shed, and Craft. A search bar is located on the right side of the navigation bar. Below the navigation bar, there is an advertisement for Amazon.it featuring a pink MP3 player and a link to "MINI LETTORE MP3 MICRO SD RICARICABILE DA ... EUR 6,90". To the right of the ad is a "Scopri" button and a "Privacy" link. On the left side of the main content area, the Make: Craft logo is displayed in large red letters. Below the logo, there are links for Blog, Magazine, Projects, Reviews, and Shop. On the right side, there is a "SUBSCRIBE!" button with the text "BUILD THIS DOG BALL LAUNCHER!" and an image of a book titled "Perr-o-Matic Build This Awesome Dog Ball Launcher". Below the main navigation, there is a section for "Hot Topics" with links for Kids, Arduino, 3D Printing, Computers & Mobile, Craft, and Raspberry Pi. There is also a "See All Topics" button. The main content area features several project thumbnails: "Stitch it!" showing a fabric pendant, "Folding Chair Makeover" showing a black and orange chair, "Fabric Pendant" showing a close-up of a pendant, "Blackwork Stop Motion Animation" showing a stop-motion scene, and a "New York Maker Faire!" announcement for September 29 & 30, 2012, with a "BUY YOUR TICKETS TODAY!" button. On the right side of the main content area, there is an advertisement for "Fab." featuring various products like a foosball table, a bicycle, a lightbulb, a vase, a watch, and a chair, with the text "Everyday Design." and a "Shop Now!" button.

A quarterly magazine published by O'Reilly Media which focused on do it yourself (DIY) projects like knitting, sewing, jewelry, metalworking, woodworking, until 2009.

Source: <http://blog.makezine.com/craftzine/> [http://en.wikipedia.org/wiki/Craft\\_\(magazine\)](http://en.wikipedia.org/wiki/Craft_(magazine))

# Makerbot TV

The screenshot shows the homepage of the MakerBot TV website. At the top, the "MakerBot TV" logo is displayed in a large, bold, black font. Below the logo is a video player showing a stack of colorful 3D printer filament spools (yellow, blue, red) and a play button. To the right of the video player, the text "MakerBot TV S02E11 - MakerBot A Robot!" is written in red. Below this, a description reads: "The MakerBot design team is building a Robot Petting Zoo to bring to this year's Maker Faire. In this video you'll get a behind-the-scenes look at how they conceptualized, designed and created these amazing DIY robots! Visit us at MakerBot.com Thank You: Michael Curry, Adam Fontenault, Jason...". There are navigation arrows on either side of the main text. Below the video player, there are sections for "RECENT VIDEOS" and "SUBSCRIBE". The "RECENT VIDEOS" section lists two entries: "May 21, 2012 MakerBot TV S02E12 - Maker Faire" and "May 14, 2012 MakerBot TV S02E11 - MakerBot A Robot!". Each video entry includes a thumbnail image of the video player and a brief description. The "SUBSCRIBE" section includes links to follow the channel via RSS, Twitter, and Facebook. At the bottom, there is a "RECENT COMMENTS" section with a comment from "Craig The Fabricator" and a response from another user.

**MakerBot TV**

About MakerBot TV Go to makerbot.com →

**MakerBot TV S02E11 - MakerBot A Robot!**

The MakerBot design team is building a Robot Petting Zoo to bring to this year's Maker Faire. In this video you'll get a behind-the-scenes look at how they conceptualized, designed and created these amazing DIY robots! Visit us at MakerBot.com Thank You: Michael Curry, Adam Fontenault, Jason...

RECENT VIDEOS

May 21, 2012 **MakerBot TV S02E12 - Maker Faire**  
In this special Maker Faire edition of MakerBot TV, R.Maker takes you on a tour of the faire and then we chat with a few of the many MakerBot Operators we ran into over the weekend. Thank you so much to everyone who joined in the fun! Keep it awesome! Visit us at MakerBot.com Thank You:...

May 14, 2012 **MakerBot TV S02E11 - MakerBot A Robot!**  
The MakerBot design team is building a Robot Petting Zoo to bring to this year's Maker Faire. In this video you'll get a behind-the-scenes look at how they conceptualized, designed and created these amazing DIY robots! Visit us at MakerBot.com Thank You: Michael Curry, Adam Fontenault, Jason...

SUBSCRIBE

Be notified of new videos by RSS

Follow us on Twitter

Be a fan on Facebook

RECENT COMMENTS

I thought I had read something once about using acetone... Used sparingly, my understanding is that you ...

Craig The Fabricator said about MakerBot TV S02E09 - Finishing ...

Awesome! I've felt for a long time that these

An online TV show produced by Makerbot, for promoting their 3D printers.

# Makerbot TV



An online TV show produced by Makerbot, for promoting their 3D printers.

# Thingiverse (from Makerbot)

The screenshot shows the Thingiverse homepage with a featured item: a Universal iPhone camera mount. The item is a blue 3D-printed device with adjustable arms, designed to hold an iPhone for filming. Below the main image are five smaller images showing different views of the print. To the right of the image is a detailed description of the item, including its purpose, creation date (Aug 27, 2012), category (Gadgets > Camera), and a YouTube link for a timelapse video. The page also includes sections for Downloads (listing four STL files: ARM 1, ARM 2, ARM SWI..., and CAP) and Instructions (step-by-step assembly guide). A sidebar on the right features a blog post about a lost and found air hockey table.

Welcome, friend.  
Please [REGISTER](#) or [LOGIN](#) to rock.

THINGS   TOOLS   BROWSE   BLOG   SEARCH   UPLOAD A THING

Digital designs for real, physical objects. A Universe of Things!

**Universal iPhone camera mount**

Created by [marinosdrake](#)

Created on Aug 27, 2012

Gadgets > Camera

Featured on Aug 27, 2012

Camera mount for all your iphone camera mounting needs!

Universal iPhone camera mount for attaching your iPhone to anything you want to film! Designed for filming timelapse videos of 3d prints or anything you want! Adjustable arms to allow you to film from a number of angles, should attach to most printers or just about anything, here's an example using the camera mount printing thing:12105:

[youtube.com/watch?v=nVrlkTOeyTc](http://youtube.com/watch?v=nVrlkTOeyTc)

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**Downloads**

Sort By: Date | Popular | File Type

- ARM 1.STL**  
613 kb / 50 downloads / 12 days ago
- ARM 2.STL**  
886 kb / 46 downloads / 12 days ago
- ARM SWI...STL**  
1 mb / 44 downloads / 12 days ago
- CAP.STL**  
101 kb / 16 downloads / 12 days ago

**Instructions**

1. Print all parts listed:(version printed uses .25mm layer height, 3 perimeters, 3 solid layers and 10% hexagonal infill, printed on ultimaker)

Arm 1 x1  
Arm 2 x 1  
Arm Swivel x1  
Clamp x1  
Foot x1  
iphone1 x1  
M8 cap x2  
Cap x4 (could use M4 fly nuts instead)

2. Assemble as pictured (refer to exploded view). You will need:  
M8 tan (tan x2 holes in the part "clamo")

**Latest From The Thingiverse Blog**

**Lost and Found: Air Hockey Edition**

Do you have that awesome old school air hockey table in the basement but what happened to the puck and the mallets? Bring life back to the game

A website for sharing 3D digital files that can be printed (with Makerbot printers).

Source: <http://www.thingiverse.com/thing:29258>



Aalto University  
Media Factory

02.

## Platforms Digital Fabrication, Open Design and DIY

# A platform

= an extremely valuable and powerful ecosystem that quickly and easily scales, morphs, and incorporates new features (called planks), users, customers, vendors, and partners.

The most vibrant platforms embrace third-party collaboration. The companies behind these platforms seek to foster symbiotic and mutually beneficial relationships with users, customers, partners, vendors, developers, and the community at large. At their core, platforms today are primarily about consumer utility and communications.

---

Simon, P. (2011). *The Age of the Platform: How Amazon, Apple, Facebook, and Google Have Redefined Business*. Motion Publishing.

# A platform

Attributes	Pre-Platform Age	Platform Age
Target Market	Predominantly business-oriented. Planks used in an office by employees on a single device (PC).	Both business- and consumer-oriented. Planks used everywhere by everyone on multiple devices.
Ecosystems	Stable. Primarily comprising relatively few arms-length resellers and strategic partners.	Vibrant, robust, dynamic. Comprising individual developers and small partners. Partnerships and communities quickly form, change, and dissolve.
Collaboration	"We'll buy you or we'll crush you." Fixed pie. Competition-based.	"We want to work with you." Grow the pie together. Cooperation-based.
Technology	Mostly closed source or proprietary, sometimes available via expensive licensing.	Mostly open source and less proprietary. Often takes form of a free development kit or an API.
Innovation	Top down. Internal or via acquisition. Usually slow.	Bottom up. External or partner-based or -assisted. Much faster.
Marketing	Centralized single company campaigns, rigidly coordinated and controlled.	Comarketing and partner-driven campaigns. More independent, organic, and decentralized.

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Simon, P. (2011). *The Age of the Platform: How Amazon, Apple, Facebook, and Google Have Redefined Business*. Motion Publishing.

# Etsy: a DIY / Crafts marketplace

Screenshot of the Etsy homepage showcasing various DIY and crafts categories and featured items.

**Header:** Cart 0 | Your Etsy | Help | Register | Sign In

**Main Navigation:** Etsy | Buy | Sell | Community | Blog | Handmade | Search

**Categories:**

- Accessories
- Art
- Bags and Purses
- Bath and Beauty
- Books and Zines
- Candles
- Ceramics and Pottery
- Children
- Clothing
- Crochet
- Dolls and Miniatures
- Everything Else
- Furniture
- Geekery
- Glass
- Holidays
- Housewares
- Jewelry
- Knitting
- Music
- Needlecraft
- Paper Goods

**Handpicked Items:**

Item Image	Name	Seller	Price
	Love Tamil-Hand Painted...	cocopunkz	\$270.00 USD
	I KILL PXLS Bangle	sisicata	\$50.00 USD
	mix'n'match com...	OhGosh	\$49.00 USD
	Shopping Day Earrings	posystudio	\$85.00 USD

**Special Features:**

- Showcase:** Fresh picks from sellers (ITEM BY ALICIABOCK)
- Treasury:** Browse member picks (ITEM BY GRIGIO)
- Graduation Showcase:** Sellers' top picks for grads (ITEM BY WOODSYWOOLS)

**Picked by Kookoowa:**

- Love Tamil-Hand Painted...
- I KILL PXLS Bangle
- mix'n'match com...
- Shopping Day Earrings

The biggest marketplace for your DIY / Crafts projects.

Source: <http://www.etsy.com>

# Etsy: a platform for DIY

Buy Sell Registry Community Blogs Mobile Help

Etsy Register Sign In Search for items and shops Search Cart

Home > Developers

Developers Home Documentation Discussion API Terms of Use

Your Developer Account Register as a developer Migrate your account

Looking for Etsy Apps? Check out our new App Gallery! It's the best way to find cool and useful tools built upon Etsy's API.

**Developers** Your place to code all things handmade

**Welcome To the Etsy Developer Community**

We believe in code as craft. Join Etsy's community of makers, artists and creators and build tools that enrich the ways you can shop, sell and connect in the world's most vibrant handmade marketplace.

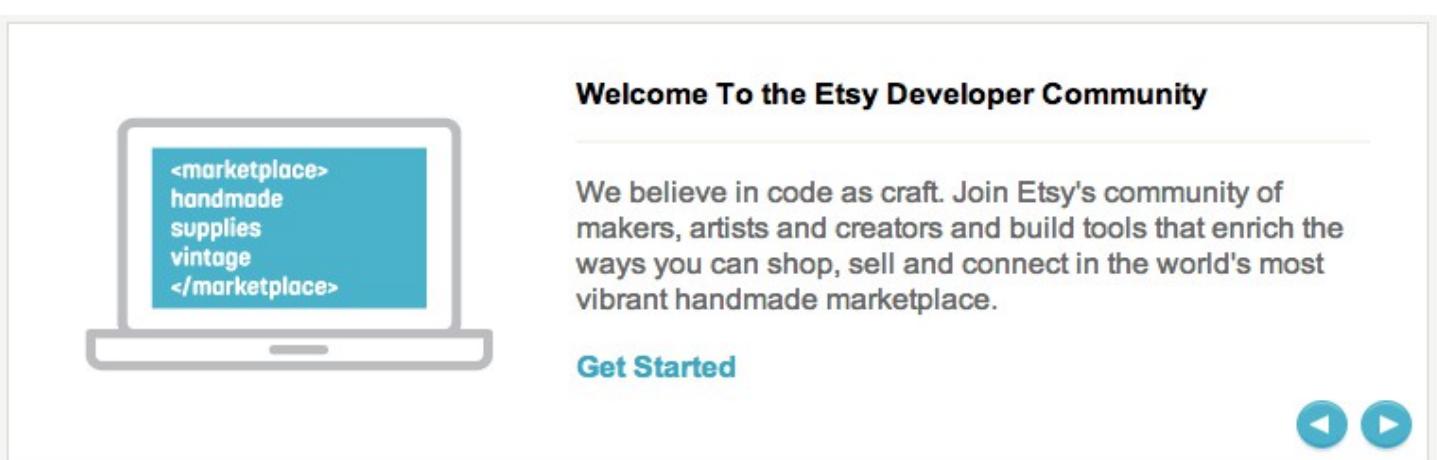
**Get Started**

Handmade Code Stories See more

Handmade Code: Bizelo Spend more time creating and less time worrying about inventory with one of the latest

Etsy's Developer Blog Posts See more

What Hardware Powers Etsy.com? Traditionally, discussing hardware configurations when running a large website is something done inside private circles; and...



With also open API for interacting with the platform!

# Etsy: a platform for DIY



The biggest marketplace for your DIY /  
Crafts projects.

Source: <http://www.youtube.com/watch?v=RmXJXYHnWPo>

# Blomming: another platform for DIY

The screenshot shows the homepage of Blomming, a social e-commerce platform. At the top, there is a navigation bar with links for "HOW IT WORKS", "WHY IT WORKS", "PRICING", "SUPPORT", and "LOG IN". Below the navigation is the Blomming logo, featuring a green chameleon icon and the word "blomming" in lowercase, with "the social e-commerce" written underneath.

The main content area is divided into two main sections: "buy" on the left and "sell" on the right. The "buy" section features a "FIND & DISCOVER" heading and a subtext "THOUSANDS OF UNIQUE OBJECTS AND FINE ITEMS, ALWAYS UPDATED". It displays five small product images: a grey textured bag, a white owl-shaped pouch, a blue flower necklace, a colorful floral tote bag, and a person wearing a blue dress. A large green "EXPLORE" button is located at the bottom of this section. The "sell" section features a "PUBLISH & SHARE" heading and a subtext "ON FACEBOOK, ON YOUR WEBSITE, ON YOUR BLOG, ON BLOMMING". It also displays five small product images: a grey textured bag, a white owl-shaped pouch, a blue flower necklace, a colorful floral tote bag, and a person wearing a blue dress. A large brown "OPEN YOUR SHOP" button is located at the bottom of this section, with a small "FREE" badge next to it.

On the right side of the page, there is a sign-up form. It includes a "SIGN UP WITH facebook" button, a "OR SIGN UP WITH YOUR EMAIL" heading, and fields for "Username", "E-Mail", and "Password". Below the sign-up form is a note: "By signing up you accept our [Terms of Service](#) and [Privacy Policy](#)".

At the bottom of the page, there is a call-to-action: "Install the Blomming app on your mobile device" with icons for smartphone and tablet. The footer contains links for "Blomming", "Legal", "Social", "TC 24 ORE", "WIRED", "TNW", "Gartner:2012 CoolVendor", "la Repubblica", "Browsing language: English", and social sharing buttons for Facebook, Twitter, and Google+.

A platform for embedding your e-commerce  
store in your own website.

Source: <http://blomming.com/>

# Ponoko (New Zealand)

The screenshot shows the Ponoko website homepage. At the top, the Ponoko logo and tagline "the world's easiest making system" are displayed, along with a decorative banner featuring various 3D-printed objects like a robot and a heart. Below the banner is a navigation bar with links: home, buy, sell, make, apps, blog, and support. The main headline reads "The future of products is here" followed by "Personal Factory™ 5". A sub-headline states "Now with App Gateway to create almost anything, and CNC routing to make big things." To the right, there is a photograph of a woman sitting in a wooden chair, writing in a notebook. In front of her is a small wooden table with a red 3D-printed cube featuring a large white exclamation mark. Four callout bubbles point to the cube: "Laser cutting", "Electronics", "3D printing", and "CNC routing". At the bottom right of the image area are two small navigation arrows. On the left side of the page, there are two buttons: a red one labeled "How it works »" and a smaller one below it labeled "Pricing from \$0 »".

Online service and marketplace (open your own shop) with laser cutting, cnc routing, 3D printing, electronic components through local hubs.

Source: <http://www.ponoko.com>

# Ponoko (New Zealand)

## Digital making hubs

Personal Factory connects you to a global, digital making network.

Current making hubs are listed below. Select a hub closest to where you live that offers the methods and materials you're looking for.

You will be taken to a page where you can sign up for a free Personal Factory account or login if you already have one.

Note: Digital making methods and material selections vary at each hub, because each one works with their own equipment and local material suppliers.

Location	Website	Methods	Materials
<b>United States</b>			
CA Oakland	<a href="#">Ponoko</a>	3D printing CNC routing laser cutting	materials materials materials
GA Atlanta	<a href="#">Ponoko</a>	CNC routing	materials
<b>New Zealand</b>			
Wellington	<a href="#">Ponoko</a>	laser cutting	materials
<b>Germany</b>			
Berlin	<a href="#">Formulor</a>	laser cutting	materials
<b>Italy</b>			
Milan	<a href="#">Vectorealism</a>	laser cutting	materials
<b>United Kingdom</b>			
London	<a href="#">RazorLAB</a>	laser cutting	materials

Online service and marketplace (open your own shop) with laser cutting, cnc routing, 3D printing, electronic components through local hubs.

Source: <http://blog.ponoko.com/digital-making-hubs/>

# Ponoko (New Zealand)

The screenshot shows the Ponoko website's developer program section. At the top, the Ponoko logo and tagline "the world's easiest making system" are visible, along with navigation links for home, buy, sell, make, apps, blog, and support. A decorative banner with red 3D-printed objects like gears and a robot head is present. The main heading is "Apps" with sub-links for "App Gateway" (which is underlined) and "Developer Program".

**Personal Factory Developer Program**

*Build apps for Personal Factory and distribute them in the Personal Factory App Gateway*

[Join now \(it's free\) »](#)

**Create an app**  
Get access to the Sandbox and Live APIs – and let us do the making for you. [Find out more »](#)

**Developer resources**  
Get API documentation, code samples and technical support. [Find out more »](#)

**Personal Factory App Gateway is coming soon!**  
Distribute your 'making apps' to the people who care the most.

[Learn more »](#)

Online service and marketplace (open your own shop) with laser cutting, cnc routing, 3D printing, electronic components through local hubs.

Source: <http://www.ponoko.com/app-gateway/developer-program>

# Shapeways (Netherlands/USA)

The screenshot shows the Shapeways website homepage. At the top, there's a blue header with the Shapeways logo, a search bar, and links for 'Create', 'Discover', 'Community', 'Go', 'Cart', 'Register', and 'Log in'. Below the header is a large banner featuring a video thumbnail of a person holding a 3D-printed mug with a play button over it. The banner text reads 'Shapeways 3D Printing & the Culture of Creativity' and 'Make & Share Your Products With 3D Printing'. It includes a 'Join Now!' button and a link to upload models. Underneath the banner is a section titled 'Discover 3D Printed Products' with four product cards:

- Animaris Geneticus Par...** by Theo Jansen. A white, lattice-like 3D-printed sculpture. Rating: 5 stars (107 reviews). Price: From €90.73.
- Bicycle Chainring Cuffli...** by GothamSmith. Three small, ring-shaped cufflinks. Rating: 5 stars (75 reviews). Price: From €56.62.
- Klein Bottle Opener** by Bathsheba Sculpture LLC. A red bottle with a black, knobby 3D-printed cap. Rating: 5 stars (18 reviews). Price: From €72.66.
- Moustache Cufflinks** by GothamSmith. Two silver cufflinks shaped like mustaches. Rating: 5 stars (11 reviews). Price: From €56.62.

