



Aalto University

DesigningOpenInnovation.02

From Web 2.0 to Open Design

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@openp2pdesign

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



11.03.2013



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01.

From Web 2.0 to Open Everything: mass collaboration enabled by the Internet and other tools



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Web 2.0



A new model of mass collaboration, based on user-generated content and commenting.

Source: <http://www.time.com/time/magazine/article/0,9171,1570810,00.html>

Web 2.0

THE CREATIVE WORLD AT WORK™

create a portfolio post a job log in

coroflot

design jobs portfolios member gallery employer directory groups genius my account

Olivier Henrichot

 [STARRY](#)

[Back To Thumbnails](#) [← Previous](#) [Next →](#)

FOOTWEAR RUNNING (1 of 15)

OVERVIEW
→ **PORTFOLIO**
PROFILE

[Contact Olivier](#) [Share](#)

[follow](#)

Last Login: 11 Aug 2011



Muscular (2003)

 [me likey](#)

Description
Muscular fiber inspired shoe on track and field last

Comments

 **Adrián Castro says**
Exelent idea...cool!!!
Posted 28 Jan 2009

 **Jose Figueroa says**
this is one of my favorite images in all of coroflot...
Posted 27 Jun 2009

 **s siddharth says**
cool..!!
Posted 26 Jul 2009

To add a comment you need to have a public profile. [Log In](#) or [Create an Account](#).

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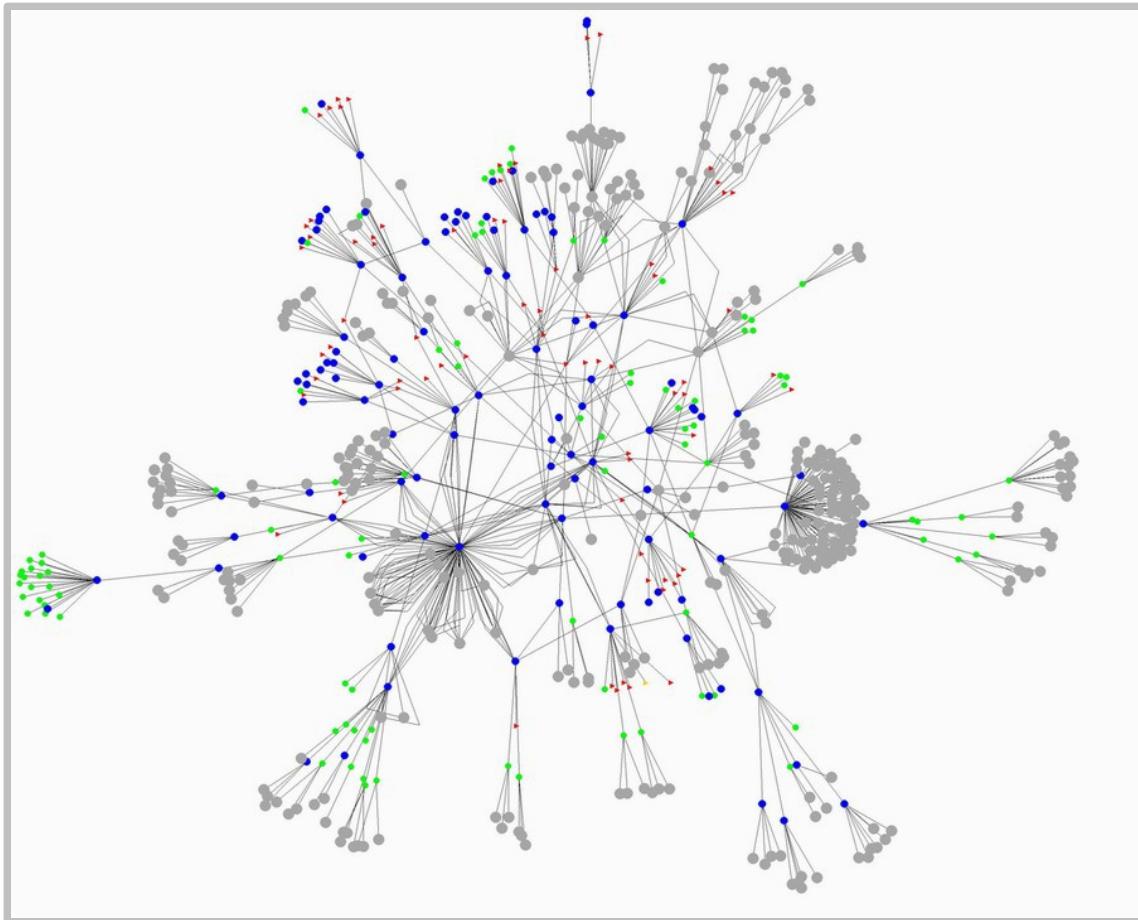
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cool..!!
Posted 26 Jul 2009

To add a comment you need to have a public profile. [Log In](#) or [Create an Account](#).

And the same model can be applied to
Design.

Source: <http://www.coroflot.com/heo/FOOTWEAR-RUNNING/1>

Peer-to-Peer



More than about file sharing, peer-to-peer
defines new dynamics between people.

Source: <http://home.comcast.net/~gregory.bray/>

Peer-to-Peer

KIVA GIFTS LOGIN REGISTER MY BASKET

Lend About Community Updates My Portfolio

Kanze Hanjari

Samburu, Kenya Retail | Retail



A loan of \$225 helps Kanze Hanjari to purchase bundles of maize flour and wheat flour for resale.

0% raised, \$225 to go

Select amount to lend

\$25

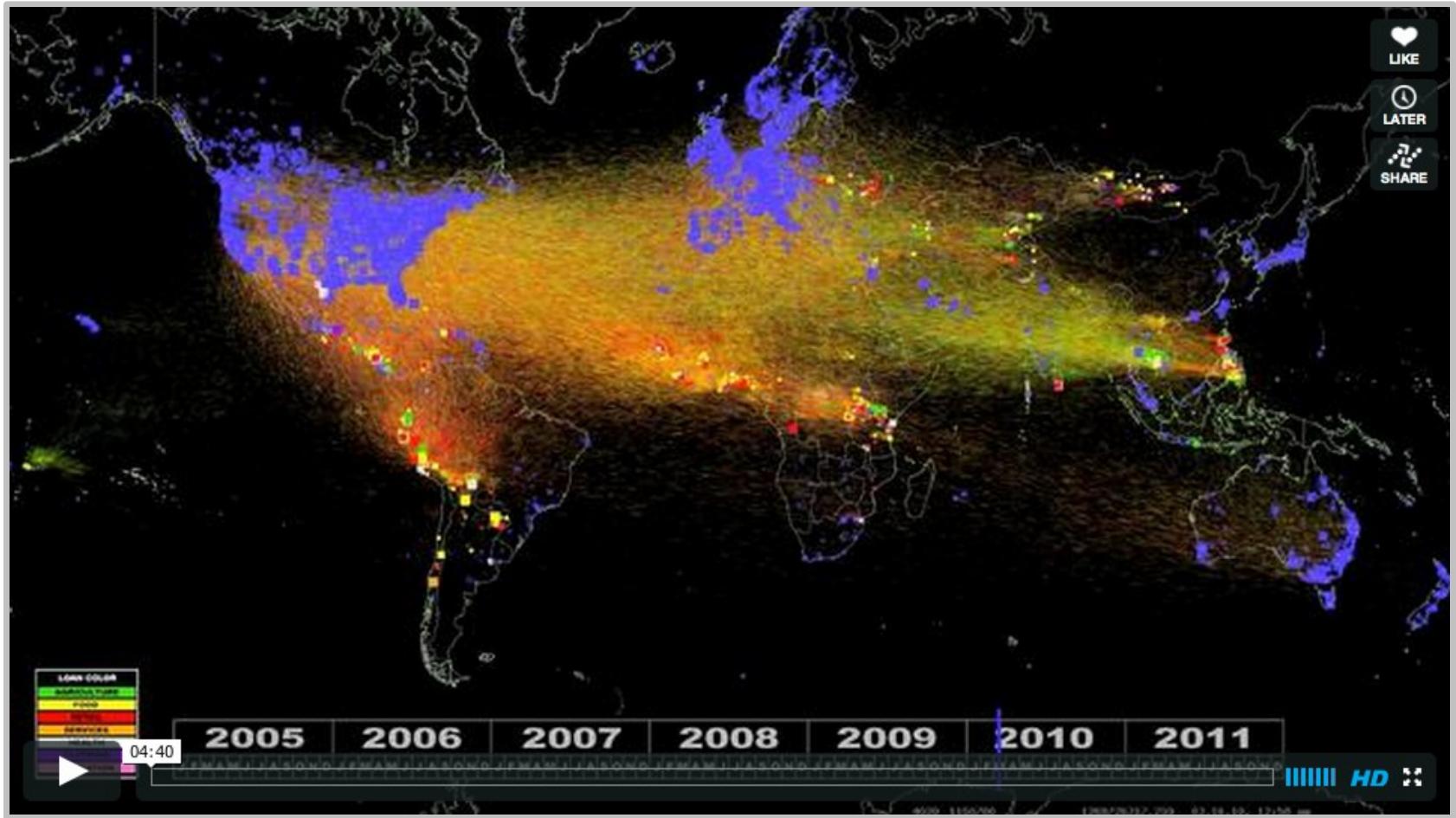
Repayment Term: 13 months (more info)
Repayment Schedule: Monthly
Pre-Disbursed: Aug 4, 2011
Listed: Sep 9, 2011
Currency Exchange Loss: Possible
Default Protection: Not Covered

Your funds will be used to backfill this loan.
Repayments will go to you.

And the same model can be applied to Design.

Source: <http://www.kiva.org/lend/333427>

Peer-to-Peer



And the same model can be applied to
Design, with important results!

Source: <http://vimeo.com/28413747>

Crowdsourcing

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Where the World Innovates

Are you looking to solve problems and accelerate your innovation capability?

Drive Innovation »



Are you passionate about solving important problems that really matter?

Become A Solver »



Open Challenges Show: **Featured Challenges** ▾ There are 114 active challenges | [View All »](#)

Challenge Title	Deadline	Active Solvers	Referral Award
A GRI (Glucose Responsive Insulin) for Better Treatment of Type 1 Diabetes	11/09/2011	32 active solvers	\$10,000 USD
The Economist/Qualcomm Challenge: Pictures of Tomorrow	10/31/2011	41 active solvers	\$100 USD

NEWSFLASH

InnoCentive and JDRF Partner to Combat Diabetes

JDRF is harnessing InnoCentive's Challenge Platform and Global Solver Community to uncover solutions for a transformative and sophisticated insulin drug for patients with diabetes to improve

Outsourcing a project or a task to an online crowd,
more about competition than collaboration.

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

Crowdsourcing

The screenshot shows the homepage of DesignCrowd. At the top, there's a navigation bar with the logo 'DesignCrowd' (featuring a stylized blue starburst icon), 'Log in', 'Register', 'Help', and a green button 'Post a design project'. Below the navigation is a secondary menu with links to 'Categories', 'Get Started', 'Browse Projects', 'Portfolios', and 'About Us'. The main banner has a dark blue background with white text. It features the headline 'Custom Design. Online. Risk-free.' followed by a numbered list: '1) Post a project 2) Get 100+ designs 3) Select the best design'. Below this, two large statistics are displayed: '39,213 graphic designers' and '103 average number of designs / project'. There are two buttons at the bottom of the banner: a blue one with a play icon labeled 'See how it works' and a green one labeled 'Get started now'. Below the banner, the text 'As featured in' is followed by logos for 'YAHOO! FINANCE', 'smartcompany', 'Mashable', and 'TNW THE NEXT WEB'. At the bottom, there are four service cards with icons and prices: 'Web Design starting at €235' (with a smartphone icon), 'Business Card starting at €90' (with a business card icon), 'Flyer Design starting at €130' (with a flyer icon), and 'T-shirt Design starting at €130' (with a t-shirt icon). Each card has a 'Learn More' button.

And the same model can be applied to
Design, with critica results!!

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

Mobile: Single user designing, no collaboration



Collaboration is not only based on a single tool: not only on a PC!

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

Mobile: Smart Mobs, Ubiquitous Computing



We could even (re)build a design from
noncoordinated users.

Source: <http://grail.cs.washington.edu/rome/> <http://youtu.be/HrgHFDPJHXo>

Open Source: open collaborative development



The most complete and promising model for mass-collaboration on the Internet.

Source: <http://www.buglabs.net/ford-buglabs>

And hybrid models... like OpenIDEO

The Challenge 289 followers [Follow updates](#)

How might we use social business to improve health in low-income communities?

INSPIRATION 290 inspirations | **CONCEPTING** 98 concepts | **EVALUATION** 20 final concepts | **WINNING CONCEPTS** Announced! | **REALISATION** Ongoing

Congratulations to all our contributors!

Challenge Brief

OpenIDEO has partnered with the Holistic Social Business Movement (HSBM) of Caldas – a joint venture between the Grameen Creative Lab and the Government of Caldas, Colombia – to consider how social businesses can improve the health of low-income communities in Colombia and around the world. Together, with your help, we hope to develop a set of implementable and high impact solutions to support and promote social business development and improve health in low-income areas like Caldas, where 26% of the population lives in extreme poverty.

Sponsored by:
Grameen Creative Lab

Challenge Start Date:

Crowdsourcing 50% + Web 2.0 30% + Open Source 20%.

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

Open Source Everywhere...

“Software is just the beginning ... open source is doing for mass innovation what the assembly line did for mass production. Get ready for the era when collaboration replaces the corporation.”

Thomas Goetz, Wired November 2003

Source: <http://www.wired.com/wired/archive/11.11/opensource.html>

Open Source as promising way to organise communities.

Source: <http://www.buglabs.net/ford-buglabs>

Open Drinks



Started as an example or for marketing, now
an important field of experimentation!

Source: [http://en.wikipedia.org/wiki/OpenCola_\(drink\)](http://en.wikipedia.org/wiki/OpenCola_(drink)) http://en.wikipedia.org/wiki/Free_Beer
<http://www.flickr.com/photos/16038409@N02/2327138220/in/photostream>

Open Biotechnology

Go to the Cambia home page

Cambia
enabling innovation

Cambia means change.
Cambia is an independent non-profit institute **creating new technologies, tools and paradigms** to promote change and enable innovation.

Search this website

[Home](#) [About Cambia](#) [Media Centre](#) [Papers & Publications](#) [Contact Us](#)



Global Problems?
Disease, hunger, poverty, climate change... Most people see these as big worldwide problems.

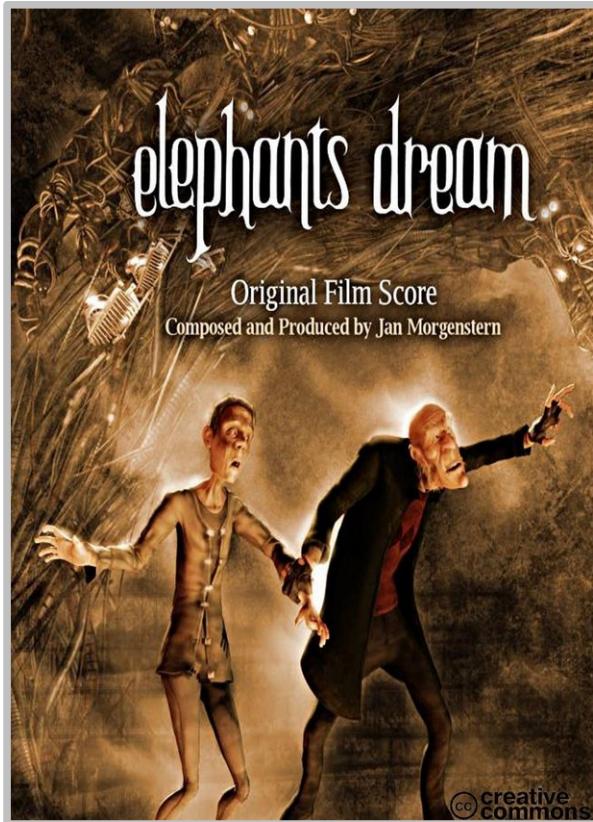
We see them as symptoms.
It's time to change the way we look at the world. The people who experience these problems *are the solution*.

[» Cambia means change](#)

Applied in many different scientific researches.

Source: <http://www.cambia.org/>

Open Movies + Videogames



Done with and for Blender (Open Source 3D modeling software).

Source: <http://www.elephantsdream.org/> <http://www.bigbuckbunny.org/> <http://www.sintel.org/>

Open Hardware: the definition



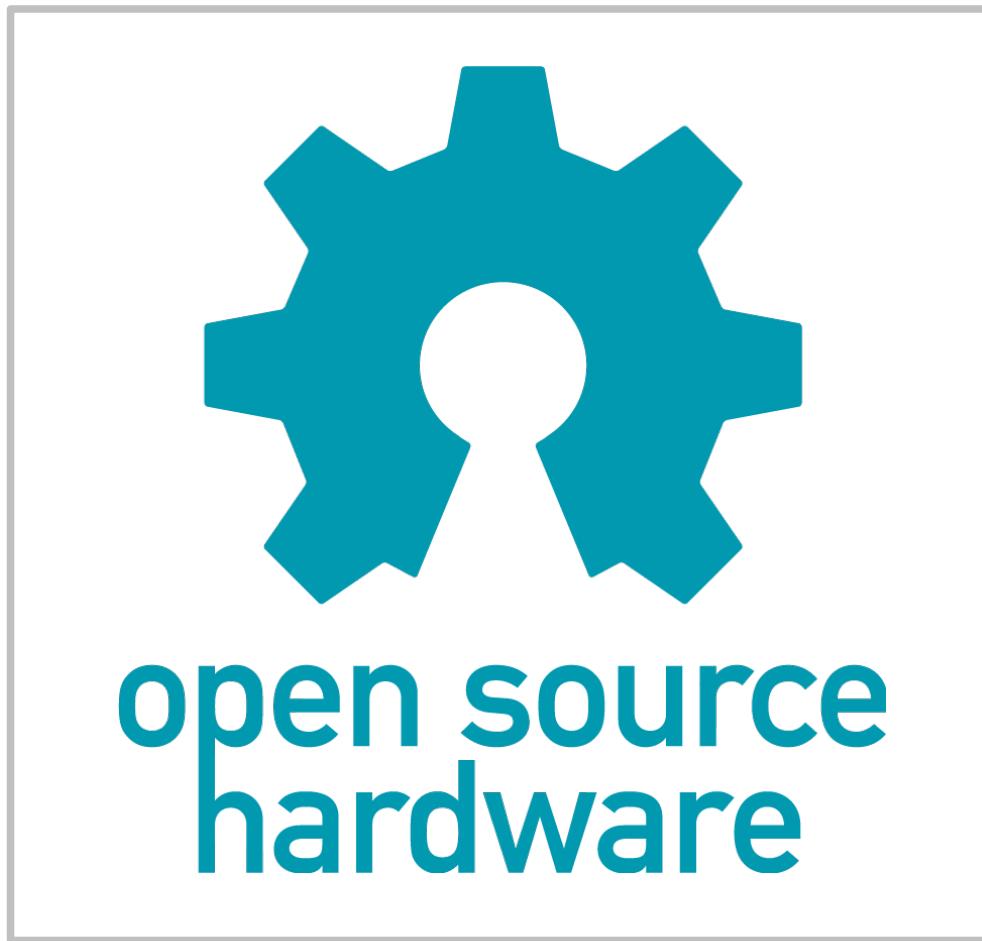
The screenshot shows a Wikipedia-style page for the "OSHW" entry. At the top right, there are "Page" and "Discussion" tabs. Below them, a message says: "Version 1.1 of the definition has been released. Please help updating it, contribute translations, and help us with the design changes." The main title is "OSHW". The page content includes:

- A brief description of the page: "This page hosts the current proposed Open Source Hardware (OSHW) Statement of Principles and Definition v1.0. The statement of principle definition is an attempt to apply those ideals to a standard by which to evaluate licenses for hardware designs."
- Instructions for endorsement: "To endorse the Open Source Hardware Definition 1.0, please add your name (and affiliation) below."
- A link to older drafts: "Older drafts of the definition are also available."
- A link to community feedback: "Compiled community feedback from previous versions of the Definition can be found [here](#).
- Instructions for proposing changes: "If you would like to propose changes to the statement of principles or definition, please do so on the [work-in-progress draft](#). And, please edit this page directly."
- A section titled "Please join the conversation about the definition [here](#)".
- A "Contents [hide]" sidebar with the following links:
 - 1 Open Source Hardware (OSHW) Statement of Principles 1.0
 - 2 Open Source Hardware (OSHW) Definition 1.0
 - 3 Licenses and Hardware
 - 4 Translations
 - 5 Logo repository
 - 6 Endorsements
- A section titled "Open Source Hardware (OSHW) Statement of Principles 1.0" with a detailed description of open source hardware.
- A section titled "Open Source Hardware (OSHW) Definition 1.0" with a note: "OSHW Draft Definition 1.0 is based on the [Open Source Definition](#) for Open Source Software and [draft OSHW definition 0.5](#). The definition is a work in progress and subject to change."

Even hardware and especially electronics can be open source, and there is already an official definition.

Source: <http://freedomdefined.org/OSHW>

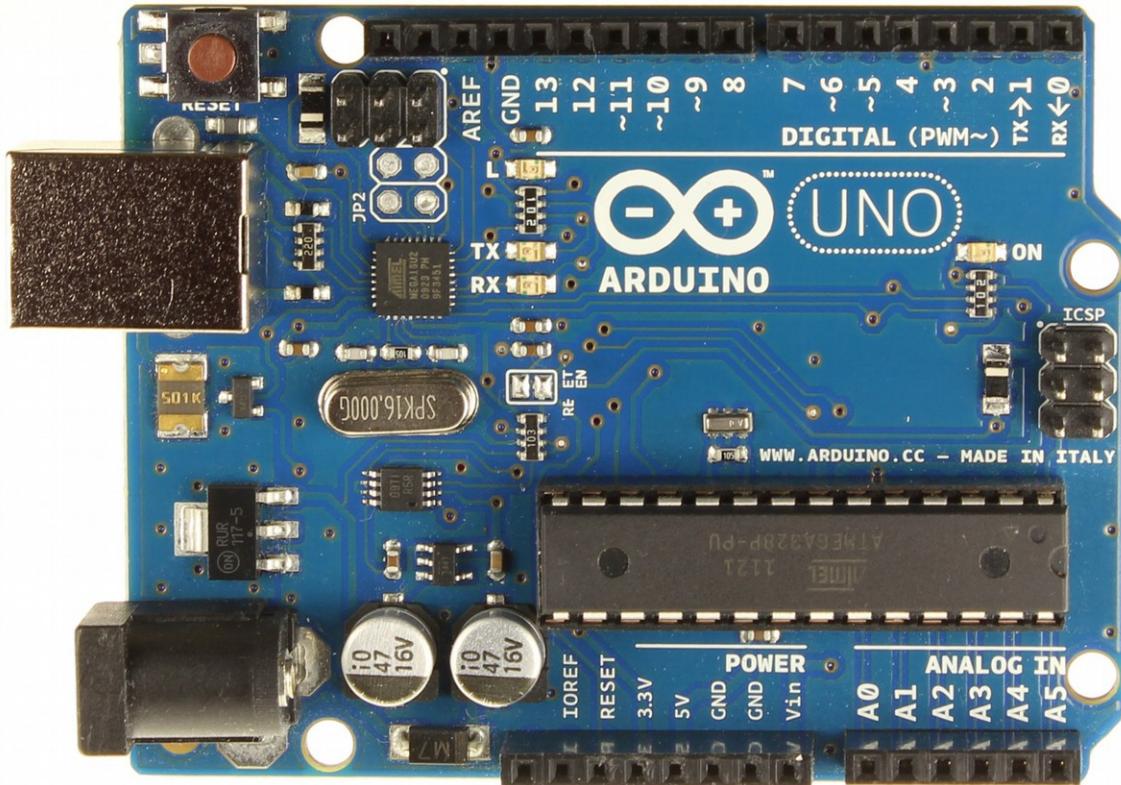
Open Hardware: the logo



... and an official logo, reminding the Open Source one.

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

Open Hardware: Arduino



The most popular open hardware board for developing interaction design projects in an easy way.

Source: <http://arduino.cc/>

Open Hardware: Arduino



The most popular open hardware board for developing interaction design projects in an easy way.

Source: <http://youtu.be/UoBUX00dLXY>



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02.

Open Design: mass collaboration in the design field



Aalto University

What is Open Design? A generic definition

a project published with a **license** that facilitates its sharing and that can be “compiled” or “manufactured” locally.

- * sharing
- * collaboration
- * open licenses
- * code --> artifact

Open Design refers to every kind of design projects that can be shared in a digital format over a network.

Open Product Design



Ronen Kadushin: the first author designer to
embrace Open Design.

Source: <http://www.ronen-kadushin.com/index.php/open-design/>

Open Typography

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

abcdefghijklmnopqrstuvwxyz

“<<.:?!©*¶§&/(||)[{}]{€†‡}@®™¿¡;,»”

The first open source font (2001) by Victor Gaultney, with a specific license: SIL Open Font License (OFL).

Source: http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&item_id=Gentium

Open Fashion Design

openwear/
collaborative
clothing

INFO
MEET THE COMMUNITY
BROWSE CREATIONS
COLLABORATIVE COLLECTION
BLOG

search | keep in touch | help / support | log in **JOIN US!**

Nadiuchka's Showbox

EXPERTISE: tailoring, fashion design, education

PROFESSIONAL from MILAN

Map

Lugano Varese Lecco Como Bergamo E60 E64 Busto Arsizio Rho Monza Monza Brianza Ovava Milano Lodi Piacenza Alessandria Voghera

ABOUT → PICTURES & CREATIONS →

NETWORK →

MY BLOG

FORUM

PICTURES & CREATIONS

PERSONAL PICTURE PERSONAL CREATION COLLABORATIVE CREATION CUSTOMIZATION

LATEST UPLOADS

BUY IT BUY IT BUY IT BUY IT

Visit Gallery

ACTIVITIES OF YOUR NETWORK

CREATIONS COMMENTS NETWORKING

Latest uploaded creations by collaborators

r0k0 uploaded: MEME expo panoji 2 08.04.2011 - 08:04

r0k0 uploaded: animacija_IMG_7018 06.04.2011 - 10:54

r0k0 uploaded: MEMEFEST expo Ljubljana debate 06.04.2011 - 10:10

r0k0 uploaded: MEME expo Ljubljana banners 05.04.2011 - 11:53

popland uploaded: fluo tshirt 17.01.2011 - 10:54

Open Fashion Design projects and brands.

Source: <http://www.openwear.org/>

Open Architecture

The screenshot shows a web browser displaying the Open Architecture Network website. The header features the network's logo (a yellow square with a brown rectangle) and the text "Open Architecture Network". There are links for "Register or Log In" and a search bar. The main navigation menu includes "ABOUT", "PROJECTS", "COMPETITIONS", and "PEOPLE". A sub-menu for the current project, "Native Cultural and Learning Centre", shows tabs for "OVERVIEW", "TEAM", "UPDATES", "WORKSPACE", "CALENDAR", and "FILES". The "OVERVIEW" tab is selected, displaying a large image of a modern building with a wooden facade and glass windows. Below the image, there are navigation controls (back, forward, share) and a caption: "Aboriginal Toronto - where is it? We'd like to give that question an answer." A paragraph explains the project's purpose: "We are currently working to provide a centre to foster the cultural and educational development of native and newer Canadians in our city." Another paragraph discusses the building's design: "Cultures are not made of museum artifacts, but living breathing people evolving everyday. We'd like to celebrate today's rapidly growing urban Native community, while providing the support and structure to welcome new urbanites and help native youth reach their full potential. We want to share and take pride in the legacy of the first Canadians." A quote from Jake Chakasim is provided: "Jake Chakasim, a member of the first nations community, has designed an environmentally-friendly building based on a traditional community centre - the longhouse." The page also mentions the support of Rita Davies. To the right, a "PROJECT DETAILS" sidebar lists the project's name, lead, location, start date, current phase, type, and student. It also includes a "COPYRIGHT" section about Creative Commons licensing and a link to the "Open Architecture iPad App". An "iTunes" download button is at the bottom.