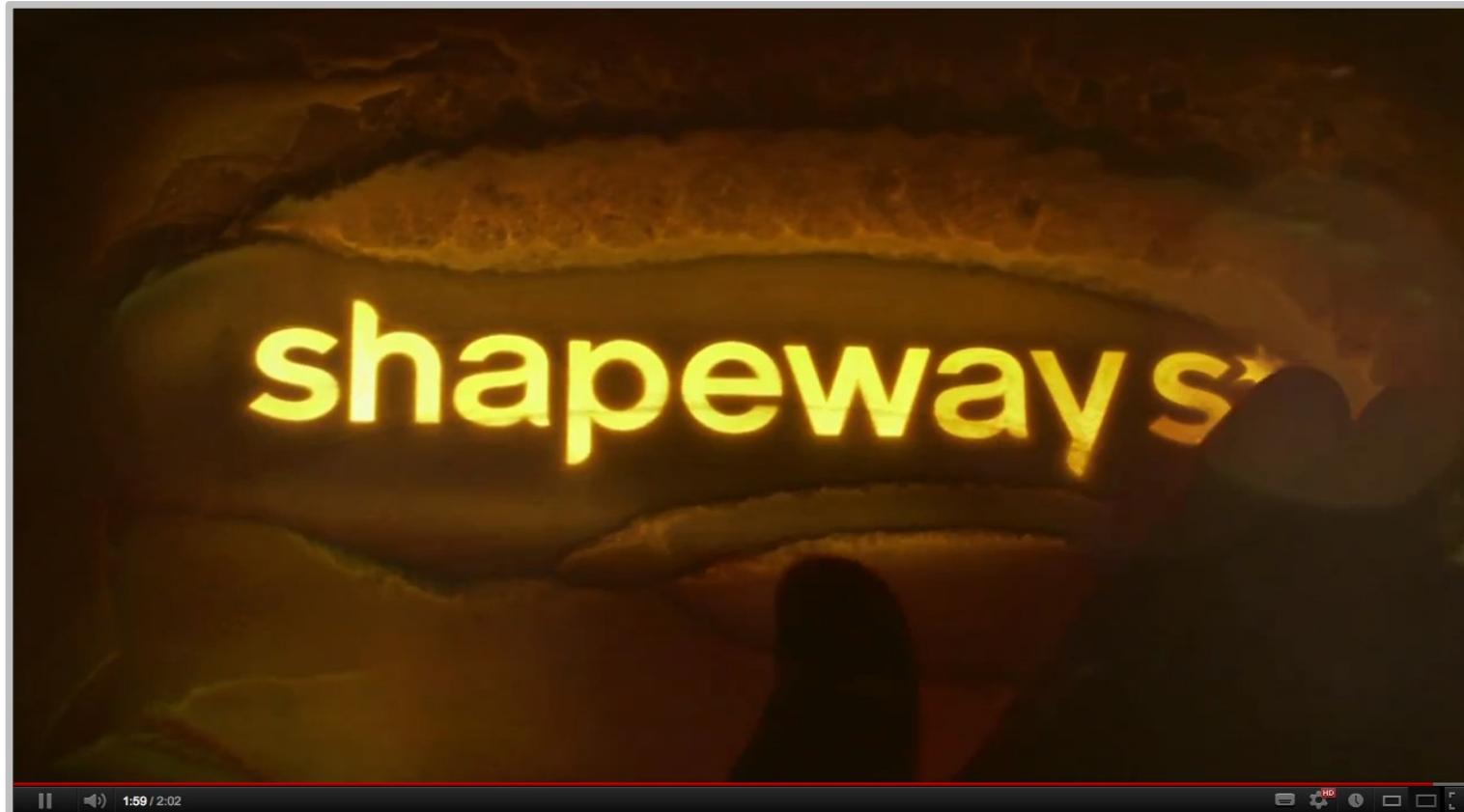
Online service and marketplace (open your own shop) with 3D printing.

# Shapeways (Netherlands/USA)



Online service and marketplace (open your own shop) with 3D printing.

# Shapeways (Netherlands)



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Online service and marketplace (open your own shop) with 3D printing.

# i.materialise (Belgium)

The screenshot shows the homepage of i.materialise (Belgium). At the top, there is a navigation bar with links to Home, Creation corner, 3D print lab, Materials, Gallery, About us, and Blog. Below the navigation, there is a large banner featuring three gold-colored 3D-printed figurines (a tall totem-like figure, a small owl, and a stylized human figure) on the left. To the right of the figurines, the text "got metal ?" is displayed in a large, bold, sans-serif font. Below this, a smaller text block says "Yes, we do! Titanium, Brass, Bronze, Stainless steel, Gold plated stainless steel, Silver and Gold." At the bottom of the banner, there are five small circular dots followed by a solid black dot, likely indicating a scrollable image gallery.

WHAT CAN I DO HERE?

**Upload and Order**

**3D print your designs**

Upload your 3D design and instantly see the price for your models. It's that easy.

- No login necessary
- Choose from a large selection of materials and colors
- Scale your model to the ideal size
- Order as many copies as you want

**Sell your designs**

Want to show off your design talent and make some money at the same time? Offer your designs for sale in our gallery and once a month, we will pay you a fee for every one of your items sold.

Online service and marketplace (open your own shop) with 3D printing.

Source: <http://i.materialise.com/>

# Sculpteo (France)

Sculpteo.com | Stores | Workshops | Blog | Professionals

English | Français | Login | Register

**sculpteo | 3D Printing**

Home Services Materials Support Cloud Engine App FAQ Upload a 3D file

## POLISHED PLASTIC IS COMING ON STAGE

Get another feeling on your creations!  
[Learn more on this material](#)



Innovative 3D printing service for creative people

**3D Print easily**  
Upload your 3D file and have it printed by Sculpteo.  
  
[Upload 3D file](#)

**Design at your fingertips**  
We develop online 3D tools and workshops to give you the best 3D printing results. Try them !  
  
[Create objects](#)

**Sell your creations**  
Open your store in our 3D printing marketplace. Sell your creations and get benefits.  
  
[Open your store](#)

**Get inspired**  
Browse our designers' collections, get inspired and have them 3D printed !  
  
[Visit Designers Stores](#)

**Get in touch**  
Keep in touch with Sculpteo with our monthly newsletter.  
 [OK](#)

**PARTICULE 14**  
PARTICULE 14 PROJECT FOR INTERNATIONAL DESIGN WEEK OF MILAN  
[Learn more](#)

**Follow us** 

**News**  
Sept. 5, 2012 How-To 3D Print Glasses  
Cordavi is a student at San Jose State University studying Digital Media Arts, and an avid user of T...

Online service and marketplace (open your own shop) with 3D printing.

# Inventables (USA)

**INVENTABLES**  
The Hardware Store for Designers

Search by keyword or part number

LASER CUTTING  
Accessories  
Acrylic Sheets  
Cuttable Sheets  
Laser Cutters  
Wood

INNOVATIVE MATERIALS  
3D Printer Filament  
Coatings  
Components  
Electrical & Light  
Magnets  
Molding Materials  
Unexpected Properties

RAW MATERIALS  
Films  
Foam  
Gel  
Glass  
Glow in the dark  
Metal  
Paper & Cardboard  
Pigments  
Plastic & Rubber  
Textiles, Thread & Yarn  
Wax  
Wood

HARDWARE  
Fasteners  
Tools

## Sheet Materials

**Acrylic Sheets**  
Over 100 varieties of acrylic sheets in various colors, sizes, styles and textures.

**Wood Veneer**  
Thin veneers good for laminating and laser engraving

**Anodized Aluminum**  
10 colors good for laser engraving

**Cork Fabric and Sheet**  
4 paper thin cork patterns for cutting, gluing, and sewing

## Hardware and Materials for Desktop Fabrication

**MakerSlide Components**  
MakerSlide and Componentry for building machines

**Machines**  
Machines for making, Shapeoko CNC Mill, 3D Printer, Laser Cutter

**3D Printer Filament**  
8 colors of 1.75mm ABS and PVA filament

**Molding Materials**  
Plastic, rubber, and putties for molding

## Electrical & Light

Online store for materials, components and machines for digital fabrication and DIY.

Source: <https://www.inventables.com/>

# Adafruit (USA)

The screenshot shows the Adafruit website homepage. At the top, there's a navigation bar with links for HOME, BLOG, FORUMS, SUPPORT, TUTORIALS, CHAT, VIDEOS, CONTACT, JOBS, and ABOUT. A search bar with a 'GO' button is also present. The main content area features a large image of an Arduino board with an NFC/RFID shield attached. A hand is shown holding a small circular NFC tag near the shield. A callout box over the image reads "NFC/RFID Shield for Arduino Touchless communication!" with a "LEARN MORE" button. To the left, a sidebar titled "PRODUCTS" lists "New Products [121]" and various product categories with their counts: Android (6), Arduino (53), Boards & Packs (12), Shields (30), Accessories (11), BoArduino (8), Brain Machine (1), AVR Development (8), BeagleBone (20), Bunnie Studios (8), mbed (10), PIC (2), Breakout Boards (20), Clocks & Watches (12), Discover Electronics (1), Drawdio (3), EggBot (1), FLORA (18), FPGA (1), Fuzebox (3), littleBits (1), Game of Life (2), Microtouch (5), MiniPOV (3), MintyBoost (2), NETduino (12), Power supply (9), Propeller (11), Raspberry Pi (37), SIM reader (4), Snap Circuits (4), SpokePOV (10), TV-B-Gone (4), Tweet-a-Watt (5), XBee (10), Project packs (9), and RFID / NFC (12). Below the sidebar, a section titled "Latest blog entries" includes a link to "#piday #raspberrypi @Raspberry\_Pi". There are three product cards at the bottom: "Drawdio kit" (\$17.50), "Adafruit ARDX - v1.3 Experimentation Kit for Arduino (Uno R3)" (\$85.00), and "XBee Adapter kit" (\$10.00). Each card has a "LEARN MORE" button.

Online store of Open Hardware projects and electronic components.

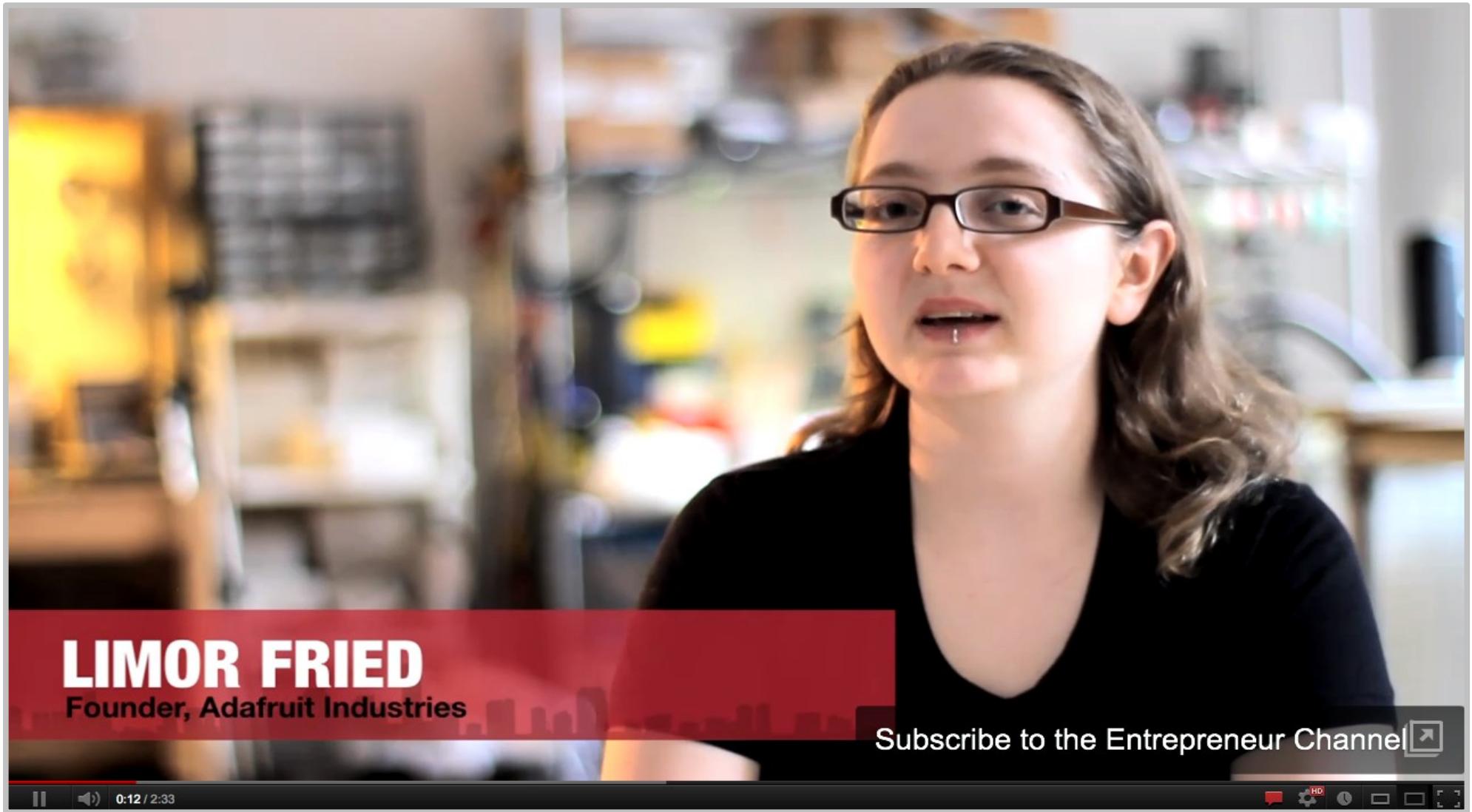
# Adafruit (USA)



Online store of Open Hardware projects and electronic components.

Source: <http://www.youtube.com/user/adafruit>

# Adafruit (USA)



Online store of Open Hardware projects and electronic components.

# Sparkfun (USA)

The screenshot shows the Sparkfun (USA) website. At the top, there's a navigation bar with links for Products, Support, Tutorials, Distributors, About Us, Contact, a search bar, and a user login link. A red banner at the top features the letter 'K' and the text 'SPARKFUN APPROVED KICKSTARTERS'. On the left, a sidebar titled 'Categories' lists various product categories like New Products, Top Sellers, Featured Products, Gift Certificates, Classes & Events, Books, Breakout Boards, Cables, Cellular, Components, Development Tools, Dings and Dents, E-Textiles, Educators, GPS, Kits, LCDs, Port-O-Rotary, Programmers, Prototyping, Retail, Retired, Robotics, Sale, Sensors, Swag, Tools, Widgets, and Wireless. The main content area has a 'Latest News' section with a post titled 'AVC 2013 - The Next Chapter' by RobertC. dated September 06, 2012. Below the news is a photograph of a person kneeling on asphalt, holding a camera and operating a quadcopter drone. To the right of the news is a 'New Products' section with three items: 'RGB LED Strip - 32 LED/m Addressable - 1m' (\$44.95), 'LilyPad LED Purple (5pcs)' (\$4.95), and 'Hook-Up Wire - Assortment (Stranded)' (\$16.95). Further down is a 'Featured Products' section with three items: 'SparkFun Projects Case - Clear' (\$11.95), 'LED - RGB Diffused Common Cathode' (\$1.95), and 'Hackerspace Passport' (\$1.95). A 'What is BatchPCB?' section at the bottom explains the service.

0 items in cart | \$ USD | You are not logged in. | log in |

SPARKFUN APPROVED KICKSTARTERS

Products    Support    Tutorials    Distributors    About Us    Contact    search...   

**Categories**

- New Products
- Top Sellers
- Featured Products
- Gift Certificates
- Classes & Events
- Books
- Breakout Boards
- Cables
- Cellular
- Components
- Development Tools
- Dings and Dents
- E-Textiles
- Educators
- GPS
- Kits
- LCDs
- Port-O-Rotary
- Programmers
- Prototyping
- Retail
- Retired
- Robotics
- Sale
- Sensors
- Swag
- Tools
- Widgets
- Wireless

Latest News

**AVC 2013 - The Next Chapter**  
by RobertC. | September 06, 2012 | 59 comments

Hello everyone! Is this really a post about AVC? I know it might seem a bit early to be announcing AVC 2013, but we're making some big changes and wanted to let everyone know in advance what to expect for next year's AVC. It's changed a bit every year, but after some feedback from competitors, spectators, SparkFun employees and yours truly, we've decided to do a complete overhaul for the new competition, scheduled for June 15th of 2013.

Don't worry, we're still going to have autonomous vehicles. That part is staying the same. However, we're expanding the list of 'allowed' vehicles. Basically, if it can move on its own, you can bring it. Big, small, excessive, simplistic, we'll take it all. We're also not going to limit the amount of entries. That's right, we'll take anyone with a vehicle that pays to enter. And for all the aerial folks out there, dust off your quadcopters and helicopters, they'll be allowed next year.



**New Products** See all »

**RGB LED Strip - 32 LED/m Addressable - 1m** \$44.95

**LilyPad LED Purple (5pcs)** \$4.95

**Hook-Up Wire - Assortment (Stranded)** \$16.95

**Featured Products** See all »

**SparkFun Projects Case - Clear** \$11.95

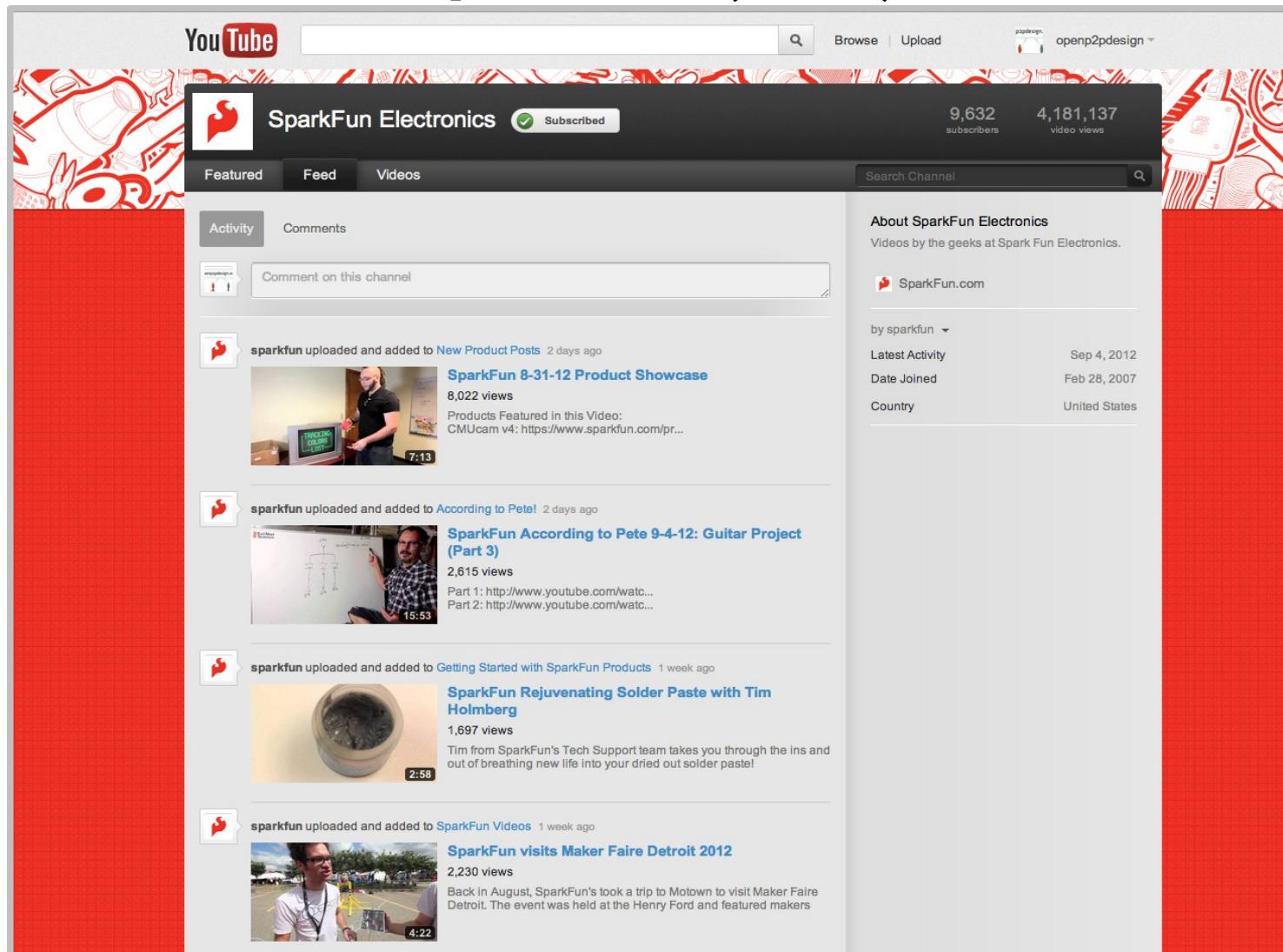
**LED - RGB Diffused Common Cathode** \$1.95

**Hackerspace Passport** \$1.95

**What is BatchPCB ?** Take your invention to the next level with a custom PCB! Check out BatchPCB, a SparkFun service offering inexpensive small runs of your own

Online store of Open Hardware projects and electronic components.

# Sparkfun (USA)



Online store of Open Hardware projects and electronic components.