Not as advanced as Open product design, but still part of an ongoing experimentation.

Source: <http://openarchitecturenetwork.org/>

Open Architecture



WikiHouse 

PROCESS | ABOUT | PROTOTYPE | CONTRIBUTE

$d = D \neq d$

design.is.design.is.not.design



Download houses and components which are created and shared by an open community of designers from around the world. Individual parts can be combined or adapted using the free program Google Sketchup.

1 2 3 4 5 6 7 8 9 10

powered by 

 Gwangju Biennale

Not as advanced as Open product design, but still part of an ongoing experimentation.

Source: <http://www.wikihouse.cc/>

(Open) Design competitions

[Login | Français](#)

SUBMIT YOUR DESIGN ➤

search a design **Search**

(UN)LIMITED Design Contest **2011**

form food fashion fusion

Shades of Wood

[Product view](#) [Manual view](#)

[Download blueprint](#)

Designer: **Jorn van Eck & Overtreders-W.**
Published: Sep 15, 2010
Number of designs: 1
Rating: 4.4 (12 votes)

Contest winners

Shades of Wood
Jorn erfde een oude schemerlamp van zijn opa...
by Jorn van Eck & Overtreders-W

Coolplus micro knitted shawl with transfer flex folie
Future vision on the production of...
by Marina Toeters

2 teaspoons // tablespoons at once!
In cooking recipes we often...
by Eulàlia Llovet Vidal

Magic Box (entirely new)
Last year Magic Box was a tool that helped you to make custom boxes...
by Studio Ludens

Related products

Floo's Bag
The idea was to make a bag using the laser cutter only. The art of ...
by Floo

Emergency Coat Rack
Never Have a Coat Hanging Emergency Again! Just Break Apart ...
by D E Sellers

ClickBag
The ClickBag is based upon the beatiful Floo's Bag.I wanted to design a ...
by Jens

Most viewed products

Digital fabrication and FabLabs open new possibilities for Design competitions and Open Design.

Source: <http://unlimiteddesigncontest.org/>

(Open) Design competitions

The screenshot shows a web page from the Domus website. At the top, there is a navigation bar with the word "domus" in blue, followed by "Sections", "Magazine", "Network", "Store", and "Events". There is also a search bar labeled "Search Domus..." and a "Sign up" button. A small Italian flag icon is visible. The main content features a large, intricate geometric model, possibly a 3D printed structure or a digital fabrication project. Below the model, the text "Autoprogettazione 2.0: on display—" is displayed in large white letters. Underneath this, a dark grey box contains the text: "The selection committee has decided: here are the seven projects which will be on display at *The Future in the Making*, in Palazzo Clerici. A news report from Milan".

Digital fabrication and FabLabs open new possibilities
for Design competitions and Open Design.

Source: <http://www.domusweb.it/en/upcoming-event/call-for-ideas-autoprogettazione-20--/>
<http://www.domusweb.it/en/news/autoprogettazione-20-on-display/>

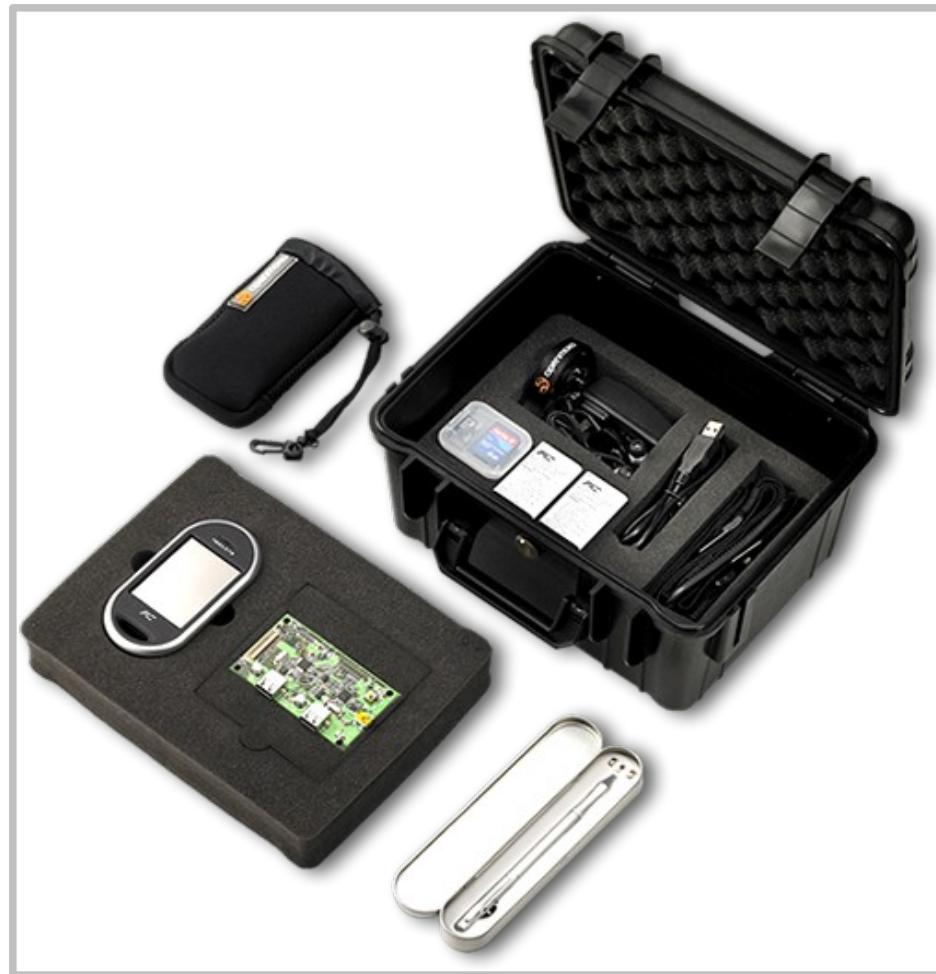
Completely Open: Hardware, Software, Design



OpenMoko was the first product to be completely open:
open hardware, open source software, open design.

Source: http://wiki.openmoko.org/wiki/Main_Page

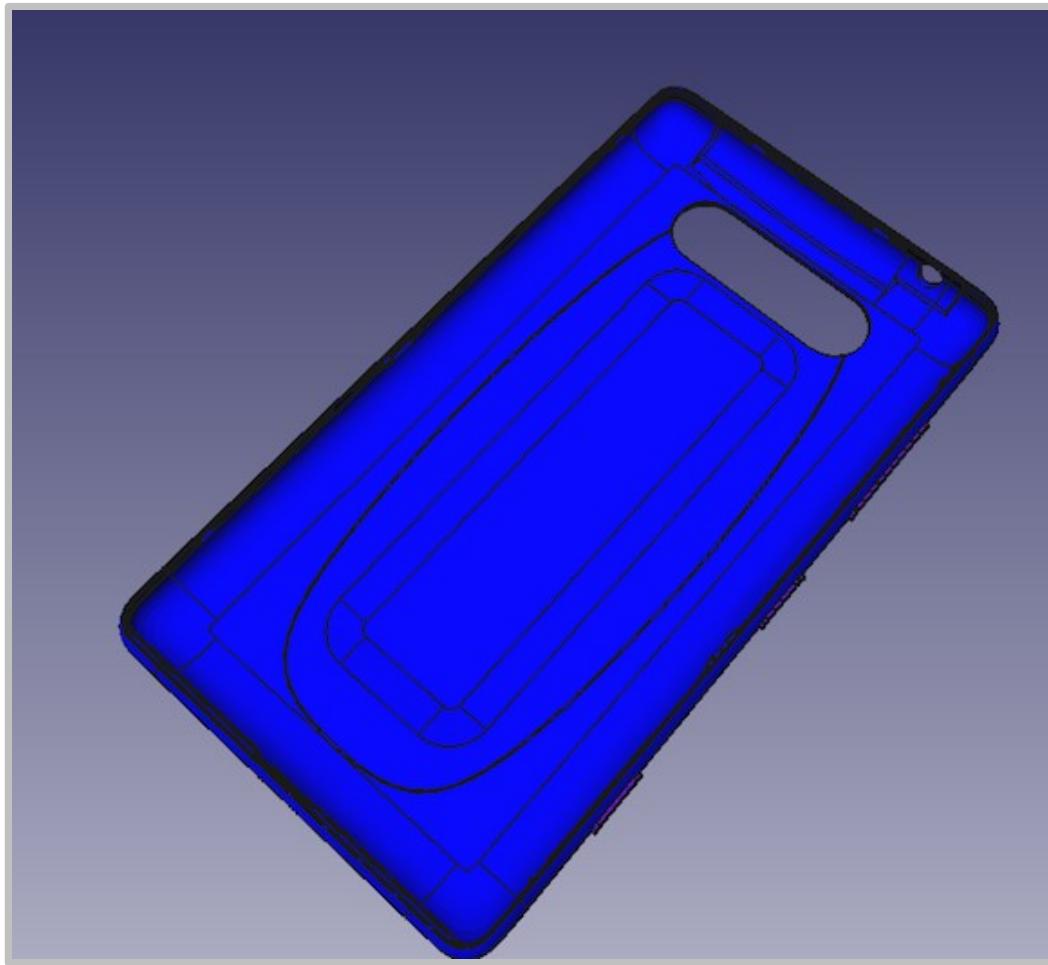
Completely Open: Hardware, Software, Design



OpenMoko was the first product to be completely open:
open hardware, open source software, open design.