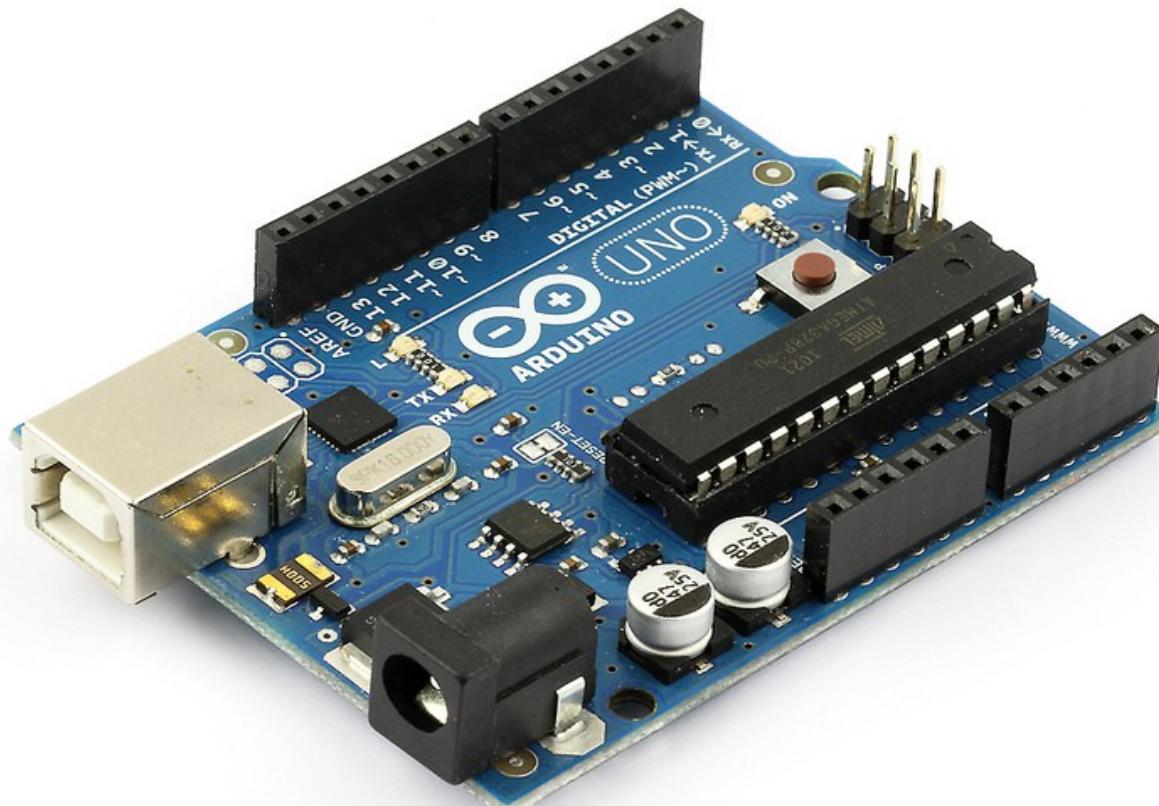
Source: [http://www.youtube.com/user/sparkfun?feature=results\\_main](http://www.youtube.com/user/sparkfun?feature=results_main)

# Sparkfun (USA)



Online store of Open Hardware projects and electronic components.

# A physical platform: Arduino (Italy)



An Open single-board microcontroller and IDE designed to make the process of using electronics in multidisciplinary projects more accessible.

Source: <http://arduino.cc>

# A physical platform: Arduino (Italy)



Queríamos una herramienta  
para nuestros estudiantes,

An Open single-board microcontroller and IDE designed to make the process of using electronics in multidisciplinary projects more accessible.

Source: <http://vimeo.com/18539129>

# Crowdfunding: Kickstarter

?! What is Kickstarter? We're the world's largest funding platform for creative projects.

**KICKSTARTER** Discover great projects Start your project Search projects BLOG HELP SIGN UP LOG IN

*like you!*

## We help people fund creative projects.

Kickstarter is the world's largest funding platform for creative projects. Every week, tens of thousands of amazing people pledge millions of dollars to projects from the worlds of music, film, art, technology, design, food, publishing and other creative fields.

**PLAY**

**START YOUR PROJECT**

Find out how to make an awesome Kickstarter project

Each and every Kickstarter project is the independent creation of someone like you!

### HOW KICKSTARTER WORKS

**Our Simple Formula**  
Kickstarter is a new form of commerce and patronage. In our world, the best way to inspire support is to offer people great rewards. Everyone loves limited editions, one-of-a-kinds, and fun experiences (parties, screenings, balloon rides!). Spend some time brainstorming your rewards and people will respond. No one needs another coffee mug.

**Creative projects only**  
Kickstarter cannot be used to fund for charity projects or causes. While there are countless causes worthy of support, we believe that creativity deserves its own space. See our guidelines for more.

**Where does the money come from?**  
Each month millions of people visit

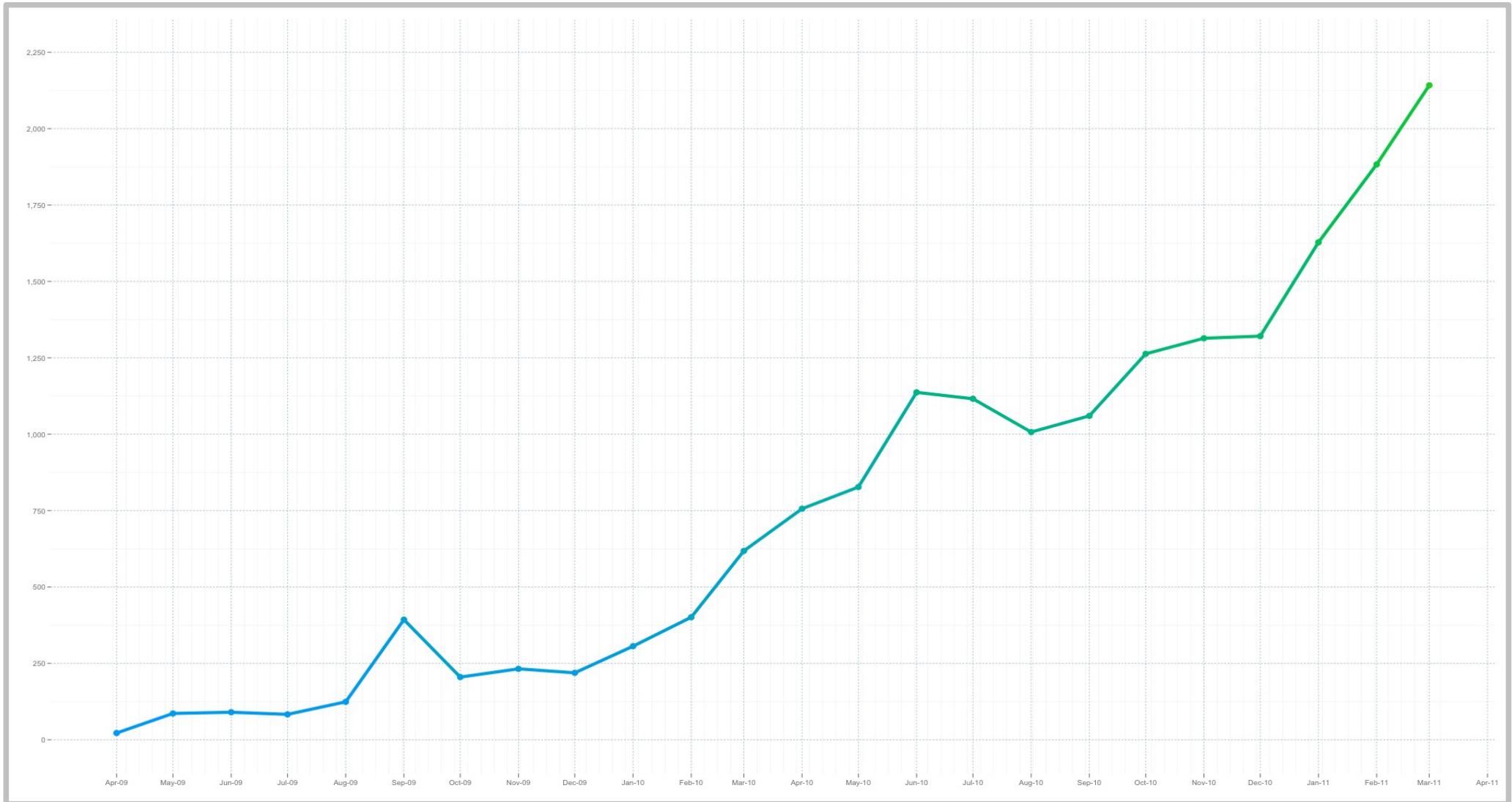
*...an unexpected influence on indie culture, a new model for a D.I.Y. generation.* — The New York Times

My ideas aren't "big and important." Is Kickstarter for me?  
Absolutely! Kickstarter is for creative projects big and small, serious and whimsical, traditional and

Kickstarter is the world's largest funding platform for creative projects.

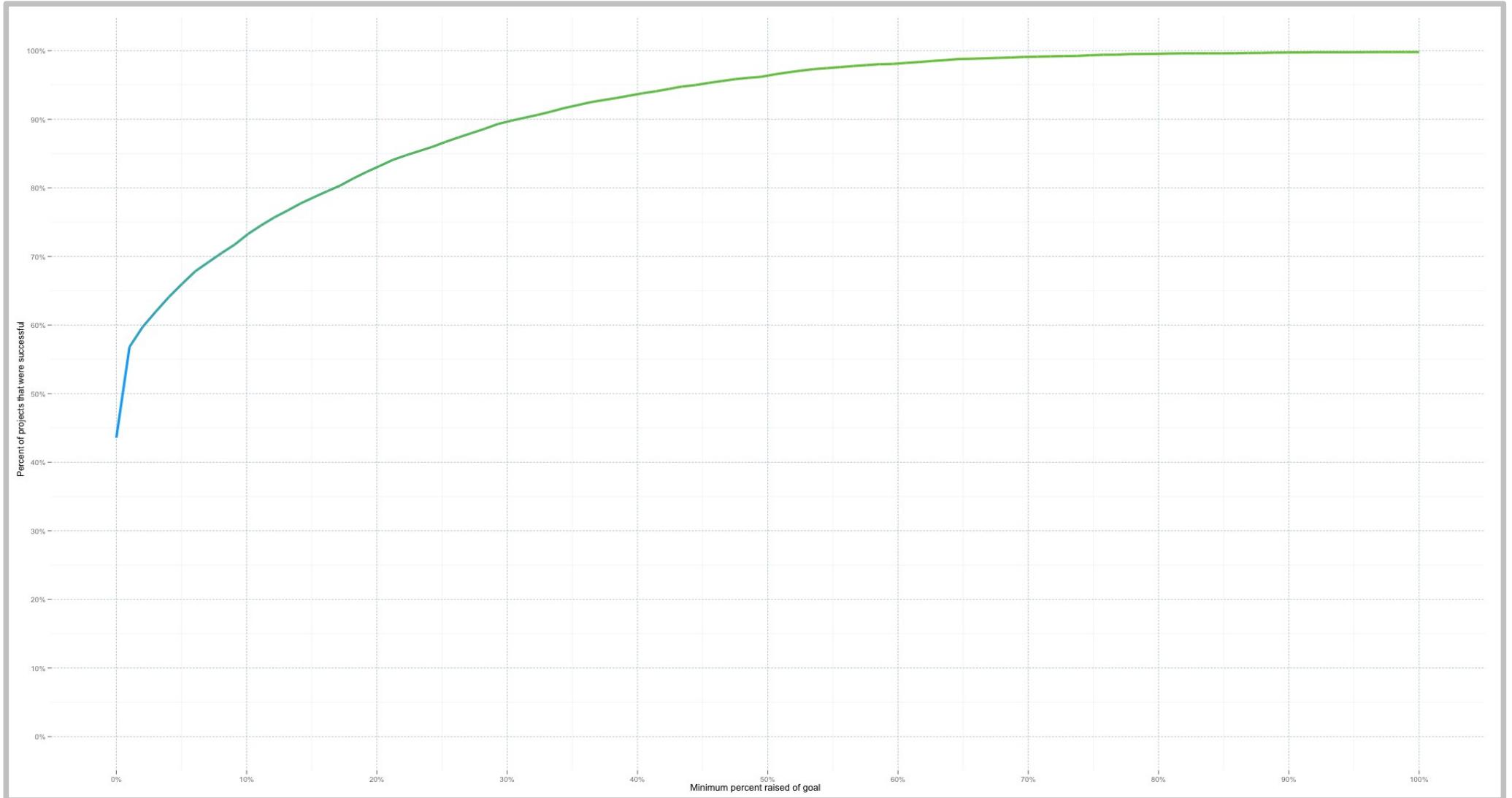
Source: <http://www.kickstarter.com/start>

# Crowdfunding: Kickstarter



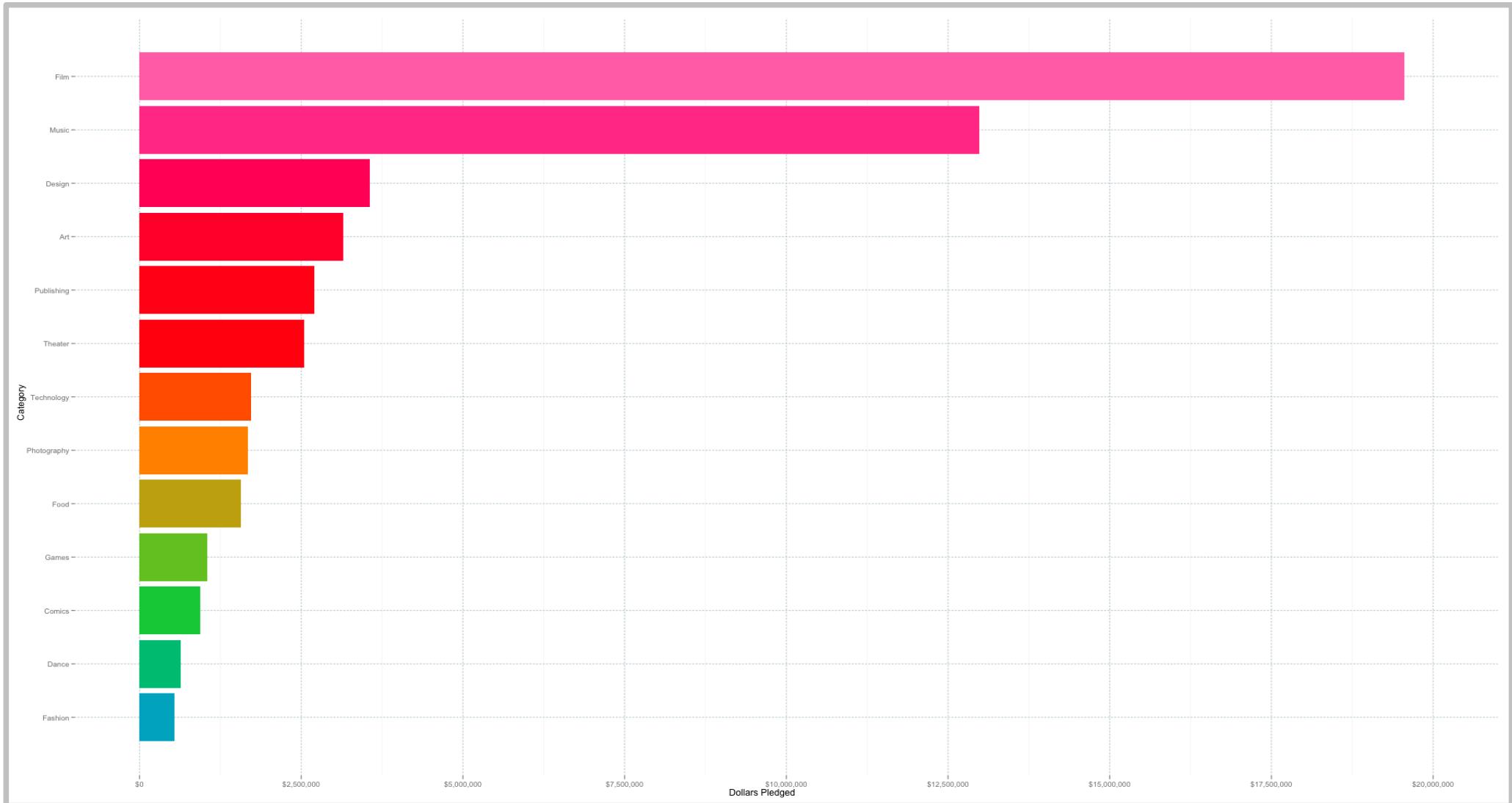
Projects launched: activity between April 28, 2009 - April 27, 2011.

# Crowdfunding: Kickstarter



Projects that reach 30% of their funding goal succeed more than 90% of the time. As the line turns green, the percent of projects that succeed approaches 100%.

# Crowdfunding: Kickstarter



Film leads the pack with nearly \$20 million in pledges and Music follows with more than \$13 million. 10 of the 13 categories have seen more than \$1 million.

# Kicktraq: analytics for Kickstarter

The screenshot shows the Kicktraq website interface for the "Ultra-Bot 3D Printer" project. At the top, the Kicktraq logo is displayed, followed by navigation links: What's New, Browse, Tools, Hot List, and Project Owners. A search bar is located at the top right. A large digital timer on the right side of the header displays "028:10:28" with "days", "hours", and "minutes" indicators.

The main content area features a large banner for the "Ultra-Bot 3D Printer" project, which is active and funded by William Steele from Lawrenceburg, IN. The banner includes a thumbnail image of the printer, a status summary, and a call-to-action button labeled "VISIT PROJECT".

Key statistics shown in the banner include:

- STATUS: ACTIVE**
- CURRENT PLEDGE LEVEL: \$12,737**
- TRENDING TOWARD: \$131,616**
- 169% OF GOAL**
- 1754% OF GOAL**

The "Funding Progress" section contains a line graph titled "Funding Progress: Ultra-Bot 3D Printer". The Y-axis is labeled "PLEDGED" and ranges from \$0 to \$140K. The X-axis shows dates from 9-6 to 10-2. The graph shows a steady upward trend, starting around \$10K and reaching approximately \$131,616 by the end of the campaign. A green dashed line indicates the trend, and a blue bar at the end represents the final amount pledged.

Below the graph, a copyright notice states: "(c)2012 Kicktraq. Kickstarter is a trademark of Kickstarter Inc. Additional content provided by William Steele. Trademarks and related content are owned by their respective companies. Shared under the creative commons (CC BY-NC 3.0) license. Read more about sharing this image at [www.kicktraq.com/projects/2105227104/ultra-bot-3d-printer/#sharing](#)

At the bottom of the page, there are footer links: ©2012 Kicktraq, Contact Us, About Us, Policies, and Advertiser Pilot.

Kickstarter is the world's largest funding platform for creative projects.

Source: <http://www.kicktraq.com/> <http://www.kicktraq.com/projects/2105227104/ultra-bot-3d-printer/>

# Kickstarter: is it rather a Medium?

FAST COMPANY

SUBSCRIBE | NEWSLETTER | SEARCH

Follow @

MORE THAN 200 DESTINATIONS

Co.DESIGN Co.CREATE Co.EXIST Co.LEAD TECHNOLOGY

## Kickstarter: Crowdfunding Platform Or Reality Show?

BY IAN BOGOST | JULY 18, 2012

It's QVC for the web generation, the new Thunderdome, Off Track Betting for ideas addicts. Whatever you call it, Kickstarter's becoming less about funding widgets than pouring gas on creative sparks just to watch them ignite.



A photograph of a man wearing a blue jacket and shorts performing a trick on a skateboard over a large sign that reads "KICK STARTER". The sign is white with black and green letters. The background features red curtains. In the foreground, there are silhouettes of people and various electronic devices like phones and a laptop.

On Kickstarter, we sell / fund more an experience than a product!

# Lessons from / for Kickstarter

- \* **Design for Simplicity:** reduce the functionalities / components
- \* **Design for scale:** identify your possible supply chain and plan how to scale the production
- \* **Treat it like a job:** it requires full time energy, and probably also a team work
- \* **Befriend fellow hackers:** develop the project in hackerspaces or fablabs
- \* **Leverage your backers:** use them not just for collecting money!

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Some lessons from successful projects... “design for manufacturing”

# Lessons from / for Kickstarter

- \* **Set a spot-on funding goal – not too big, not too small:** set your Kickstarter goal near \$10,000: 38% of projects met their goals
- \* **Don't take too long to raise your money:** The average Kickstarter campaign lasts for 30 days, with 35% of success
- \* **Produce a slick video to get attention:** The nearly foolproof way to raise money on Kickstarter is to get the attention of the crowdfunding site's staff (89% success)
- \* **Make at least 1,000 Facebook friends:** Founders with 1,000 Facebook friends or more can have a success up to 40%

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Some lessons from successful projects...

# Crowdfunding: Indiegogo

The screenshot shows the Indiegogo homepage. At the top, there's a navigation bar with the Indiegogo logo, a search bar, and links for 'Sign Up' and 'Log In'. Below the header, a banner reads 'The world's funding platform. Go fund yourself.' A large image of a wooden geodesic dome under construction is displayed. Below the image, a campaign card for 'New Alexandrian Library Project For Esoteric ...' shows '\$12,855 raised' and '4 days left'. To the right of the banner are three buttons: 'BROWSE CAMPAIGNS' (with a magnifying glass icon), 'LEARN HOW IT WORKS' (with a book icon), and 'CREATE A CAMPAIGN' (with a lightbulb icon). Below the banner, a 'Final Countdown' section displays four campaign cards:

- Mountain Riders Alliance** (SMALL BUSINESS): Support the Future of Skiing. by Mountain Rider's Alliance. We are a grassroots organization committed to making a positive difference in the sport we... 72% funded, \$7,230 raised, 45 hours left.
- Goodbye Promise** (FILM): 30 Days To One Million - The Worldwide Release of Goodbye Promise. by Karen Worden & David Branin. Be a part of the first ever feature film distributed ... 0% funded, \$2,338 raised, 5 days left.
- #StopMonsanto** (ENVIRONMENT): StopMonsanto Film Project. by Stop Monsanto. #stopmonsanto is a film about five young activists who get fed up with Monsanto's actions and... 25% funded, \$37,404 raised, 8 days left.
- Greebo: Nippo Goblin and Turtles** (GAMING): Greebo: Nippo Goblin and Turtles. by Greebo miniatures. Our goal is creating a full Nippo Goblin team for Fantasy Football. 186% funded, \$7,426 raised, 4 days left.

A crowdfunding platform based in California, it has hosted over 100,000 funding campaigns in areas such as music, charity, small business and film.