Source: http://wiki.openmoko.org/wiki/Main_Page

Open Design and mobile phones?



Nokia has released a part from its Lumia 820 (and then partnered with Makerbot).

Source: <http://www.openp2pdesign.org/2013/open-design/first-global-company-to-embrace-open-design/>

Completely Open: Hardware, Software, Design



BugLabs has been much more successful in offering completely open products.

Source: <http://www.buglabs.net/>

BugLabs + Ford

Ford + Bug Labs Press Release

login
sign up



Bug System
Apps
Store
Support
Community

Businesses
Education
Developers

Google™ Custom Search

Mailing List
Feed



Ford and Bug Labs explore open innovation and crowd sourced, community-driven development

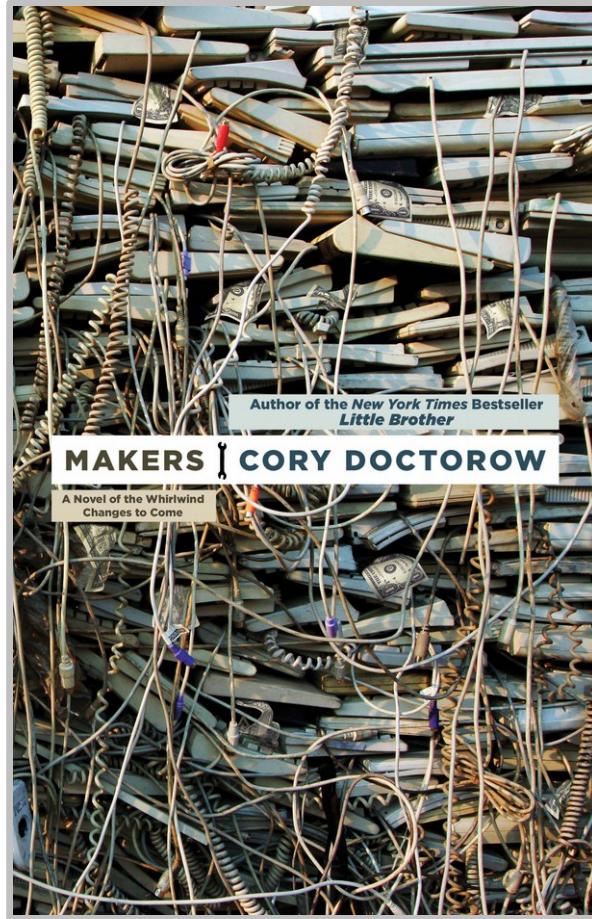
Ford and Bug Labs Develop Open-Source R&D Platform for Socially-Networked In-Car Connectivity Innovation

- Ford and Bug Labs, an open-source hardware and software provider, announce a joint development project to research, develop and distribute open-source developer tools to advance in-car connectivity innovation

So successful that they just announced a partnership with Ford Car.

Source: <http://www.buglabs.net/ford-buglabs>

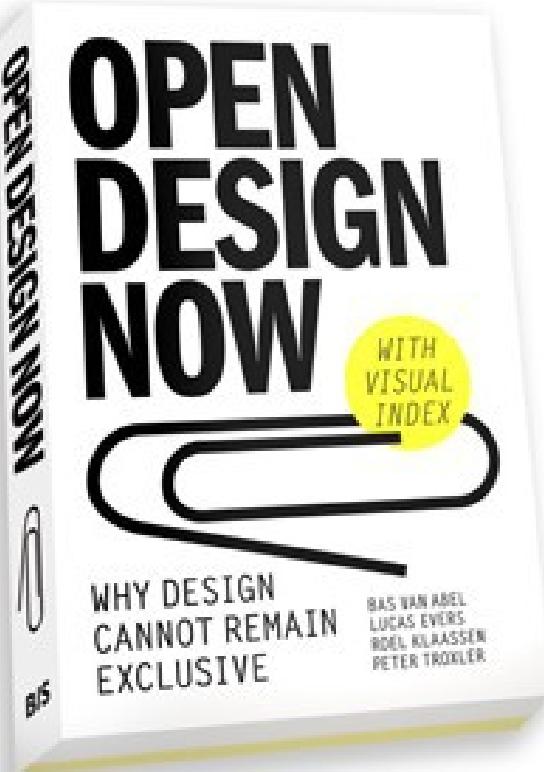
Open Design: (almost) already successful



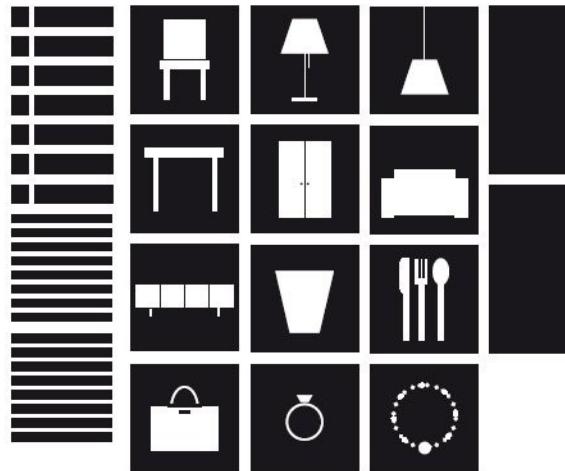
When you have a sci-fi novel from a popular autor about open design and makers, they are not underground any longer.

Source: <http://craphound.com/makers/download/>

Open Design: (almost) already successful



design for download



When a famous design company and the national organization of design embrace Open Design ...

Source: <http://www.buglabs.net/ford-buglabs>

Open Design: (almost) already successful

The screenshot shows the Instructables website. At the top is the logo featuring a yellow robot-like character and the word "instructables" with the tagline "share what you make". Below the logo is a navigation bar with categories: Food, Living, Outside, Play, Technology, Workshop, and a category represented by three bats. The main content area displays a red header for a blog post titled "Community : forums : community blog" followed by the title "Instructables Joins Autodesk". The text of the post discusses the impact of the Instructables community and the company's vision. It then announces that Instructables is becoming part of Autodesk, expressing excitement for the future of the community.

Instructables Joins Autodesk

The Instructables community is incredible: you build, bake, and create amazing things, then share your projects and ideas with the world. I think it's great when someone builds a project using instructions from our site, but it's even more amazing when we inspire someone to start (or finish) that project they've always dreamed of. This has been my vision for Instructables: to have a positive impact on the world by giving passionate people great publishing tools to document their projects, and connect them to a community full of like-minded people.

Today I'm able to share my plan for accelerating that vision, and making Instructables an even better place to be. I'm proud to announce that **Instructables is becoming part of Autodesk**. Everyone here at Instructables HQ is absolutely thrilled, because this is going to be awesome for the entire Instructables community.

And when probably the biggest CAD design software house buys an open design community, there must be money ahead!

Source: <http://www.instructables.com/community/Instructables-Joins-Autodesk/>
<http://techcrunch.com/2011/08/01/autodesk-acquires-diy-community-instructables/>

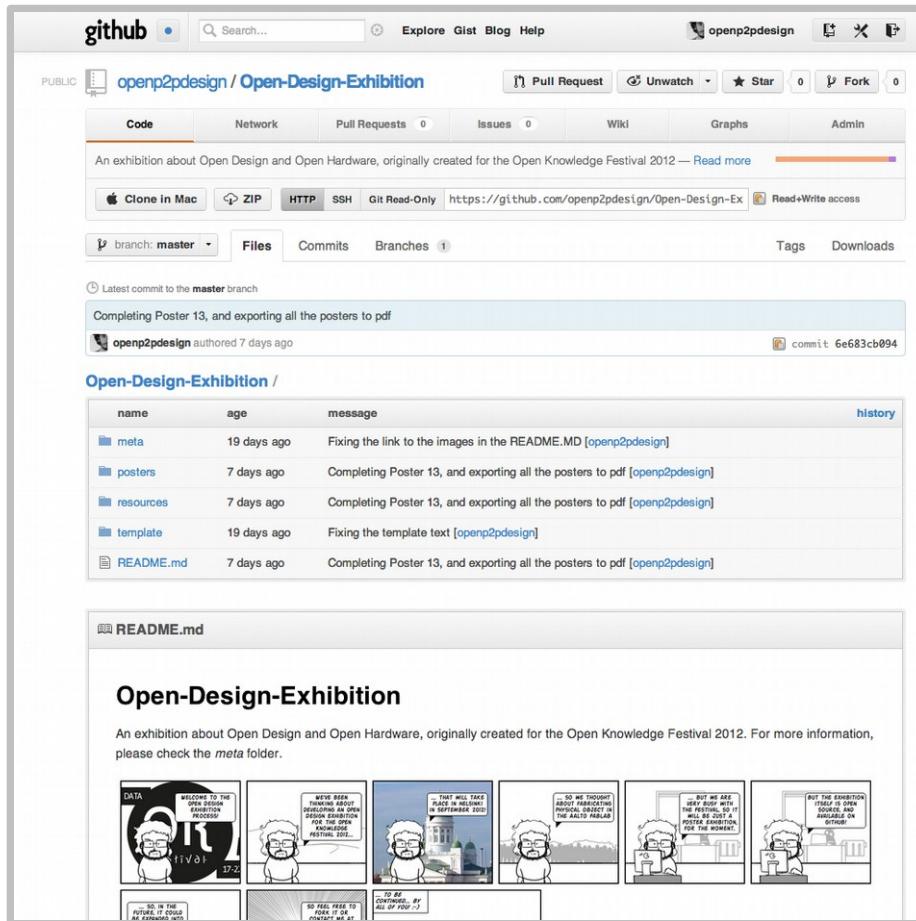
Open Design: (almost) already successful

The screenshot shows the Autodesk 123D Beta 7 website. At the top, there's a dark blue header bar with the Autodesk 123D logo on the left, followed by navigation links: "About 123D", "Get Content", "Gallery", "Make It", "My Corner", and "Get 123D". On the right side of the header are "Login or Register", "My Cart (0 Items)", and "Support". Below the header, the main content area has a white background. It features a large title "Autodesk 123D Beta 7" in bold black font. To the left of the title is a text block: "Laser cutting workflows plus in-app access to fabbing services and free 3D models." Below this text is a yellow "Download" button. To the right of the text is a photograph of a wooden laser-cut model of a Star Wars Millennium Falcon cockpit. The model is intricate, showing various panels and structural details. A small wrench and a small wooden piece are also visible near the model.

And when probably the biggest CAD design software house offers freeware software for makers, there must be money ahead!

Source: <http://www.123dapp.com/>

More on the Open Design Exhibition!



The screenshot shows a GitHub repository page for 'openp2pdesign / Open-Design-Exhibition'. The repository is public and contains code related to an exhibition about Open Design and Open Hardware. The README.md file includes a comic strip about the exhibition's creation process.

Code | Network | Pull Requests 0 | Issues 0 | Wiki | Graphs | Admin

An exhibition about Open Design and Open Hardware, originally created for the Open Knowledge Festival 2012 — [Read more](#)

Clone in Mac | ZIP | HTTP | SSH | Git Read-Only | <https://github.com/openp2pdesign/Open-Design-Ex> | [Read+Write access](#)

branch: master | Files | Commits | Branches 1 | Tags | Downloads

Latest commit to the **master** branch

Completing Poster 13, and exporting all the posters to pdf

openp2pdesign authored 7 days ago | commit [6e683cb094](#)

Open-Design-Exhibition /

name	age	message	history
meta	19 days ago	Fixing the link to the images in the README.MD [openp2pdesign]	
posters	7 days ago	Completing Poster 13, and exporting all the posters to pdf [openp2pdesign]	
resources	7 days ago	Completing Poster 13, and exporting all the posters to pdf [openp2pdesign]	
template	19 days ago	Fixing the template text [openp2pdesign]	
README.md	7 days ago	Completing Poster 13, and exporting all the posters to pdf [openp2pdesign]	

README.md

Open-Design-Exhibition

An exhibition about Open Design and Open Hardware, originally created for the Open Knowledge Festival 2012. For more information, please check the *meta* folder.



The comic strip consists of eight panels showing a character thinking about creating an exhibition. The panels include text such as:

- "WELCOME TO THE NEW DESIGN AND OPEN HARDWARE PROCESS!"
- "WHAT BEEN THINKING ABOUT CREATING AN OPEN DESIGN EXHIBITION FOR THE OPEN KNOWLEDGE FESTIVAL 2012?"
- "THAT WILL TAKE PLACE IN HELSINKI IN SEPTEMBER 2012."
- "SO WE THOUGHT ABOUT FABRICATING PRINTED POSTERS AND WE WILL BE JUST A POSTER EXHIBITION FOR THE MOMENT."
- "BUT THE EXHIBITION ITSELF IS OPEN SOURCE SO IT WILL BE AVAILABLE ON GITHUB."
- "SO, IN THE FUTURE, IT COULD BE EXTENDED WITH..."
- "SO FEEL FREE TO FORK IT OR CONTACT ME AT..."
- "AND CONTINUE... BY ALL OF YOU! :)"

An open exhibition about the most important Open Design projects:
on Media Factory's walls and on GitHub!

Source: <https://github.com/openp2pdesign/Open-Design-Exhibition>

Sketch Chair: Open Design as code

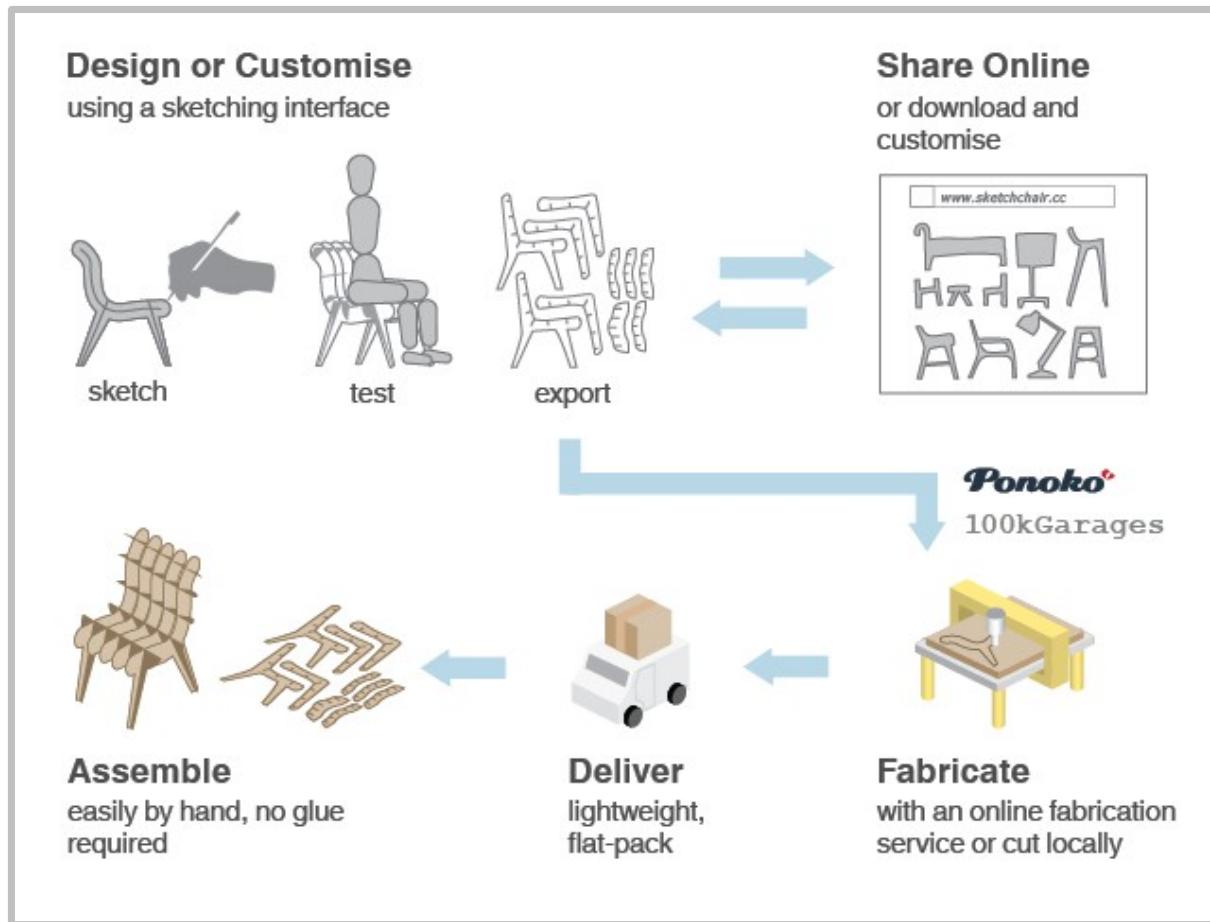
SketchChair



What is Open Design, if the chair is designed
by a software?