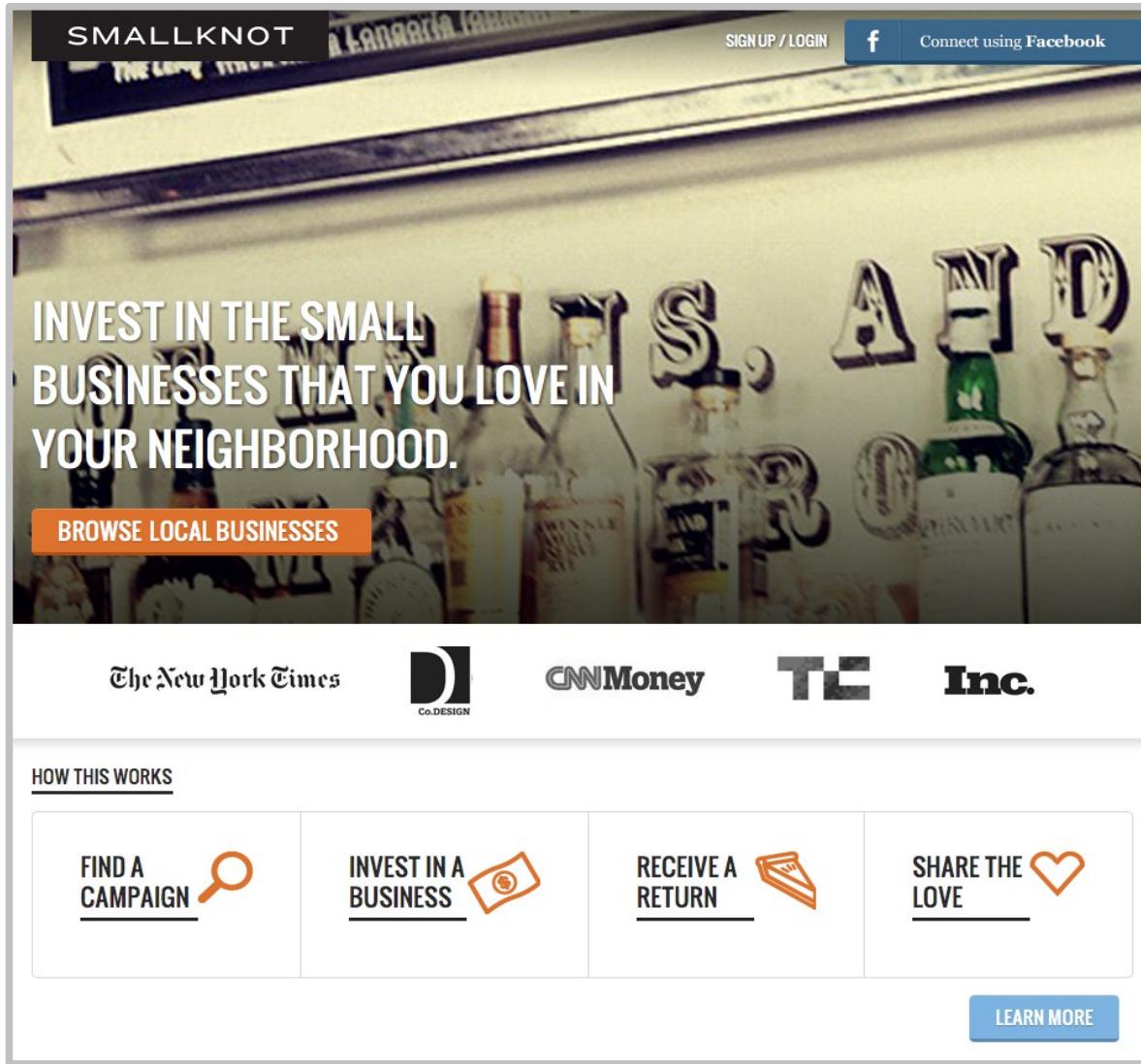
Source: <http://www.indiegogo.com/>

# Crowdfunding for Open projects: Goteo

The screenshot shows the Goteo website interface. At the top, there's a navigation bar with links for 'ABOUT GOTEO', 'BLOG', 'FAQ', and 'ENG'. Below the header, a large banner features a project titled 'SMART CITIZEN - SENSORES CIUDADANOS' by 'Fab Lab Barcelona'. The banner includes a progress bar showing '12.778 €' obtained out of '19.511 €' over '12 DAYS'. To the right of the banner is a large red 'OPEN' button with '100% OPEN' below it. A sidebar on the left is titled 'HIGHLIGHTED' and lists several projects: 'PERIODISMO DE DATOS', 'CIUDAD INTELIGENTE', 'RECETAS ECO', 'TECHNICAL, COMMUNICATIONS', 'ESPAÑA EN LLAMAS', 'SMART CITIZEN - SENSORES CIUDADANOS', 'BIONÉCTAR', and 'CO-FINANCING' for 'MINIMUM 4.650 €' and 'OPTIMUM 9.040 €'. Each project card includes a small thumbnail image and a brief description.

A crowdfunding platform for Open Projects, not just involving money but also time, participation and involvement from users.

# Crowdfunding for local business: Smallknot



A new trend in crowdfunding: fund local projects and business to strengthen your local community.

# Crowdfunding for local business: Brickstarter

**BRICKSTARTER**

- An Introduction
- Background
- Contact

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[!\[\]\(9fe9eb6c8eb4628c7d20983949bc5773\_img.jpg\) 57](#)

[!\[\]\(8da4584e1b974e29a65cdb0b7780d8a3\_img.jpg\) 41](#)

## An Introduction

*Tietoa projektista suomeksi löytyy [tämän linkin](#) takaa. Tulevaisuudessa pyrimme toteuttamaan projektin kaksikielisenä – kiitos kärsivällisyydestä.*

Brickstarter is about 21st century social services. We are sketching a system that would enable everyday people, using everyday technology and culture, to articulate and progress sustainable ideas about their community. The Brickstarter project explores the ideas behind these systems, and will provide the blueprints for a platform that can turn possibilities into proposals into projects. By creating its prototype, we aim to stimulate more productive debates about 21st century governance and local decision-making.



This blog captures our evolving knowledge of 21st century decision making as we develop the Brickstarter concept.

A new trend in crowdfunding: fund local projects and business to strengthen your local community. This is a Finnish example under development.

# Crowdfunding for Finland: Mesenaatti.me

mesenaatti.me a better tomorrow!



The screenshot shows the Mesenaatti.me homepage. On the left, there's a dark grey sidebar with the platform's name in white. The main content area features a large image of two birds in flight. Below the image, the text "create, fund and enable!" is visible. To the right of the image is a vertical sidebar with links in orange: "ABOUT US", "CREATE or FUND", "TO JOIN", "BECOME INVOLVED", "FOLLOW US", and "MORE INFO". At the top of the page, there are language links: "suomeksi" (Finnish), "in english", and "på svenska" (Swedish).

**Mesenaatti.me is the first open-for-everyone Finnish crowdfunding platform.**

**You don't have to be rich to make an impact: for only 10€ you can become a patron.**

Mesenaatti.me enables you to join in funding projects that matter to you. Support your favorite artist's new project, participate in your neighborhood park renovation or an afternoon club for school children. Fund a movie or a book. You can also invest in an innovation business or participate in starting a new bakery in your village.

Mesenaatti.me also opens up new opportunities for creatives. By presenting your idea for the public you can raise funding from those who wish to see it realized. This simple tool is ideal for funding art, culture, innovation and social projects. It enables totally new kind of activity & economy in which anyone with a great project may raise funding.

Mesenaatti.me is the first open-for-everyone Finnish crowdfunding platform.

Source: <http://mesenaatti.me/en/>

# Sourceforge: coding for the organization

The screenshot shows the Sourceforge homepage. At the top, there's a navigation bar with links for 'Search', 'Browse', 'Blog', 'Help', 'Log In', and 'Join'. Below the navigation is a banner with the text 'Find, Create, and Publish Open Source software for free'. A search bar is present, along with statistics: 'TODAY: 4,077,477 DOWNLOADS', '3,345 CODE COMMITS', '6,206 FORUM POSTS', '463 BUGS TRACKED', and a 'MORE DETAILS' link. There are two prominent ads: one for 'Go Parallel' (Translating Multicore Power into Application Performance) featuring Intel and Geeknet logos, and another for 'Earn More on Android' by airpush, which mentions 50,000 Developers, \$10+ CPM's, and 95%+ Fill Rates. On the left, there's a sidebar with categories like 'Audio & Video', 'Business & Enterprise', 'Communications', 'Development', 'Home & Education', 'Games', 'Graphics', 'Science & Engineering', 'Security & Utilities', and 'System Administration'. The main content area features a 'Project of the Month' section for 'PeaZip', which is described as a free cross-platform file and archive manager utility. It includes a download button for 'peazip-4.3/src.zip'. Other projects listed include 'StarUML', 'AkelPad', 'FreeCAD', and 'Lazarus', each with their respective project icons and download links.

The most popular platform for open source projects with 3.4 million developers that create over 324,000 projects: coding for an organization.

# GitHub: coding for the social networks

The screenshot shows the GitHub homepage. At the top, it displays "github" in the address bar, along with navigation links for "Signup and Pricing", "Explore GitHub", "Features", "Blog", and "Sign in". A prominent banner at the top states "2,110,447 people hosting over 3,683,591 repositories". Below this, a search bar includes the placeholder "Find any repository" and a list of popular projects: "jQuery, reddit, Sparkle, curl, Ruby on Rails, node.js, ClickToFlash, Erlang/OTP, CakePHP, Redis, and many more". Logos for various companies are displayed below the search bar, including Facebook, Twitter, Microsoft, VMware, Red Hat, LinkedIn, and Mozilla. The main content area is divided into two sections: "git /'git/'" and "git·hub /'git,həb/'". The "git" section describes Git as an "extremely fast, efficient, distributed version control system ideal for the collaborative development of software". The "git·hub" section describes GitHub as "the best way to collaborate with others. Fork, send pull requests and manage all your **public** and **private** git repositories". A central call-to-action button reads "Plans, Pricing and Signup" with the subtext "Unlimited public repositories are free!". Below this, a list of features is provided: "Free public repositories, collaborator management, issue tracking, wikis, downloads, code review, graphs and much more...". The bottom section contains four columns: "Team management" (describing 30-second access and activity feeds), "Code review" (describing commenting, tracking issues, and merging forks), "Reliable code hosting" (describing security, backups, and uptime), and "Open source collaboration" (describing participation in the community). Each column includes a "More about" link.

git /'git/'

git·hub /'git,həb/'

Plans, Pricing and Signup  
Unlimited public repositories are free!

Free public repositories, collaborator management, issue tracking, wikis, downloads, code review, graphs and much more...

**Team management**  
30 seconds to give people access to code. No SSH key required. Activity feeds keep you updated on progress.  
[More about collaboration](#)

**Code review**  
Comment on changes, track issues, compare branches, send pull requests and merge forks.  
[More about code review](#)

**Reliable code hosting**  
We spend all day and night making sure your repositories are **secure**, **backed up** and **always available**.

**Open source collaboration**  
Participate in the most important open source community in the world today—online or at one of our meetups.  
[More about our community](#)

The most popular platform for code development, and especially open source: a personal open source place + social network.

# GitHub as a platform: Gittip

The screenshot shows the Gittip homepage. At the top left is the Gittip logo with the tagline "Personal Funding". At the top right is a "Sign in using GitHub" button. Below the logo is a sub-header: "Set up recurring gift tips to people who make the world better. [Learn more ...](#)". The main section is titled "Tip someone!" with a search bar labeled "Enter a GitHub username: Go". Below this is a "Leaderboard" section with a link to "Unclaimed". The page is divided into two columns: "Top Givers" and "Top Receivers", each listing 10 users with their tip amounts.

Rank	Amount	User
1.	\$ 83.00	anonymous
2.	\$ 68.41	<a href="#">whit537</a>
3.	\$ 68.00	<a href="#">martindale</a>
4.	\$ 67.00	<a href="#">bruceadams</a>
5.	\$ 66.00	<a href="#">campadrenalin</a>
6.	\$ 50.00	<a href="#">mtamizi</a>
7.	\$ 45.00	<a href="#">joetyson</a>
8.	\$ 36.00	<a href="#">workforpie</a>
9.	\$ 33.25	<a href="#">wraithan</a>
10.	\$ 25.00	anonymous

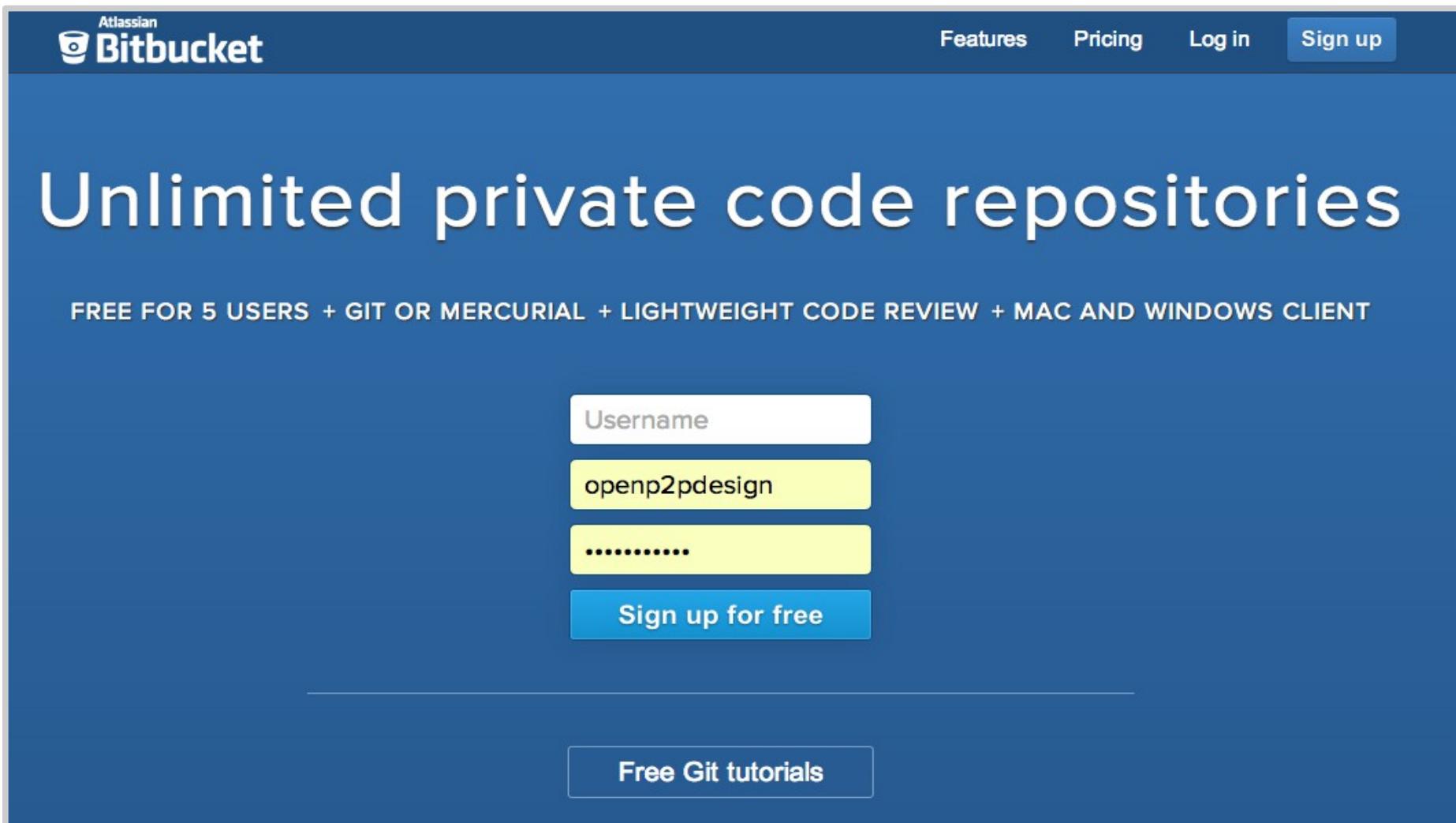
Rank	Amount	User
1.	\$ 169.80	<a href="#">whit537</a>
2.	\$ 71.39	<a href="#">inoller</a>
3.	\$ 58.63	<a href="#">alex</a>
4.	\$ 56.79	<a href="#">mitsuhiko</a>
5.	\$ 47.87	<a href="#">kennethreitz</a>
6.	\$ 46.48	<a href="#">steveklabnik</a>
7.	\$ 37.50	<a href="#">zzseek</a>
8.	\$ 31.74	<a href="#">visionmedia</a>
9.	\$ 30.32	<a href="#">antirez</a>
10.	\$ 29.57	<a href="#">jezdez</a>

**Gittip happens every Thursday.**

The amounts above are what the Gittip community is willing to give as a weekly gift to each person, but only if the person accepts it. Gittip is **opt-in**. We never collect money on a person's behalf until that person opts in by claiming their account.

A web service built on top of GitHub, it enables users to thank / give money to their favourite developers / projects.

# Bitbucket

The image shows the Bitbucket sign-up page. At the top, there's a blue header bar with the Atlassian logo and the Bitbucket logo. To the right of the logo are links for "Features", "Pricing", "Log in", and a blue "Sign up" button. Below the header, the main title "Unlimited private code repositories" is displayed in large white text. Underneath it, a subtitle reads "FREE FOR 5 USERS + GIT OR MERCURIAL + LIGHTWEIGHT CODE REVIEW + MAC AND WINDOWS CLIENT". A sign-up form follows, consisting of three input fields: "Username" (containing "openp2pdesign"), "Email" (containing "....."), and a "Sign up for free" button. At the bottom of the form is a "Free Git tutorials" link.

Atlassian  
**Bitbucket**

Features   Pricing   Log in   Sign up

# Unlimited private code repositories

FREE FOR 5 USERS + GIT OR MERCURIAL + LIGHTWEIGHT CODE REVIEW + MAC AND WINDOWS CLIENT

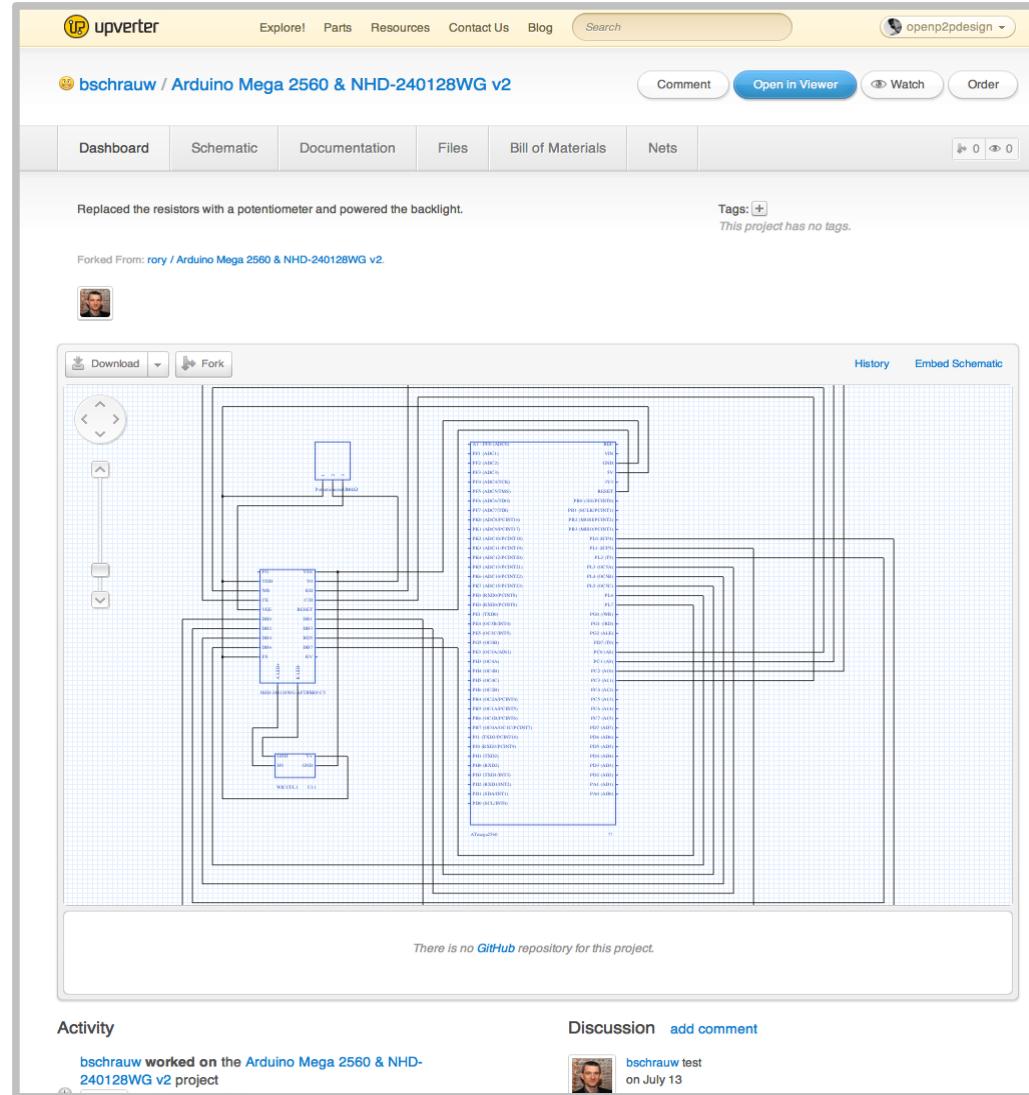
Username  
openp2pdesign  
.....

Sign up for free

Free Git tutorials

Bitbucket is a web-based hosting service for projects that use either the Mercurial or Git revision control systems.

# Upverter: design hardware, with GitHub



Upverter is a design and collaboration platform for students, engineers, designers, makers and hackers for making hardware online.

Source: <http://upverter.com>



Aalto University  
Media Factory

03.

# The business of Digital Fabrication, Open Design and DIY

# And designers can be entrepreneurs

## Glif - iPhone 4 Tripod Mount & Stand

Project by Dan Provost & Tom Gerhardt • [send message](#)



PROJECT HOME

UPDATES 17

BACKERS 5273

COMMENTS 266



**5,273**

BACKERS

**\$137,417**

PLEDGED OF \$10,000 GOAL

**0**

SECONDS TO GO

### FUNDING SUCCESSFUL

This project successfully raised its funding goal on November 2.

### PLEDGE \$5 OR MORE

The sweet, sweet satisfaction of contributing to an awesome project. Plus,

New platforms for crowdsourcing allow you to fund your projects, and digital fabrication and FabLabs could be useful for manufacturing them.

Source: <http://www.kickstarter.com/projects/danprovost/glif-iphone-4-tripod-mount-and-stand>

# And designers can be entrepreneurs

**TikTok+LunaTik Multi-Touch Watch Kits**

Project by Scott Wilson • [send message](#)

PROJECT HOME    UPDATES 39    BACKERS 13512    COMMENTS 4140



**13,512**  
BACKERS  
**\$941,718**  
PLEDGED OF \$15,000 GOAL  
**0**  
SECONDS TO GO

**FUNDING SUCCESSFUL**  
This project successfully raised its funding goal on ✓ December 16.

New platforms for crowdsourcing allow you to fund your projects, and digital fabrication and FabLabs could be useful for manufacturing them.

Source: <http://www.kickstarter.com/projects/1104350651/tiktok-lunatik-multi-touch-watch-kits>

# But “Open” alone is not enough

## 100K Stray Toasted Pull Toys

Project by C. Sven Johnson • [send message](#)

PROJECT HOME    UPDATES 2    BACKERS 13    COMMENTS 2



100K Stray Toasted Pull Toys

13

BACKERS

\$765

PLEDGED OF \$7,500 GOAL

0

SECONDS TO GO

FUNDING UNSUCCESSFUL

This project reached the deadline without achieving its funding goal on November 1, 2009.



PLEDGE \$5 OR MORE

Open Source is a good strategy, but your project needs to be meaningful for enough people!

Source: <http://www.kickstarter.com/projects/1833785894/100k-stray-toasted-pull-toys>

# You need to interact with the market

**threadless Tees** Shop ▾ Participate ▾ Community ▾ Info ▾

**\$10,000!**  
Submit your idea for a chance at 10K! ▶ LEARN MORE ▶

Score 300 designs fo

Good Shirts

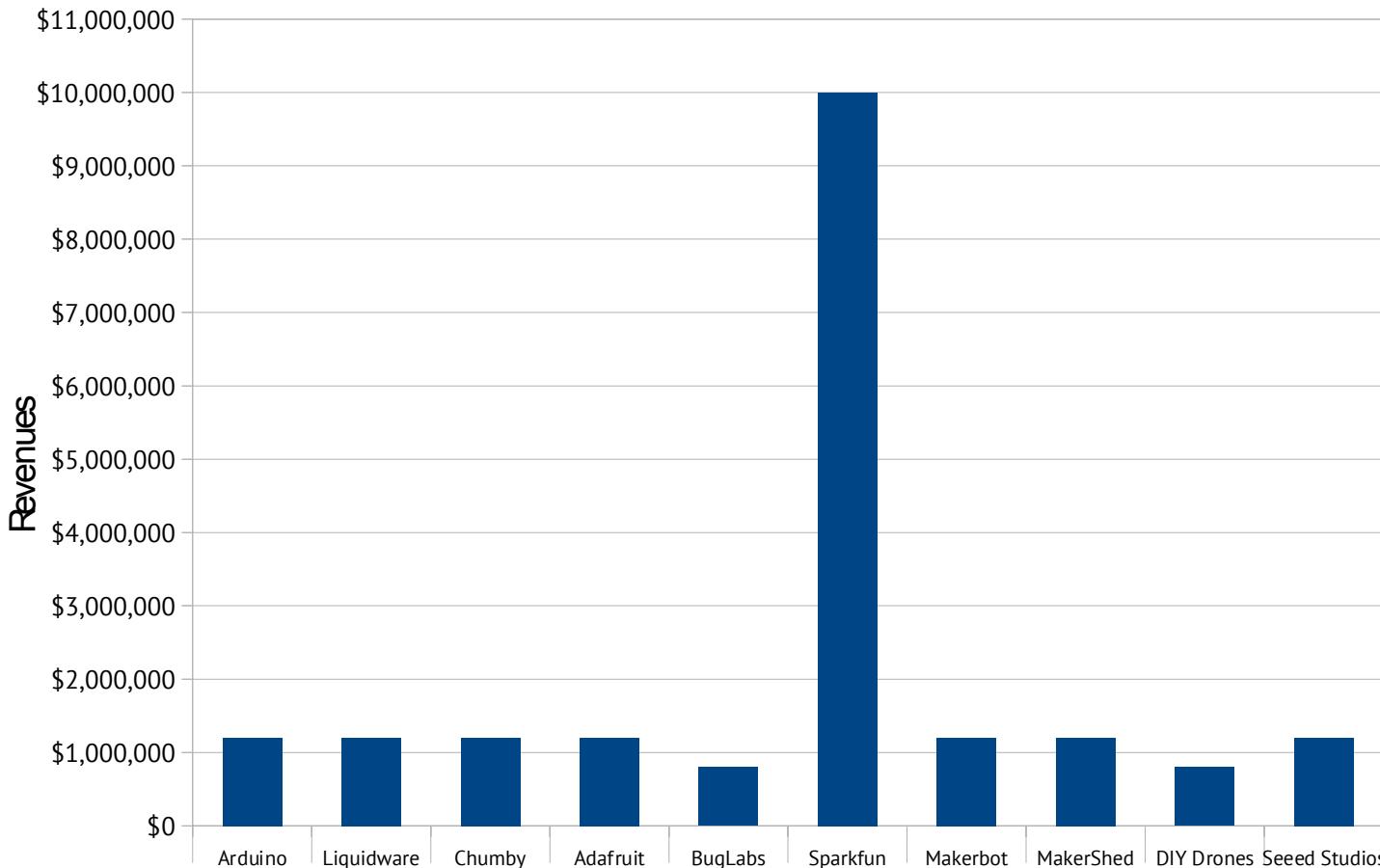
Shop Guys | Shop Girly

Design	Price	Author(s)
Cargo Flight for UNICEF	\$300,000	Justin & Christine Gignac
100 Metric Tons Of Corn Soy Blend for UNICEF	\$75,000	Justin & Christine Gignac
Motorbike for UNICEF	\$3,064.82	Justin & Christine Gignac
Emergency Tent for UNICEF	\$1,939.96	Justin & Christine Gignac

... and this is exactly what new services and platforms enable!

Source: <http://www.threadless.com/>

# Open Hardware: a rising market



2009: 13 companies above \$ 1 m. (totale: \$ 50 m.). \$  
1 billion by 2015.

Source: <http://blog.makezine.com/archive/2010/05/million-dollar-baby-businesses-de.html>

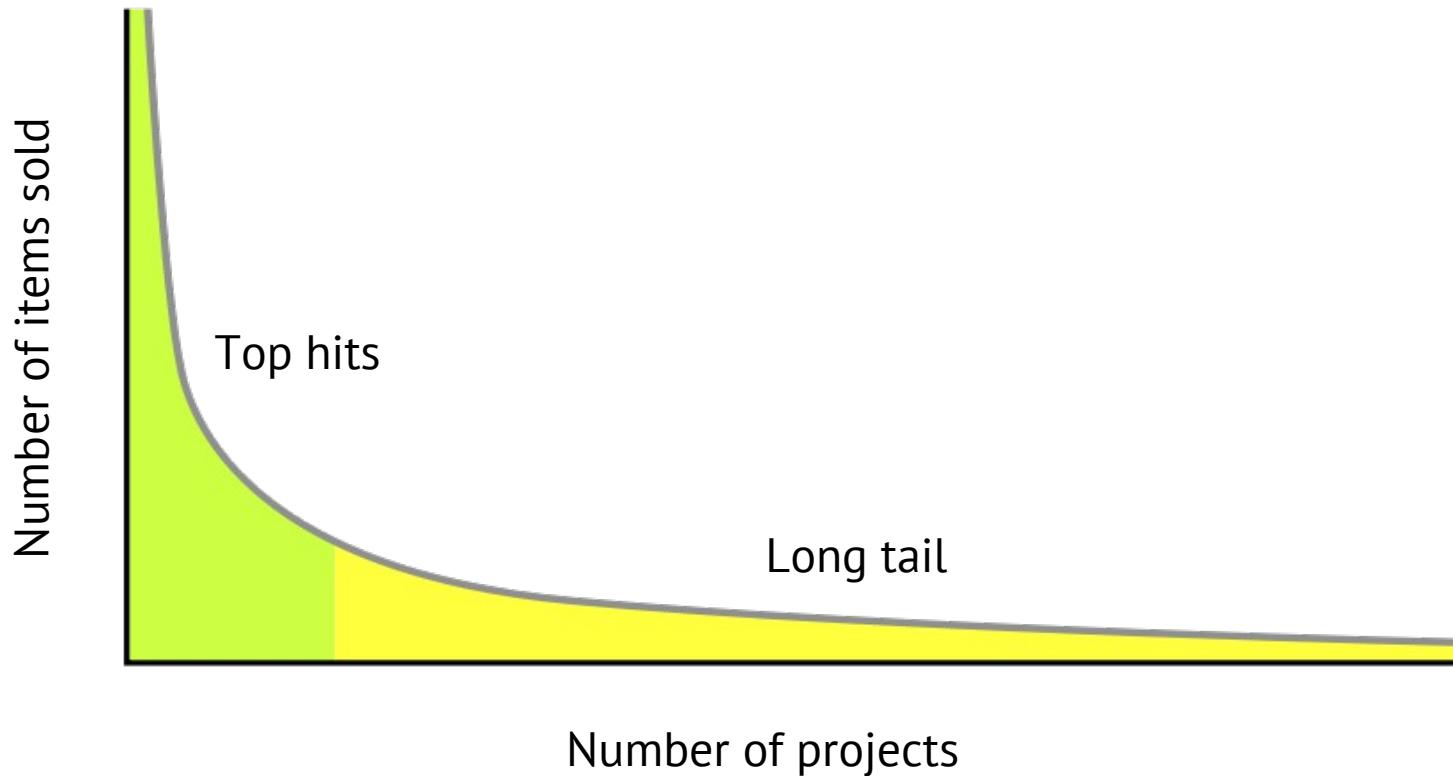
# SparkFun



*“In 2010, SparkFun had revenues of about \$18.4MM. As of April of 2011, we have around 120 employees, up from 87 a year ago.”*

*“We hope to grow by 50% this year (2011) to around \$28MM in sales. We expect to be in the 30-50MM range in the next 3-5.”*

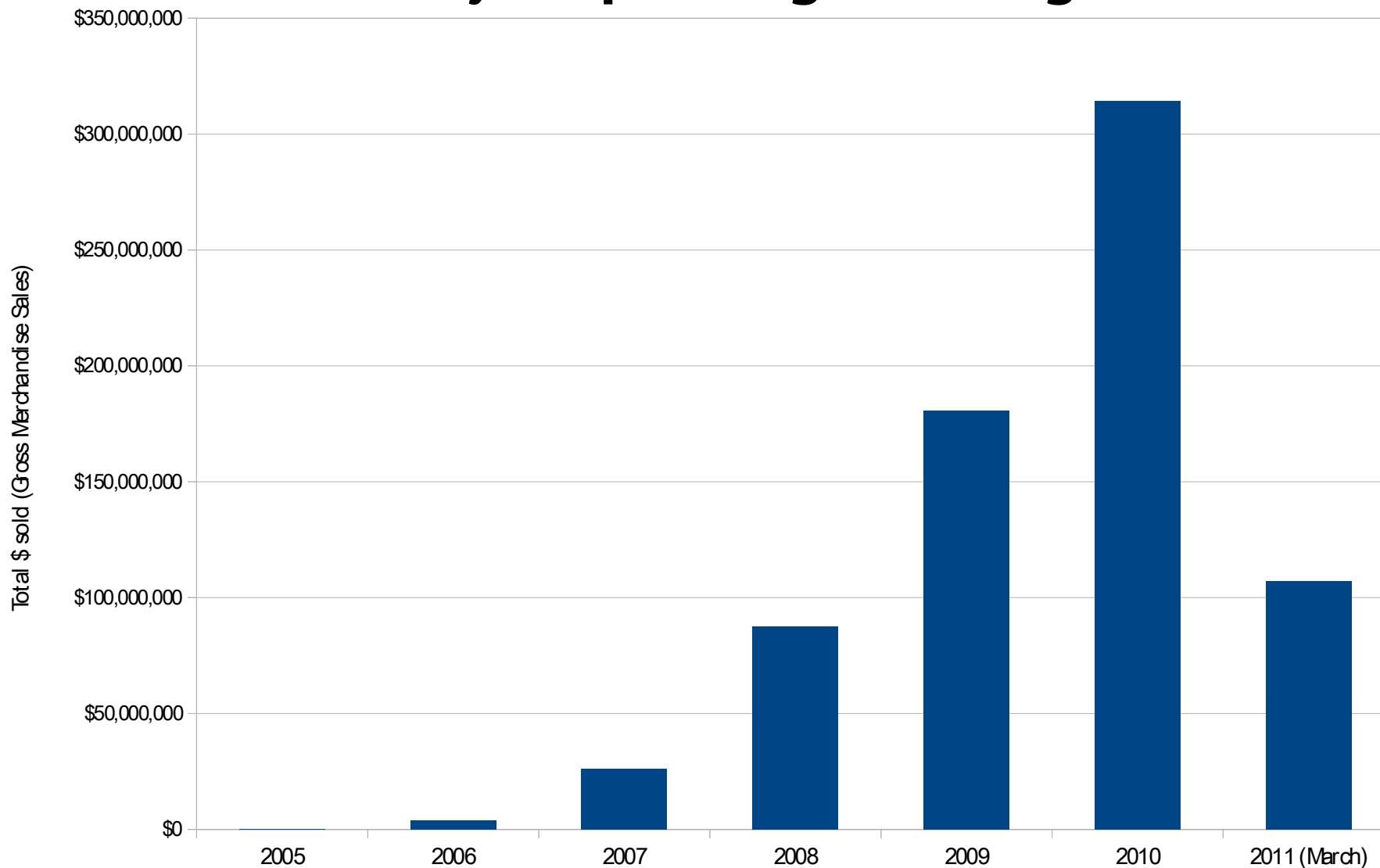
# A long tail of users / projects...



Another big player, a marketplace for your DIY / Crafts projects (exploiting the long tail effect).

Source: [http://en.wikipedia.org/wiki/Power\\_law](http://en.wikipedia.org/wiki/Power_law)

# Etsy: exploiting the long tail



Users: +8 milioni / Active shops: +800,000  
Products: 8.5 millions.

Source: <http://www.etsy.com/press/kit/>

# Makers can create a startup: Makerbot



Started from an hackerspace (and from RepRap, even financially).

Source: <http://www.flickr.com/photos/kellycdb/6168020183/>  
<http://commons.wikimedia.org/wiki/Category:Wood>

# The market of 3D printing

3D printing market has grown by 24.1% in 2011.  
Forecasts: \$3.1 billions (2016) \$5.2 billions (2020).  
*(Wohlers Associates, 2011)*

**makerBot**  
INDUSTRIES

Sustainable business  
--> \$10 Millions from VC



Not yet sustainable  
--> \$5 Millions from VC

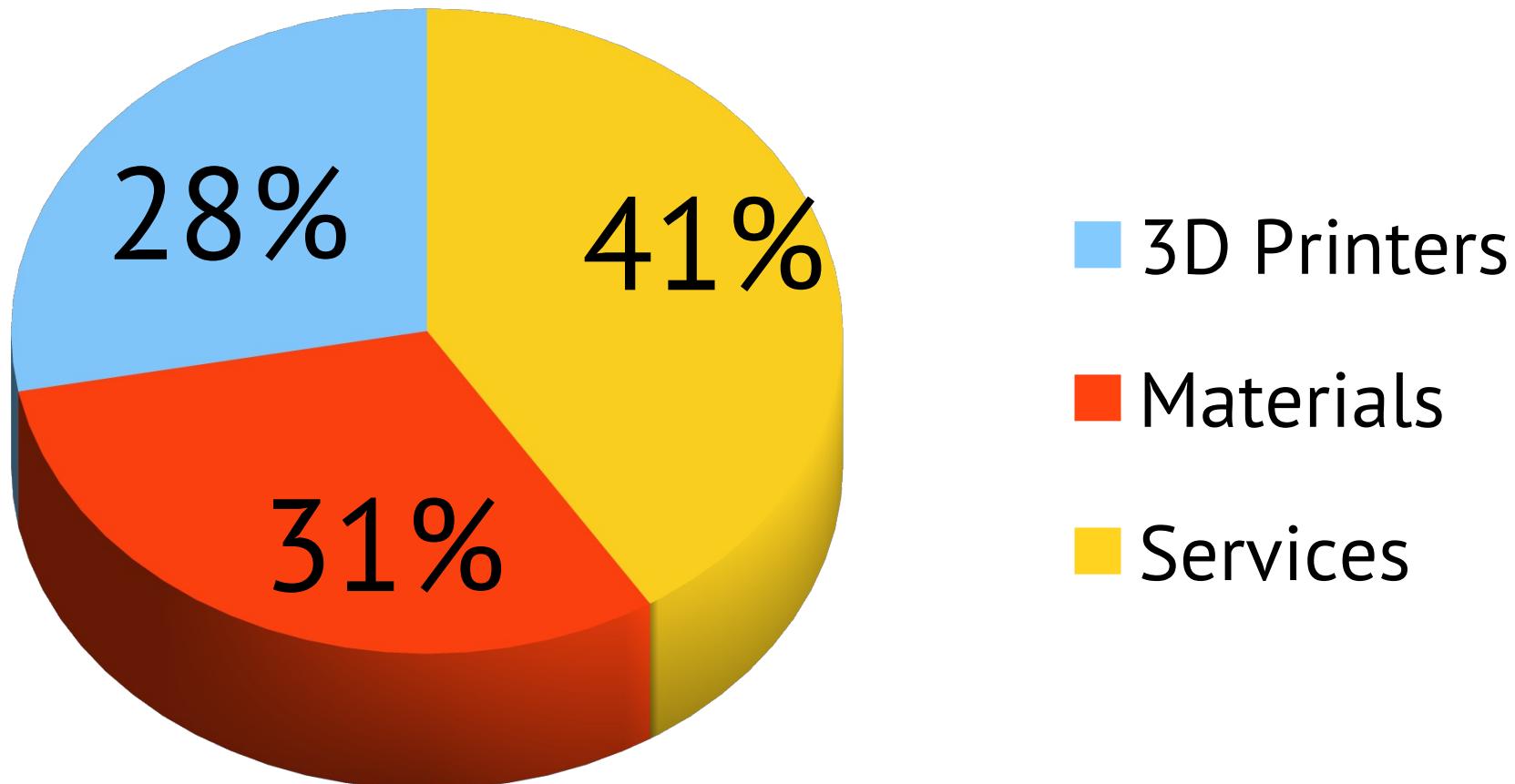
# Big corporations: 3D Systems

The screenshot shows the homepage of 3D Systems' website. At the top, there's a navigation bar with links to About Us, Newsroom, Support, Investor Relations, Where to Buy, Contact, and a phone number (803.326.3900). There's also a language selection for English and a Google Custom Search bar. Below the header is a main menu with categories: Personal Printers, Professional Printers, Production Printers, On Demand Parts, Digital Content, and Design Productivity. The main content area features a large image of a hand holding a handheld 3D printer with the word "Liberate" overlaid. Below this image is a call-to-action button labeled "Read more »". To the right of the main image is a sidebar titled "Announcements" which includes a section about the "Z Corporation Acquisition Completed". It lists three bullet points: "Ideation To Manufacturing", "High Speed To High Resolution", and "Full Color To Fully Functional Parts". Below this is a quote: "Endless applications flexibility from a single source! 3D Systems - Create with Confidence". The sidebar also has sections for "News" and "Connect With Us". At the bottom of the page, there are links to Home, Contact, Sales Terms, Terms And Conditions, Privacy Statement, and Investor Relations. Copyright information states "Copyright ©1997-2011 3D Systems, Inc. All rights reserved." Below the footer are social media icons for RSS, Facebook, YouTube, Twitter, LinkedIn, Google+, and others.

Not only hackers or startups are in this field, but even big and old companies.