Source: <http://www.sketchchair.cc/>

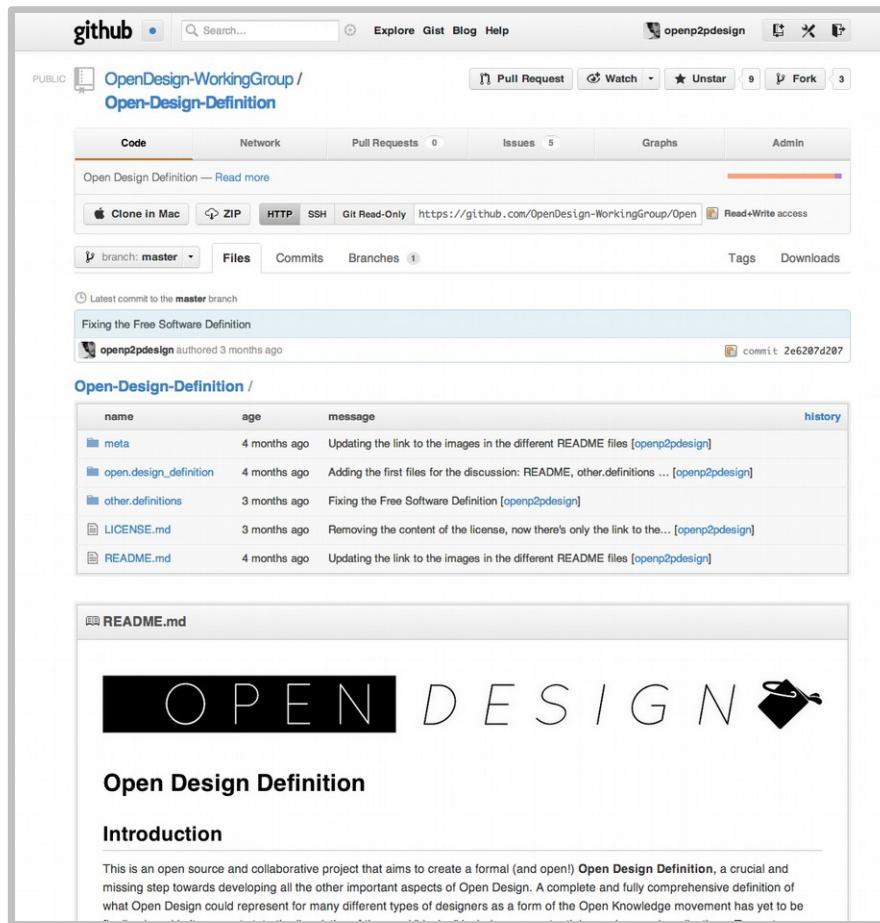
Sketch Chair: Open Design as code



What is Open Design, is manufacturing and supply chain process?

Source: <http://www.sketchchair.cc/>

... and participate in the Open Design Definition!



Participate in an open source project that defines Open Design

Source: <https://github.com/OpenDesign-WorkingGroup/Open-Design-Definition>

The current status of Open Design

- * single persons or small groups design a project and then **just publish it online**
- * lack of new **tools, processes, systems** that enable designers and users in developing open design projects

--> where is the **collaboration**?

--> where are the **open processes**?

--> where are the **communities**?



The current status of Open Design

From: torvalds@klaava.Helsinki.FI (Linus Benedict Torvalds)
Newsgroups: comp.os.minix
Subject: What would you like to see most in minix?
Summary: small poll for my new operating system
Message-ID:
Date: 25 Aug 91 20:57:08 GMT
Organization: University of Helsinki

Hello everybody out there using minix -

I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones. This has been brewing since april, and is starting to get ready. I'd like any feedback on things people like/dislike in minix, as my OS resembles it somewhat (same physical layout of the file-system (due to practical reasons) among other things).

I've currently ported bash(1.08) and gcc(1.40), and things seem to work. This implies that I'll get something practical within a few months, and I'd like to know what features most people would want. Any suggestions are welcome, but I won't promise I'll implement them :-)

Linus (torvalds@kruuna.helsinki.fi)

So successful that they just announced a partnership with Ford Car.

Source: <http://www.cs.cmu.edu/~awb/linux.history.html>

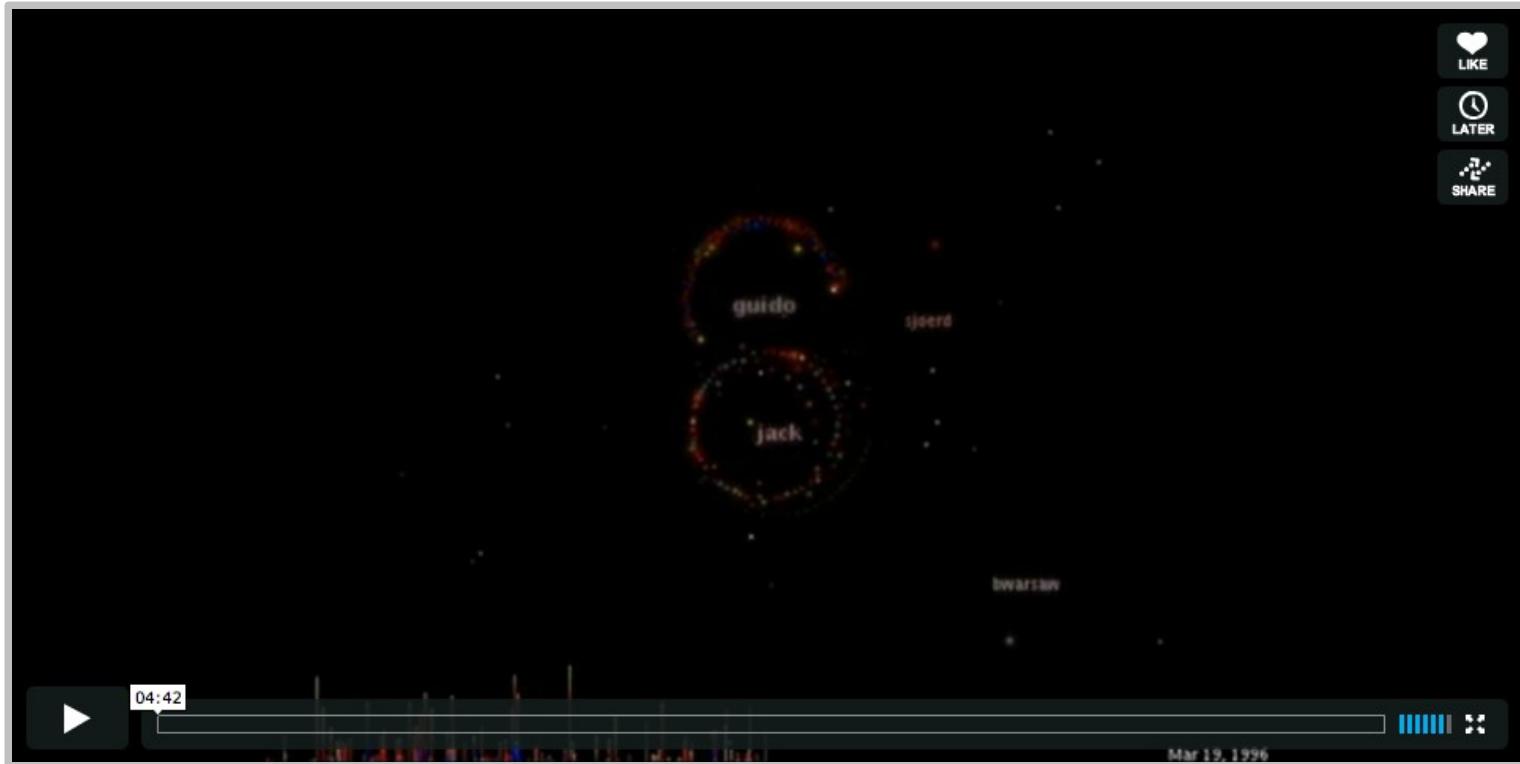
The experience of a user of Open Source software

The screenshot shows the SourceForge homepage. At the top, there's a navigation bar with the SourceForge logo, 'Register', and 'Log In'. Below this is a main banner with the text 'Find, Create, and Publish Open Source software for free'. A search bar contains the placeholder 'Search from 293,991 projects' with a 'Search' button next to it. Below the search bar, there are several statistics: 'TODAY: 3,506,302 DOWNLOADS', '5,259 CODE COMMITS', '3,374 FORUM POSTS', '577 BUGS TRACKED', and a link to 'MORE SITE ACTIVITY'. On the left side, there's a sidebar with links to various categories: Audio & Video, Business & Enterprise, Communications, Development, Home & Education, Games, Graphics, Science & Engineering, Security & Utilities, and System Administration. Below these categories is the '@sourceForge' logo. The main content area features a 'Project of the Month' section for 'OpenPetra', which includes a logo, a brief description, and a 'Download Alpha 0.2.10' button. Another section below it is for '7-Zip', featuring its logo, a brief description, and a 'Download 7z922.tar.bz2' button.

The surface experience with open source software: not only finished products that can be downloaded and used!