Source: <http://www.3dsystems.com/>

# Digital Fabrication: not just machines



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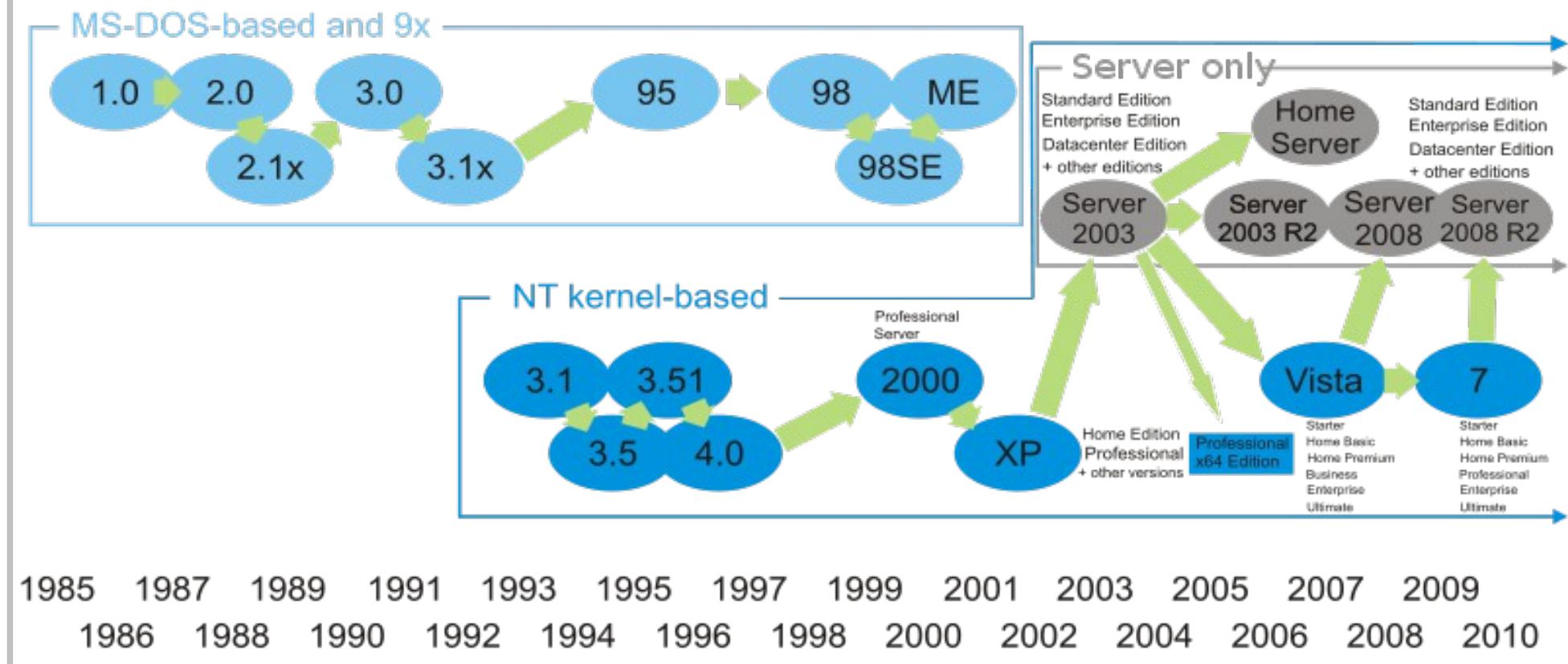
There are many ways for making money with digital fabrication...

Source: <http://investor.3dsystems.com/>

# A typical closed innovation system

## Microsoft Windows

family tree



This is the typical evolution of a closed company...

Source: [http://en.wikipedia.org/wiki/Timeline\\_of\\_Microsoft\\_Windows](http://en.wikipedia.org/wiki/Timeline_of_Microsoft_Windows)

# Linux distro timeline

Version 7.2 by NPU (nonplusx@gmail.com)

For the latest version, visit kde-files.org

Feel free to modify and spread. Mail me for updates, corrections and source flw/xcf files

Based on "Línea del tiempo Distribuciones Linux" by A. Sandoval (microteknologias.cl)  
Additional info: distrowatch.com/wikipedia.org

# An open innovation system



GNU/Linux

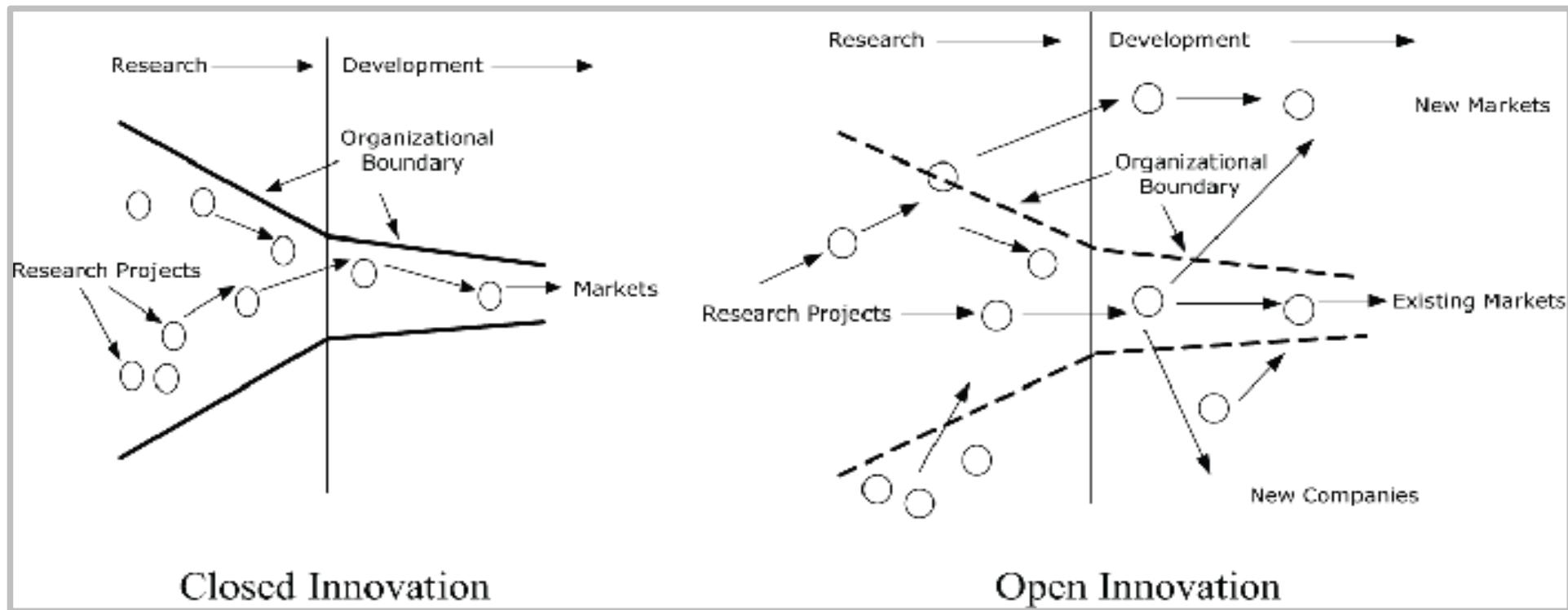
And newer pictures are too big for a slide :-)

Source: <http://futurist.se/gldt/>

1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007

1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007

# Open Innovation vs. Closed Innovation



Firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology.

# Open Innovation vs. Open Source

“Open innovation is sometimes conflated with open source methodologies for software development. There are some concepts that are shared between the two, such as the idea of greater external sources of information to create value. However, open innovation explicitly incorporates the business model as the source of both value creation and value capture. This latter role of the business model enables the organization to sustain its position in the industry value chain over time. While open source shares the focus on value creation throughout an industry value chain, its proponents usually deny or downplay the importance of value capture.”

Source: Chesbrough, H., 2011. Open Services Innovation: Rethinking Your Business to Grow and Compete in a New Era 1st ed., Jossey-Bass.

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# Look for what is becoming a *commodity*

A **commodity** is a good for which there is demand, but which is supplied without qualitative differentiation across a market. [...] the market treats it as equivalent or nearly so no matter who produces it.

Source: <http://en.wikipedia.org/wiki/Commodity>

**Commoditization** (also called commodification) occurs as a goods or services market loses differentiation across its supply base, often by the diffusion of the intellectual capital necessary to acquire or produce it efficiently. [...] a unique, branded product into a market based on undifferentiated products.

Source: <http://en.wikipedia.org/wiki/Commoditization>

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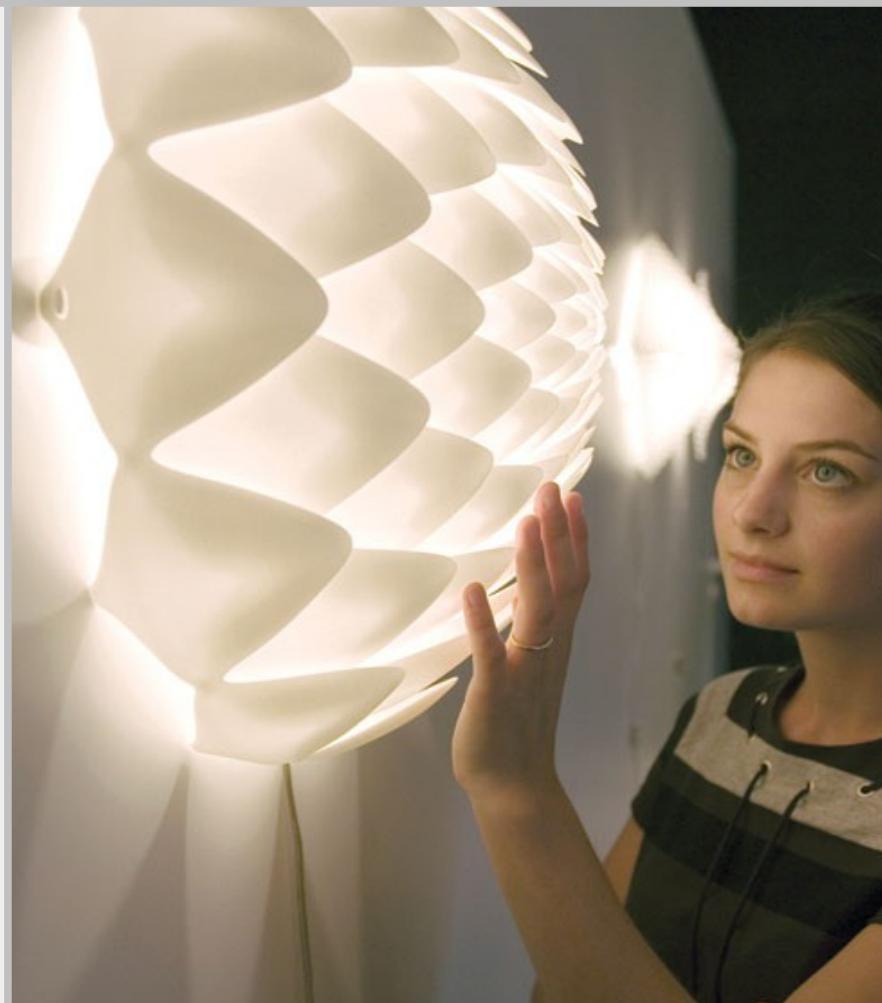
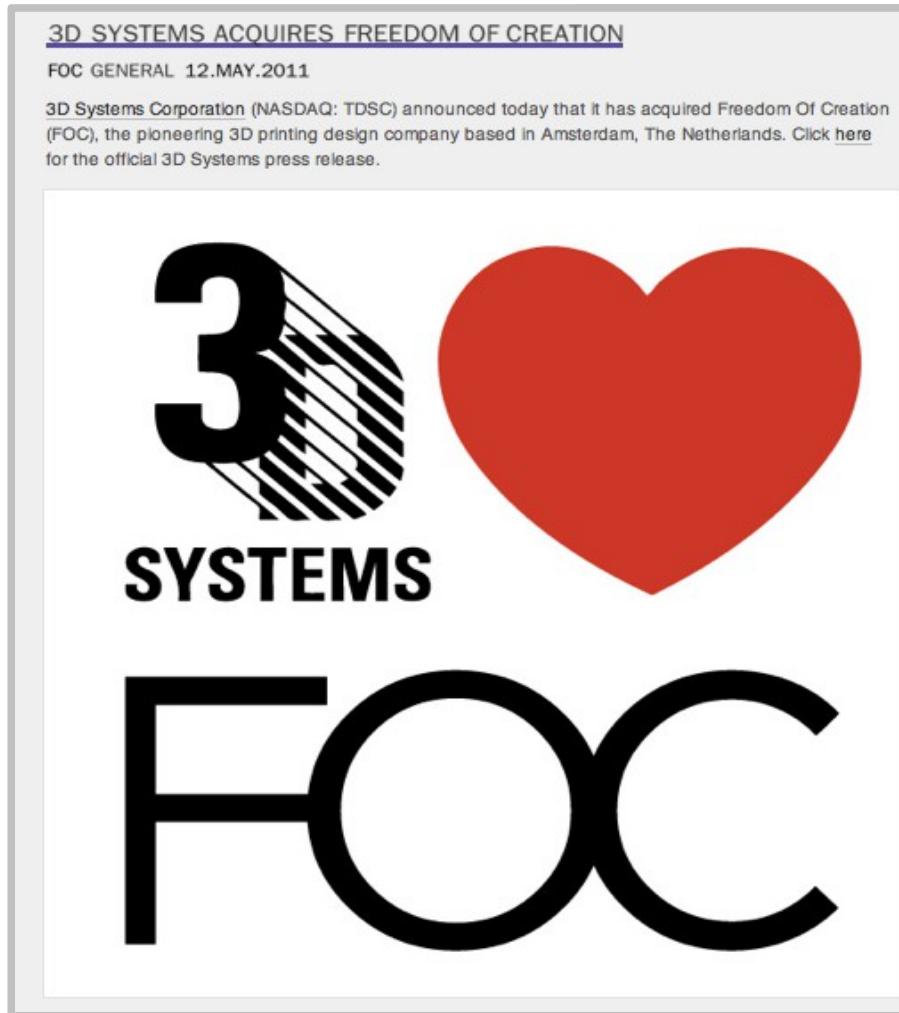
# Hardware and Software, becoming commodities

- \* ('50s-'70s) **Hardware** is the product, software is for free: mainframes
    - > Hacker ethic of sharing information
  - \* ('80s-'90s) Hardware is commodity, **software** is the product and it's proprietary: personal computers
    - > Microsoft emerges
  - \* ('00s-...) Even software is a commodity, so let's **sell services and get data from users**: open source, web 2.0, services around software, software as service, the cloud
    - > web 2.0 emerges
-

# Manufacturing and Design, becoming commodities

- \* ('90s-'00s) Manufacturing becomes a commodity and slowly disappears in the West (thanks to China)
  - \* ('10s-...) Now it's even more a commodity (thanks to Fabbing)
  - \* ('00s-...) Professional design is slowly becoming a commodity (thanks to Fast Fashion, Ikea, design schools bubble, Shanzai)
- > Where is **value now**, in Design and Manufacturing?
-

# Fabbing + designers = \$\$\$ + Open Design



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Big corporations love shopping Design companies for selling their content with 3D printers.

Source: <http://www.freedomofcreation.com/home/3d-systems-acquires-freedom-of-creation>

# But even makers may be giving content away...

a MakerBot Industries website

# THINGIVERSE

THINGS   TOOLS   TAGS   BLOG

Welcome, friend.  
Please [REGISTER](#) or [LOGIN](#) to rock.

SEARCH

Thingiverse is a place to share digital designs that can be made into real, physical objects. Let's create a better universe, together!

UPLOAD A THING

FEATURED



**Botmobile Dune Buggy**

Created by **makerbot**

Created on Nov 24, 2011

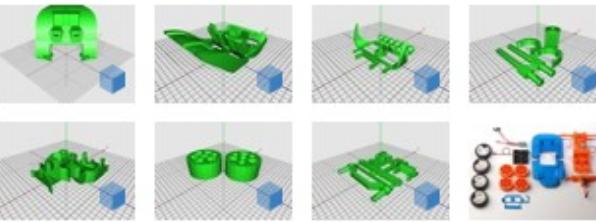
Featured on Nov 25, 2011

Order the Botmobile Kit from the MakerBot Store at [store.makerbot.com/makerbot-botmobile.html](http://store.makerbot.com/makerbot-botmobile.html) and you'll have all the parts you need to get your printed Dune Buggy going in no time!

The wind in your hair... The sun on your face... The sand in your teeth... Everyone loves a day out cruising the dunes in their trusty Botmobile Dune Buggy!

The Botmobile Dune Buggy is an open source 3d printed remote control car that you can build at home. Using the Botmobile chassis the Dune Buggy was built from the ground up as a completely new type of remote control car

See video of the Botmobile Dune Buggy in action:  
[VIEW VIDEO](#)



The same strategy of giving content to the users of the 3D printers has been adopted by Makerbot.

Source: <http://www.thingiverse.com/>

# Fabbing + designers = \$\$\$ + Open Design

The image shows the Alibre website's main page. At the top left is the Alibre logo, which consists of a stylized 3D cube icon followed by the word "Alibre". To the right of the logo is a phone number "877.525.4273" and an email address "Sales@Alibre.com". Below the header is a navigation bar with six items: "3D Software", "3D Printers", "Downloads", "Training & Support", "Successes", and "How to Buy". The "3D Software" item has a dropdown arrow indicating it has sub-options. The main content area features a large grid of 12 smaller images arranged in three rows of four. Each image shows a different 3D model or software interface, such as a motorcycle, a green car, a blue racing car, a red chair, and various mechanical parts. A dark banner at the bottom contains the text "3D CAD Software" and "Comprehensive 3D & 2D Design, Simulation, Rendering, and more... >".

But even anybody could become a user, so let's buy a design software and offer it to them.

Source: <http://blog.3dsystems.com/2011/05/3d-systems-partners-with-alibre.html>

<http://www.alibre.com/>

# And users innovate (even in non open way)



---

Not developed by a company...

# Users innovate – a lot!

*“We find this previously unmeasured type of household sector innovation to be quite large: 6.2% of UK consumers - 2.9 million individuals - have engaged in consumer product innovation during the prior 3 years. In aggregate, consumers’ annual product development expenditures are 2.3 times larger than the annual consumer product R&D expenditures of all firms in the UK combined. “*

Eric A. Von Hippel, Jeroen De Jong, Steven Flowers

**Comparing Business and Household Sector Innovation in Consumer Products: Findings from a Representative Study in the UK**

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1683503](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1683503)

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Aalto University  
Media Factory

03.

## Business models for Open projects

# Business models of Open Source (software)

**Non-monetary** incentives:

- \* problem solving
- \* ethical questions
- \* education + learning
- \* reputation --> social interactions + jobs

--> it's not just about money! Also a **gift economy**

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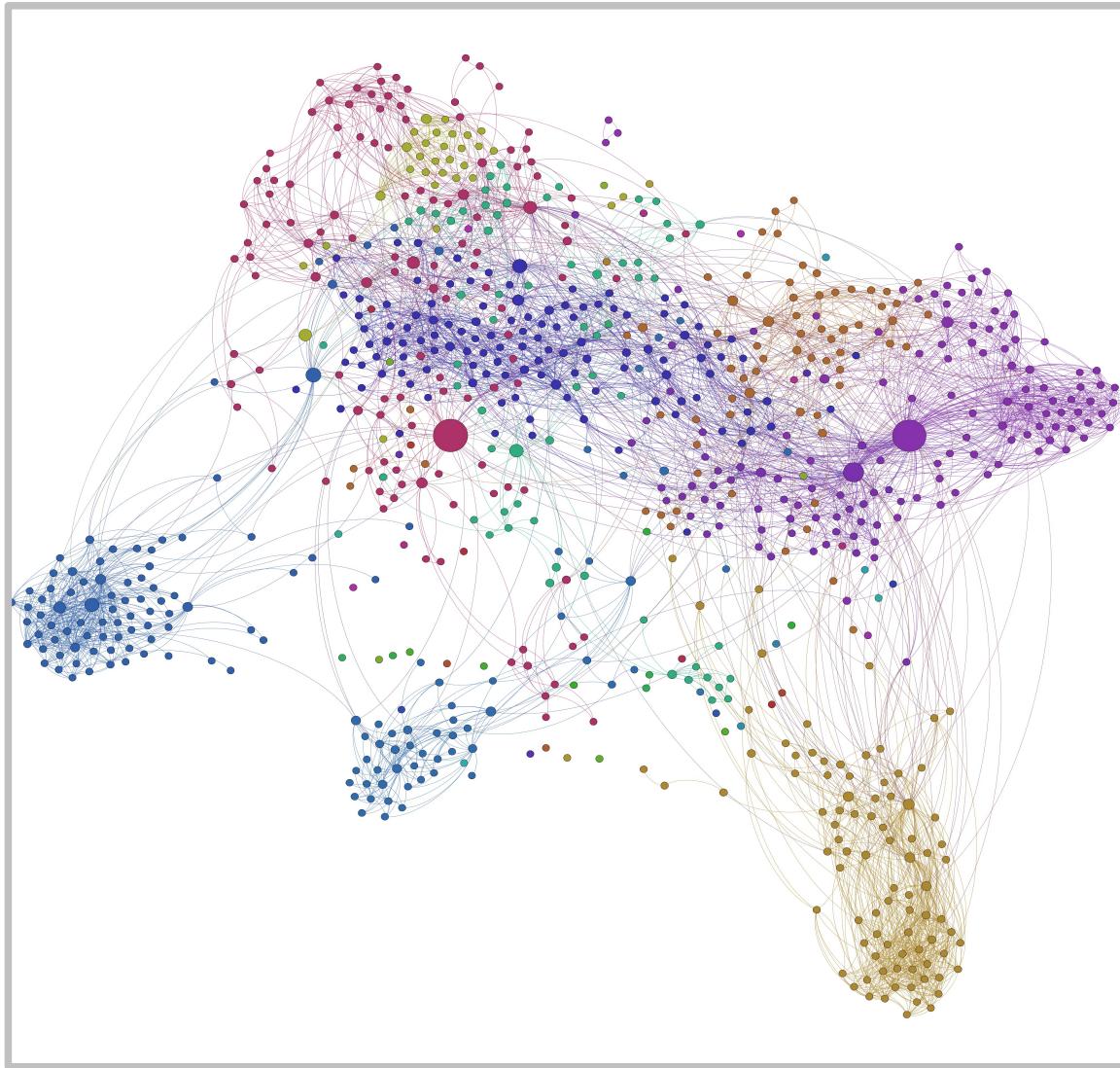
# A gift economy



A mode of exchange where valuable goods and services are regularly given without any explicit agreement for immediate or future rewards.

Source: [http://en.wikipedia.org/wiki/Gift\\_economy](http://en.wikipedia.org/wiki/Gift_economy)

# A gift economy: focus on social networks



Flows of good and services are important only for maintaining and improving social networks in the community.

Source: [http://en.wikipedia.org/wiki/Gift\\_economy](http://en.wikipedia.org/wiki/Gift_economy)

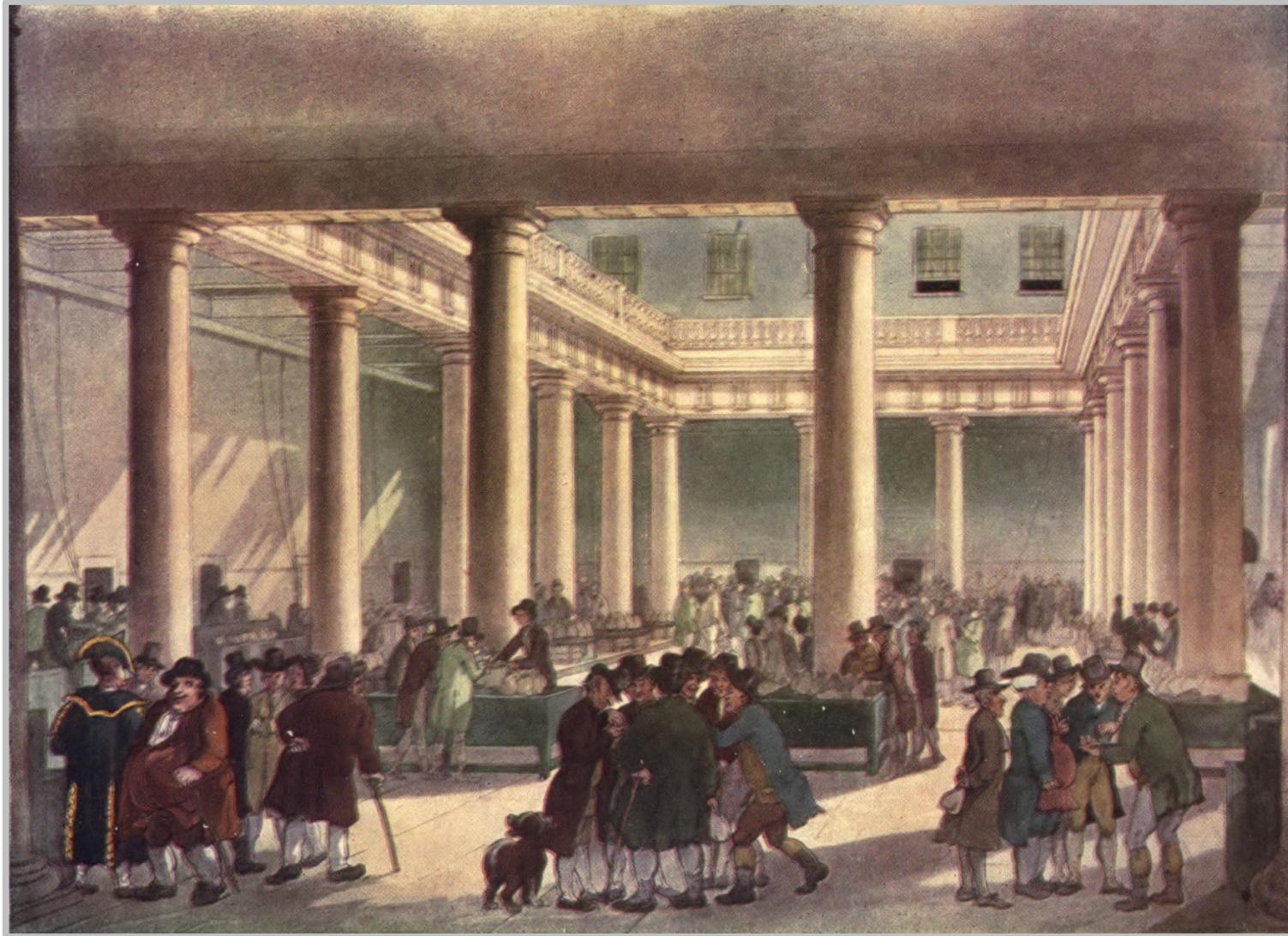
# Business models of Open Source (software)

## Monetary incentives:

- \* selling software (as open or even with dual licensing)
  - \* offering services (customisation, support, ...)
  - \* paid developer work
  - \* donation
  - \* software as service (freemium, ...)
  - \* embedding software into hardware
- > ... it's not just only volunteer work! Also a **market economy**



# A market economy



Decisions regarding investment, production and distribution are based on supply and demand and the prices are determined in a free price system.

Source: [http://en.wikipedia.org/wiki/Market\\_economy](http://en.wikipedia.org/wiki/Market_economy) [http://en.wikipedia.org/wiki/Market\\_economy](http://en.wikipedia.org/wiki/Market_economy)

# A market economy: barter



A method of exchange by which goods or services are directly exchanged for other goods or services without using a medium of exchange, such as money.

Source: <http://en.wikipedia.org/wiki/Barter>

# A market economy: money as medium



The main functions of money are distinguished as: a medium of exchange; a unit of account; a store of value.

Source: <http://commons.wikimedia.org/wiki/Category:Coins>

# Business models of Open Source (software)

## Red Hat

first open source company expected to break through the \$1bn mark in 2011.

Source: [http://www.channelregister.co.uk/2011/03/24/redhat\\_q4\\_f2011\\_numbers/](http://www.channelregister.co.uk/2011/03/24/redhat_q4_f2011_numbers/)

## Cost of developing Linux

The Linux Foundation (LF) (2008): \$10.8 billion to build the Linux community distribution Fedora 9 in today's dollars with today's software development costs.

\$1.4 billion to develop the Linux kernel alone.

Source: <http://www.linuxfoundation.org/sites/main/files/publications/estimatinglinux.html>

---

# The levels of openness in Open Hardware

1. **Closed:** any hardware for which the creator of the hardware will not release any information.
2. **Open Interface:** all the documentation on how to make a piece of hardware perform the function for which it is designed is available (minimum level of openness).
3. **Open Design:** in which enough detailed documentation is provided that a functionally compatible device could be created by a third party.
4. **Open Implementation:** the complete bill of materials necessary to construct the device is available.

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Patrick McNamara defined 4 possible levels of Openness in Open Hardware.

# Note: Open Business is not completely open

- \* **identity (brand)** is fixed and is a warranty certificate
- \* **existing business ecosystems** may not be open
- \* **knowledge, expertise, tools, resources** are not always “open”



# The business models of Open Hardware

- \* **Services and expertise** (customization, consulting)
  - \* **Manufacturing** of owned or third party Open Hardware
  - \* **Manufacturing of proprietary hardware** based on Open Hardware
  - \* **Dual-licensing**
  - \* **Proprietary hardware designs** based on Open Hardware
  - \* Proprietary **software tools** for developing Open Hardware
  - \* ... and ...
-

# Business models for FabLabs

- \* **Enabler:** launch new Labs and support services
  - \* **Education:** a global distributed model of education through Fab Labs (Fab Academy + peer-to-peer learning)
  - \* **Incubator:** provide infrastructure for entrepreneurs to turn their Fab Lab creations into sustainable local businesses.
  - \* **Replicated / Network:** provide a product, service or curriculum that operates by utilizing the infrastructure, staff and expertise of a local Fab Lab
-

# The business models of Open Hardware

The screenshot shows the homepage of the Sparkle Labs Electronics Kits website. At the top left is a cartoon flask icon with a smiling face and three stars above it. To its right, the text "Sparkle Labs Electronics Kits" is displayed in a large, bold, black font. In the top right corner is a yellow speech bubble containing the text "CREATE HACK GROW". Below the main title is a navigation bar with links: HOME (red), WEBLOG (blue), PRODUCTS (blue), LEARN (blue), PROJECTS (blue), and CONTACT (blue). To the right of the navigation bar are two buttons: "BUY NOW ONLINE!" (green) and "SAVE OR SHARE!" (pink). The main headline "Discover Electronics!" is prominently displayed in large, colorful letters (pink and orange gradient). Below the headline is a section titled "Learn to make your own circuits." with a descriptive paragraph about the DIY movement and the kit's purpose. To the right of this text is a 3D rendering of a breadboard with various electronic components like resistors, capacitors, and LEDs connected by wires. A green circular badge next to the breadboard says "Over 130 parts". At the bottom right of the page is the "sparkle labs" logo, which includes the flask icon and the brand name.

**Sparkle Labs Electronics Kits**

CREATE  
HACK  
GROW

HOME WEBLOG PRODUCTS LEARN PROJECTS CONTACT

BUY NOW ONLINE!

SAVE OR SHARE!

# Discover Electronics!

**Learn to make your own circuits.**

The growing DIY movement is empowering people to take control of their products and environment. The Discover Electronics Kit contains everything you need to learn the basics of electronics and make your own projects. It contains the most common electronics components as well as a prototyping breadboard for you to get started right away. Easy full color diagrams teach you how to bring your own ideas to life.

**Online video course**

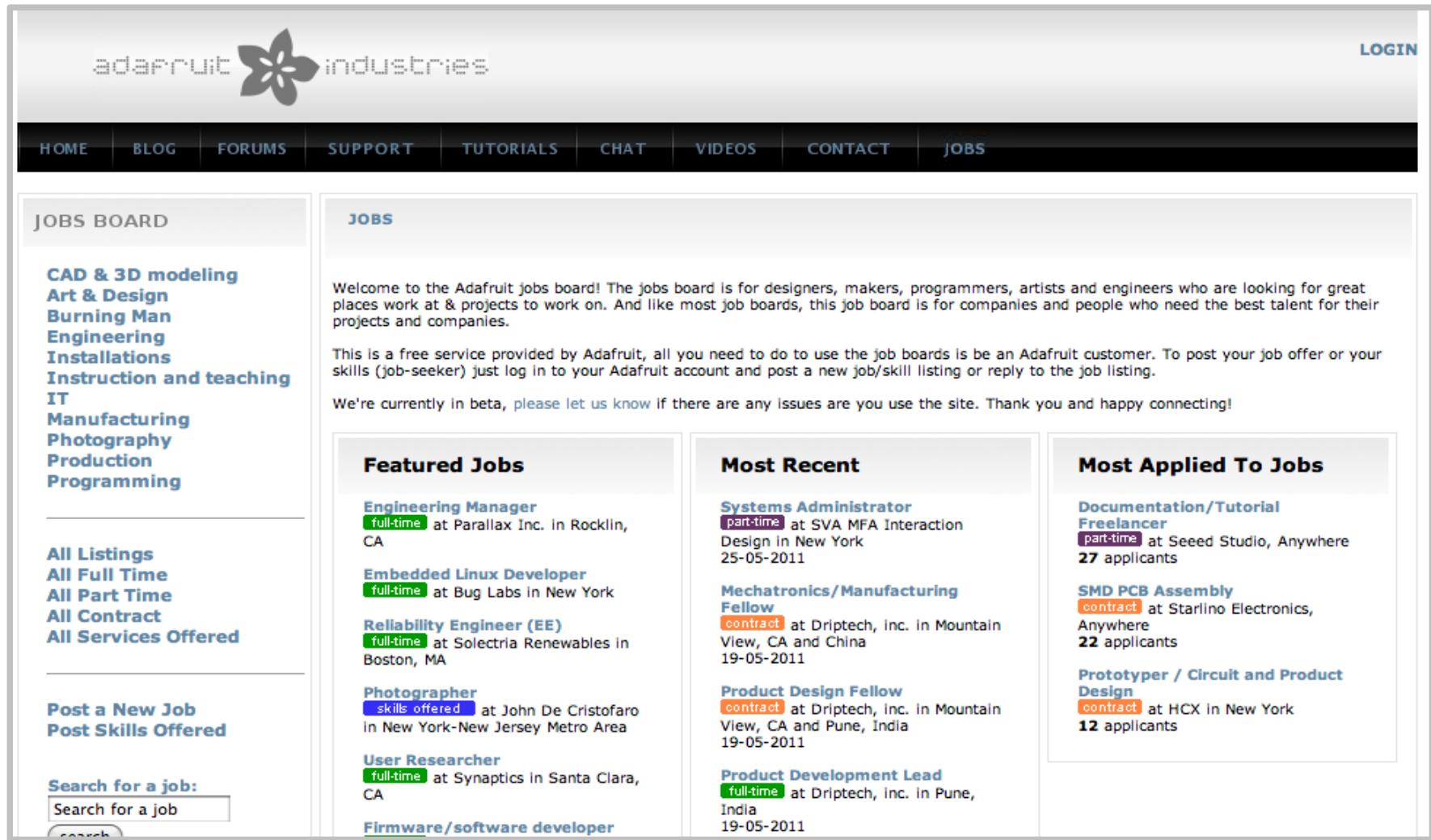
Follow along with our videos online. Take the course at your own speed, complete assignments and share your progress.

Over 130 parts

by sparkle labs

Proprietary hardware tools for learning how to develop Open Hardware.

# The business models of Open Hardware



The screenshot shows the Adafruit Industries website's jobs board page. At the top, there is a navigation bar with links for HOME, BLOG, FORUMS, SUPPORT, TUTORIALS, CHAT, VIDEOS, CONTACT, and JOBS. The JOBS link is highlighted in white, indicating the current page. The main content area has two columns. The left column, titled 'JOBS BOARD', contains a sidebar with categories like CAD & 3D modeling, Art & Design, Burning Man, Engineering, Installations, Instruction and teaching, IT, Manufacturing, Photography, Production, and Programming. Below this is a list of filters: All Listings, All Full Time, All Part Time, All Contract, and All Services Offered. Further down are links for Post a New Job, Post Skills Offered, and a search bar labeled 'Search for a job:' with a 'search' button. The right column, titled 'JOBS', has a welcome message for the beta version of the job board. It features three sections: 'Featured Jobs', 'Most Recent', and 'Most Applied To Jobs'. Each section lists several job postings with details like title, type (full-time, part-time, contract), company, location, and date.

**JOBS BOARD**

**CAD & 3D modeling**  
**Art & Design**  
**Burning Man**  
**Engineering**  
**Installations**  
**Instruction and teaching**  
**IT**  
**Manufacturing**  
**Photography**  
**Production**  
**Programming**

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**All Listings**  
**All Full Time**  
**All Part Time**  
**All Contract**  
**All Services Offered**

---

**Post a New Job**  
**Post Skills Offered**

**Search for a job:**  
Search for a job

**JOBS**

Welcome to the Adafruit jobs board! The jobs board is for designers, makers, programmers, artists and engineers who are looking for great places work at & projects to work on. And like most job boards, this job board is for companies and people who need the best talent for their projects and companies.

This is a free service provided by Adafruit, all you need to do to use the job boards is be an Adafruit customer. To post your job offer or your skills (job-seeker) just log in to your Adafruit account and post a new job/skill listing or reply to the job listing.

We're currently in beta, please let us know if there are any issues are you use the site. Thank you and happy connecting!

**Featured Jobs**

**Engineering Manager** full-time at Parallax Inc. in Rocklin, CA

**Embedded Linux Developer** full-time at Bug Labs in New York

**Reliability Engineer (EE)** full-time at Solectria Renewables in Boston, MA

**Photographer** skills offered at John De Cristofaro in New York-New Jersey Metro Area

**User Researcher** full-time at Synaptics in Santa Clara, CA

**Firmware/software developer**

**Most Recent**

**Systems Administrator** part-time at SVA MFA Interaction Design in New York  
25-05-2011

**Mechatronics/Manufacturing Fellow** contract at Driptech, Inc. in Mountain View, CA and China  
19-05-2011

**Product Design Fellow** contract at Driptech, Inc. in Mountain View, CA and Pune, India  
19-05-2011

**Product Development Lead** full-time at Driptech, Inc. in Pune, India  
19-05-2011

**Most Applied To Jobs**

**Documentation/Tutorial Freelancer** part-time at Seeed Studio, Anywhere  
**27 applicants**

**SMD PCB Assembly** contract at Starlino Electronics, Anywhere  
**22 applicants**

**Prototyper / Circuit and Product Design** contract at HCX in New York  
**12 applicants**

Offering free services for building a greater user base.

# The business models of Open Hardware

**Ponoko®**  
WWW.PONOKO.COM

+                            =

**sparkfun®  
ELECTRONICS**

## Make and sell electronic products

Now you can make and sell electronic products with your Personal Factory and showroom! [How it works](#)

[Start making >](#)

- Free Personal Factory & showroom
- No setup fees
- No minimum orders
- Custom made in 1 to 2 weeks
- Shipped to your door
- 365-day free replacement policy

 1500+ new materials!

[See the new materials](#)

**sparkfun**  
ELECTRONICS

Sparkfun is an official supplier to Ponoko of over 1500 new materials.

Partnership between hardware and fabbing companies

# The business models of Open Hardware

The screenshot shows the homepage of bildr.blog. At the top left is the logo "bildr.blog". To the right is a search bar with the placeholder "search blog..." and a magnifying glass icon. Further right is a "Login / Register" link. Below the header is a navigation bar with "about" and "write for us" buttons. The main content area features a large graphic on the left showing a grid of interconnected circles, representing a modular hardware design. To the right of the graphic is a stylized illustration of a person standing next to a brown cardboard box, with a speech bubble above them containing the word "Ours!". Below this is the text "communal knowhow". At the bottom of the main content area is a descriptive paragraph: "We are a community of makers, artists, designers, and builders focused on simplifying the world of electronics DIY by modularizing information. Instead of showcasing users' projects, we offer bite-size, easy-to-follow articles that help you hit the ground running."

We are a community of makers, artists, designers, and builders focused on simplifying the world of electronics DIY by modularizing information. Instead of showcasing users' projects, we offer bite-size, easy-to-follow articles that help you hit the ground running.

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Funding Open Hardware projects in exchange for documentation

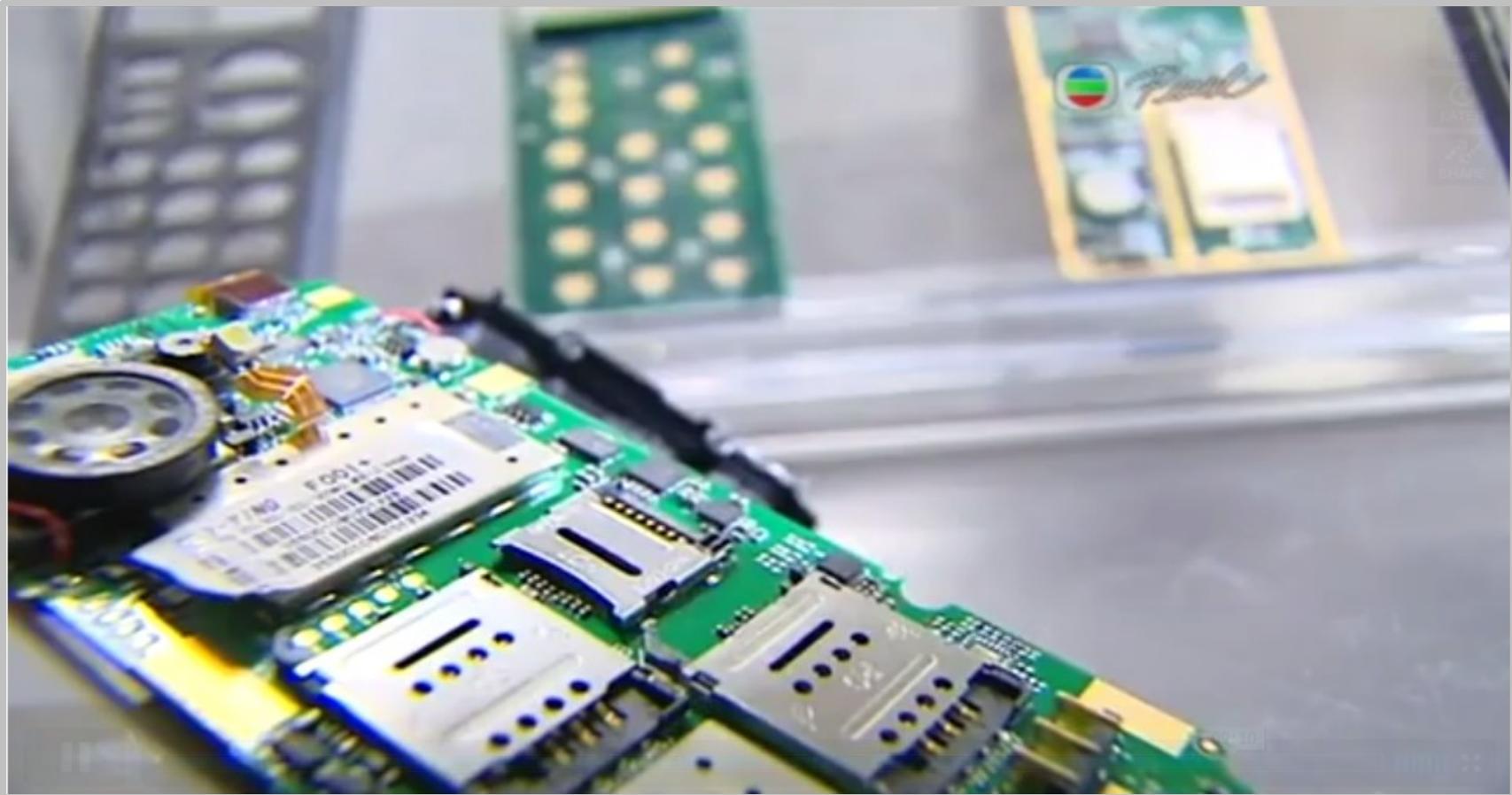
# The business models of Open Hardware



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Piracy as a learning and market building strategy: Shanzai

# The business models of Open Hardware



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Piracy as a learning and market building strategy: Shanzai

# The business models of Open Hardware

## MakerBot Botcave Store Opens Today!

POSTED BY BRE PETTIS ON FRIDAY, NOVEMBER 26, 2010 IN BOTCAVE STORE



Brick and mortar stores: Makerbot, the Botcave

Source: <http://www.makerbot.com/blog/2010/11/26/makerbot-botcave-store-opens-today/>

# The business models of Open Hardware



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Renting spaces for co-working / funding spaces by a community: hackerspaces.

# The business models of Open Hardware



**Open Source Hardware Reserve Bank<sup>cc</sup>**  
Supporting Do-It-Yourself Open Source Hardware Projects

The mission of the bank is to fund and invest in Open Source Hardware. It helps open source projects achieve scale discounts at low quantities of production, where most DIY happens. The objective of the bank is to break-even, and sustain and grow Open Source Hardware.

**Queues**



**EqualizerShield**

The EqualizerShield is a project from Matt and Chris for a 10x10 blue LED matrix that is intercompatible with the Arduino, Freeduino, and Illuminato.

It has two modes, one for a built-in 8-channel analog equalizer, and one for a serial-controlled LED matrix. [Click here to buy & build](#)



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Microcredit / peer-to-peer lending / crowdfunding: Open Hardware Bank

# Similar models for DIY Craft... Sewing Cafes



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Renting spaces for co-working: Sewing Cafes

# Similar models for DIY Craft... Sewing Cafes

# SWEAT SHOP

NOUVEAUTÉ  
CONCEPT  
**LOCATION**  
ATELIERS  
  
BON CADEAU  
ÉVÉNEMENTS  
PRESSE  
CONTACT  
LIENS  
  
BLOG  
SHOP  
  
ENGLISH

**SIGN UP**  
**NEWSLETTER**  
**INSCRIVEZ-VOUS**

**1** = **6 E/h**

**LOCATION DES MACHINES À COUDRE**

Sur le principe des cybercafés, chacun a la possibilité de louer une machine à coudre sur place, à l'heure ou au forfait. À tout moment de la journée et sans rendez-vous, les clients peuvent venir s'installer à un poste de travail et commencer à coudre en utilisant une machine prêtée à l'emploi. Sweat Shop met à disposition ciseaux, aiguilles, fils, etc.

1H.....	6E
10H.....	55E
20H.....	100E
Promo 'Couple'.....	10E/H
Promo Day Pass (+café ou thé offert) ..	25E
Location surjeteuse.....	10E/H

- 10% pour étudiants

Renting spaces for co-working: Sewing Cafes

# Open Money: making digital a physical medium

The screenshot shows the Armory Bitcoin Wallet Management software interface. At the top, there's a menu bar with 'File', 'Wallet', and 'User' options. Below the menu is the 'ARMORY' logo. On the left side, there's a vertical sidebar with buttons for 'Send Bitcoins', 'Receive Bitcoins', 'Wallet Properties', and 'Unsigned Transactions'. The main area is divided into two sections: 'Available Wallets:' and 'Ledger:'.

**Available Wallets:**

ID	Name	Security	Balance
21udkeoTU	Not my money	Watching-Only	3.377
36AjLSUM4	Keys stored on EeePC	Offline	4.0001
3VB8XSoY	Long-term savings	No Encryption	11.7882
2zftxAA7Q	First wallet	Encrypted	12.878709

**Ledger:**

Date	Wallet	Comments	Amount
2012-Jan-02 02:39am	First wallet	Swept one address to another in this wallet	0.6295
2011-Dec-31 06:30pm	Long-term savings		-3.4985
2011-Dec-31 06:30pm	First wallet		3.4985
2011-Dec-31 04:52am	Not my money		0.377
2011-Dec-31 04:52am	Long-term savings		-0.507
2011-Dec-31 04:52am	First wallet		0.13
2011-Dec-28 03:52pm	Long-term savings	Transferred to my encrypted wallet	-1.00
2011-Dec-28 03:52pm	First wallet		1.00

Total Funds: 32.04450900 BTC  
Spendable Funds: 32.04450900 BTC

Filter: All Wallets

Money is now being redesigned by many open source projects, where the governance of the flows of digital money is designed by the software: Bitcoin.

Source: <http://en.wikipedia.org/wiki/Bitcoin>  
[http://www.wired.com/magazine/2011/11-mf\\_bitcoin/](http://www.wired.com/magazine/2011/11-mf_bitcoin/)

# Open Money: making digital a physical medium



Money is now being redesigned by many open source projects, where the governance of the flows of digital money is designed by the software: Bitcoin.

# Open Money: it still needs business models



But redesigning money is only half of the solution: we need to understand its dynamics, and the possible business models it generates.

Source: <http://en.wikipedia.org/wiki/Bitcoin>  
[http://www.wired.com/magazine/2011/11-mf\\_bitcoin/](http://www.wired.com/magazine/2011/11-mf_bitcoin/)

# Crowdsourcing, mass-collaboration and work

*“If crowdsourcing runs on people’s “spare cycles”—their downtime not claimed by work or family obligations—that quantity is now in surplus. [...] Crowdsourcing is proving to be highly efficient at identifying and exploiting those “spare cycles”.”*

Source: Howe, J., 2008. *Crowdsourcing: Why the Power of the Crowd Is Driving the Future of Business* 1st ed., Crown Business.

*“First the ‘human resource’ is not just inside the boundaries of your company. The world is your resource. This is more than outsourcing. Companies can now tap into vast pools of labour.”*

Source: Tapscott, D. & Williams, A.D., 2006. *Wikinomics: How Mass Collaboration Changes Everything*, Portfolio Hardcover.

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## ... and a lesson from the past

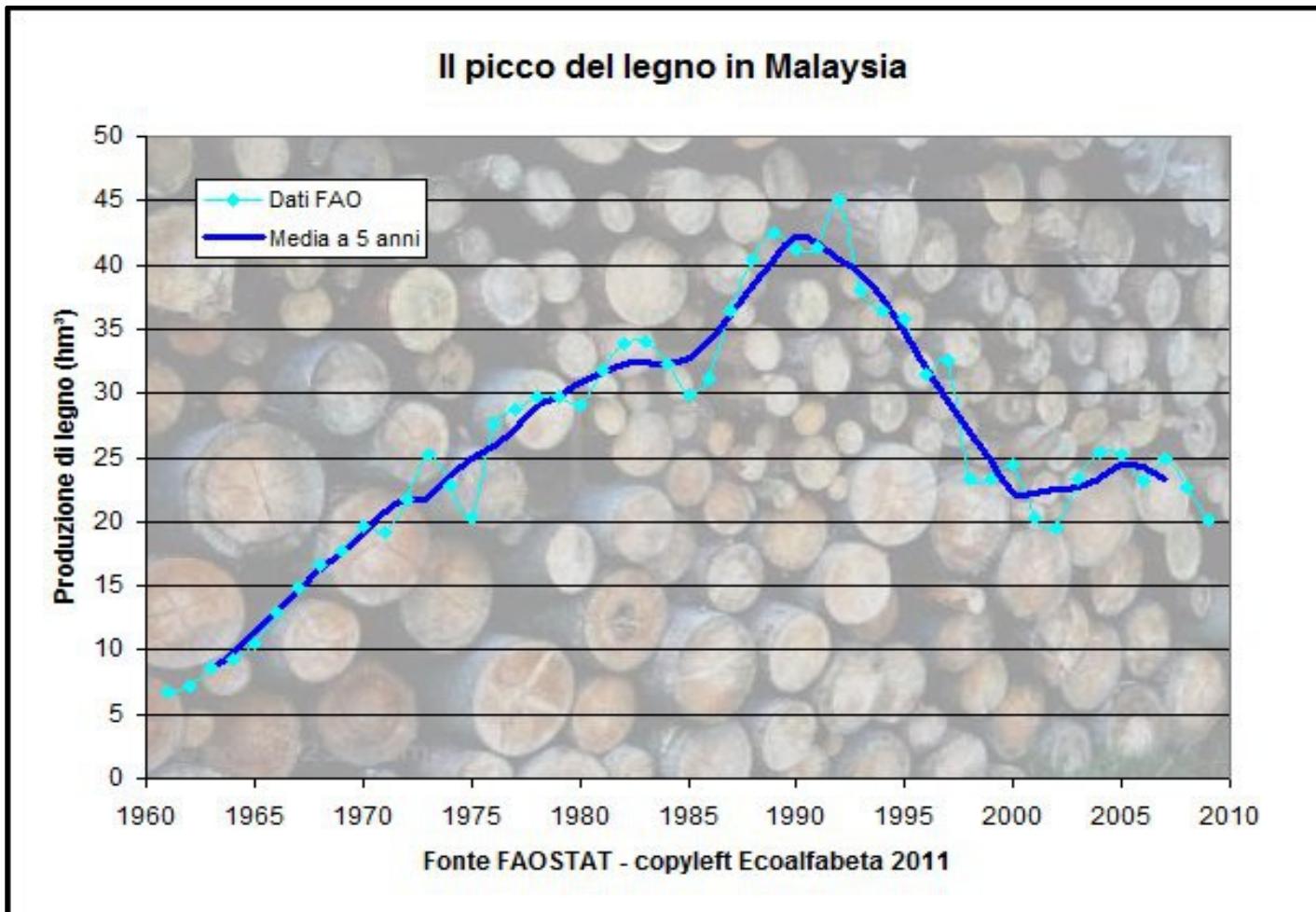


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In 1914 Ford doubled the wages, enabling his workers to afford the cars they were producing. Ford explained the policy as **profit-sharing** rather than wages.

Source: [http://en.wikipedia.org/wiki/Henry\\_Ford](http://en.wikipedia.org/wiki/Henry_Ford)

# When everything is peaking...



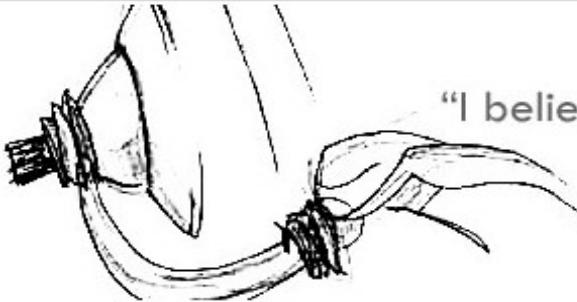
Even renewable resources like wood are peaking.. What and how are we going to manufacture when everybody will be able to do it?

Source: <http://ecoalfabeta.blogosfera.it/2011/03/il-picco-del-legno.html>

# ... reinventing an *open* wheel is not enough

Home Contact search...





**"I believe in horses, automobiles are a transient appearance."**

Wilhelm II. (1859-1941), German Emperor

**OScar - Main**

[Home](#)  
[Idea](#)  
[Concept](#)  
[Forums](#)  
[Documents](#)  
[Links](#)  
[Contact](#)

**OScar - Workbench**

[Integration](#)  
[Modules](#)  
[Tools](#)  
[Network](#)

**Home**

**OScar - Release 0.2**

It is the goal of the OScar Project to develop a car according to Open Source principles. In our opinion, a car is not a vehicle full of high-tech gadgets. Instead, we are looking for a simple and functional concept to spread mobility. Form follows function.

Apart from that, OScar is not just a car. It is about new ways of mobility and the spreading of the Open Source idea in the real (physical) world. On this website, you will find a great community of developers and drivers who want to invent mobility anew and together.

The project started in 1999. In December 2005, it reached release 0.2. Starting in 2006, everyone is welcome to participate.

[PDF](#) [PRINT](#) [EMAIL](#)



Design Contribution Rel. 0.2 by Tiago Do Vale (2006)

**Login User**

Username  
  
Password  
  
 Remember me  
**Login**  
[Lost Password?](#)

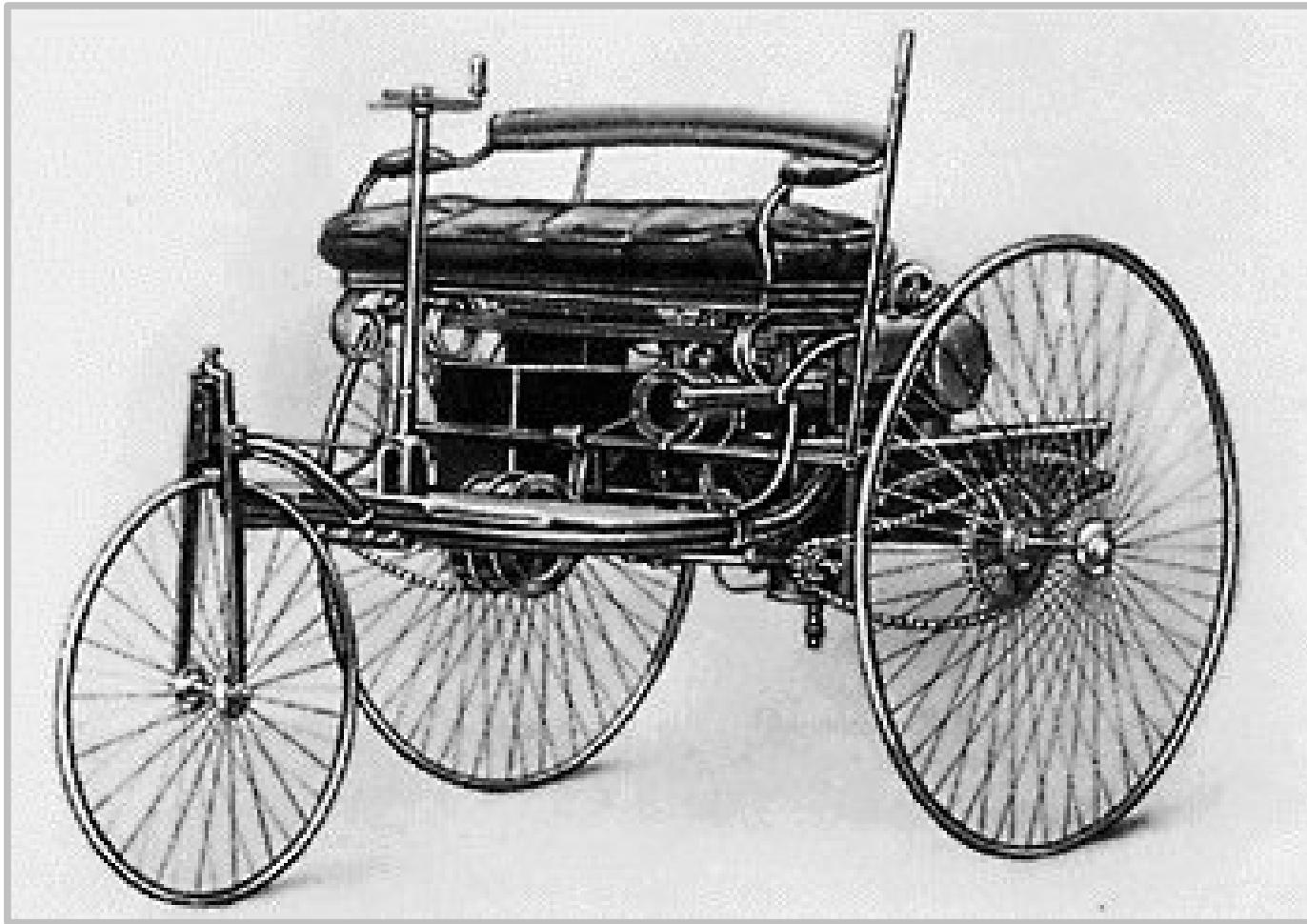
No account yet? [Register](#)

**Most Active Threads**

1. [This thread has fallen out of scope for \(354\)](#)  
2. [free piston engine / Freikolben-Motor Discussion \(179\)](#)  
3. [4 wheeler or 3 wheeler? \(148\)](#)  
[+ 1 more threads](#)

Will just making open an unsustainable past be sustainable?

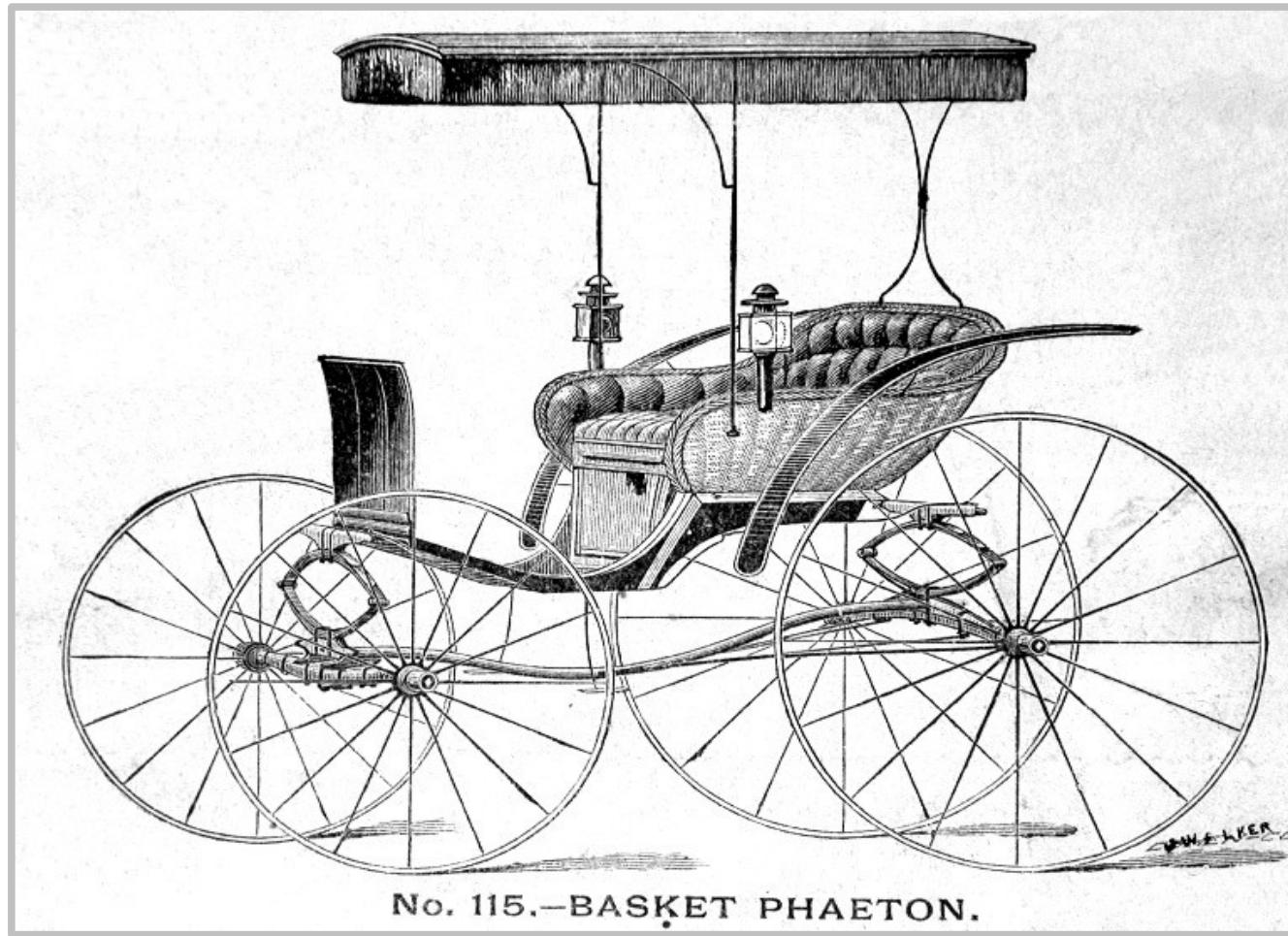
# New language, business for the new media



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Every new technology takes time to develop its own uses,  
languages and business models.

# New language, business for the new media



Every new technology takes time to develop its own uses,  
languages and business models.

# ... blocks of an Open, DIY and P2P Economy

- \* open business for **design, energy, materials, tools**
  - \* open business that consider information as **abundant** but materials and energy as **scarce resources**
  - \* open money (but well designed and **linked to energy and materials**)
  - \* **API** and **Open Data** between open businesses
  - \* Open **processes + distributed testing** of business models
-



Aalto University  
Media Factory

# Thank you!!

Massimo Menichinelli  
Aalto Media Factory  
[massimo.menichinelli@aalto.fi](mailto:massimo.menichinelli@aalto.fi)  
[@openp2pdesign](https://openp2pdesign.net)