Source: <http://sourceforge.net/>

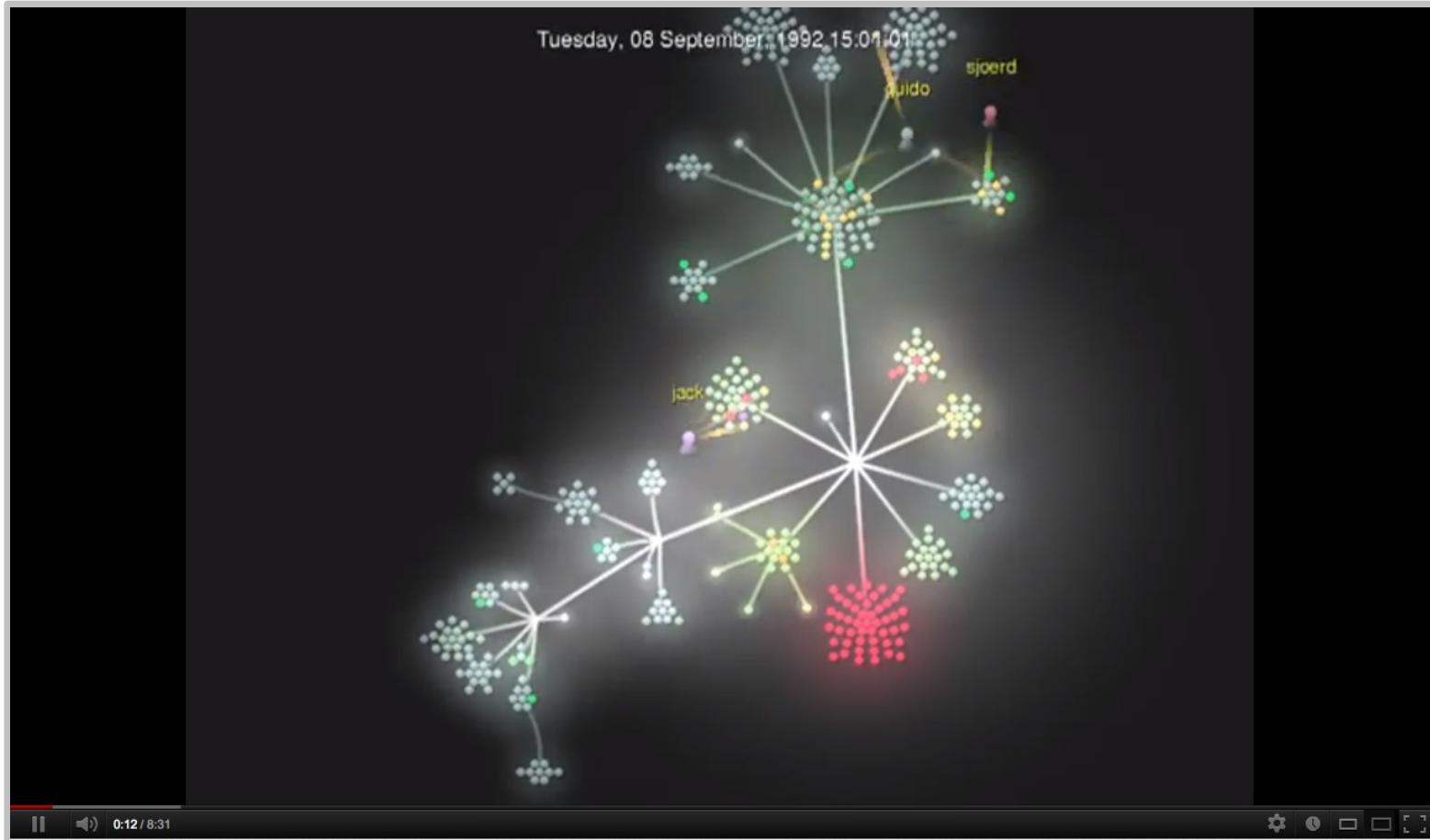
... the big picture of Open Source: the process



But there's a big process of collaboration
behind the final product!

Source: <http://code.google.com/p/codeswarm/>
<http://vimeo.com/1093745>

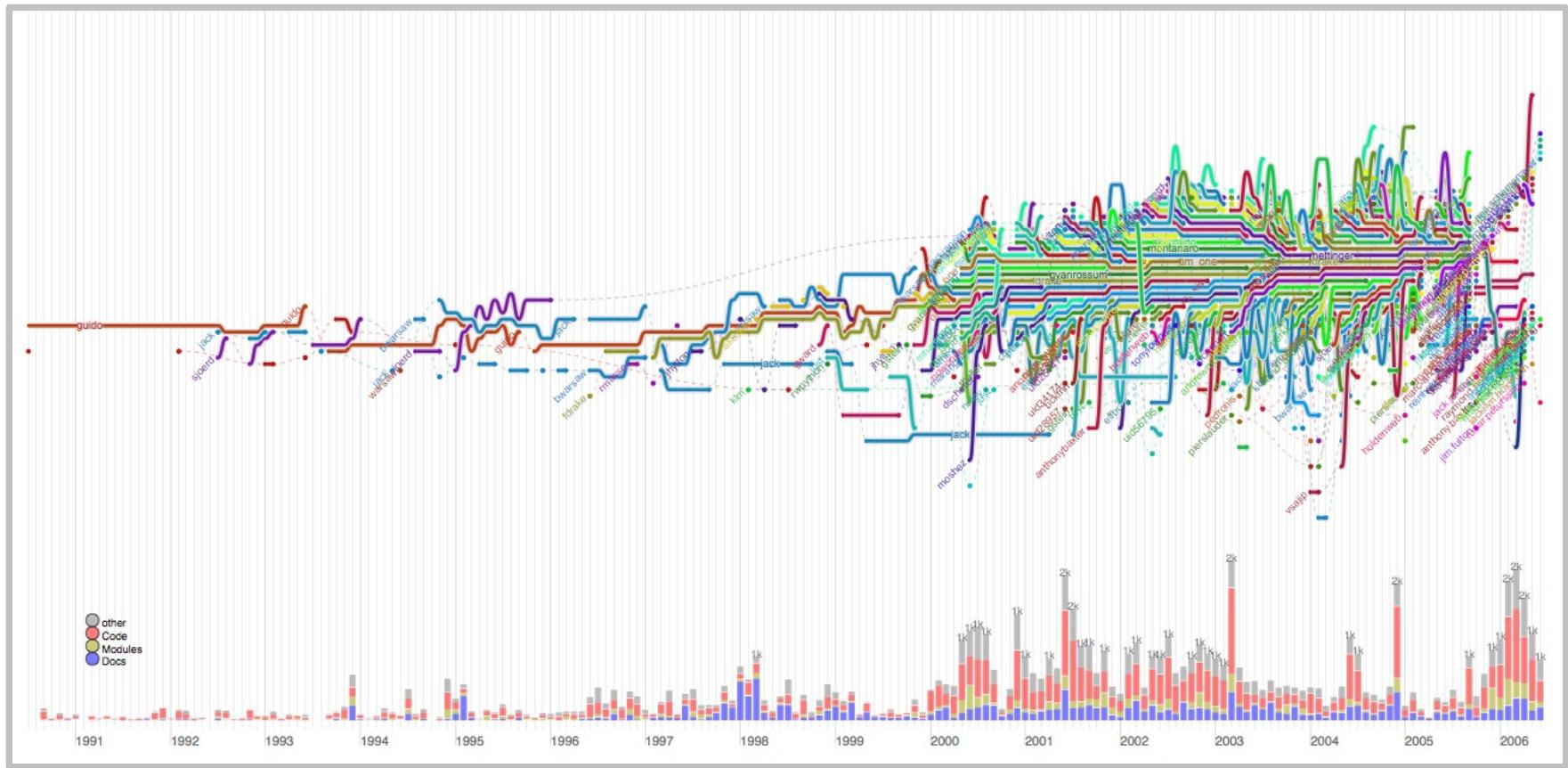
... the big picture of Open Source: the process



But there's a big process of collaboration
behind the final product!

Source: <http://code.google.com/p/gource/>
<http://youtu.be/aPk1BqK8zzI>

... the big picture of Open Source: the process



But there's a big process of collaboration
behind the final product!

Source: <http://www.michaelogawa.com/research/storylines/>

A more systemic definition of Open Design

A collaborative distributed **system** of design & manufacturing

- * sharing
- * collaboration
- * open licenses
- * open and distributed manufacturing technologies

A **system of agents** that:

- * use
 - * design
 - * manufacture
 - * market
 - * distribute
 - * manage the end-of-life
-



Aalto University

03.

Open Data and Big Data: open innovation at the data level



Aalto University

Open Data



Open data is the idea that certain data should be freely available to everyone to use and republish as they wish, without restrictions.

Source: <http://youtu.be/3YcZ3Zqk0a8>

Linked Open Data



Open data is the idea that certain data should be freely available to everyone to use and republish as they wish, without restrictions.

Source: <http://en.wikipedia.org/wiki/File:Linked-open-data-Europeana-video.ogv>

Open Data for Open Government



Open government is the doctrine which holds that citizens have the right to access the documents and proceedings of the government to allow effective public oversight

Source: <http://youtu.be/bLGTrz1Zolk>

Opening Government... with Git



Another reason why you need to study Git
and GitHub...

Source: <http://youtu.be/CEN4XNth61o>

Opening Open Government... with books

The screenshot shows the O'Reilly Books & Videos website. At the top, there's a navigation bar with links for Home, Shop, News & Commentary, Answers, Safari Books Online, Conferences, School of Technology, and Community. Below the navigation is a search bar and a shopping cart icon. A banner at the top of the page says "Save 50% on all Early Release Ebooks *one week only* – Ebooks you can only get at oreilly.com". The main content area features a book cover for "Open Government: Collaboration, Transparency, and Participation in Practice" by Daniel Lathrop and Laurel Ruma. The book cover has a circular design with concentric patterns. Below the book cover, there are ratings (4.5 stars), social sharing links (Twitter, Google+, Facebook), and buttons to "Read 2 Reviews" or "Write a Review". To the right of the book details, there are promotional boxes for "Buy 2 Get 1 FREE", "Free Shipping On Orders > \$29.95", and a "100% Guarantee". The "Buying Options" section lists the ebook price (\$19.99) and various formats (APK, DAISY, ePub, Mobi, PDF) with an "Add to Cart" button. It also shows options for a print & ebook bundle (\$27.49) and a print only option (\$24.99) with quantity selection and an "Add to Cart" button. Other links include "Safari Books Online - Read now >" and "Essential Links". A sidebar on the left contains a summary of the book's purpose and a list of topics covered.

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Open Government
Collaboration, Transparency, and Participation in Practice
By Daniel Lathrop, Laurel Ruma
Publisher: O'Reilly Media
Released: February 2010
Pages: 432

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Description Table of Contents Product Details About the Author Colophon

In a world where web services can make real-time data accessible to anyone, how can the government leverage this openness to improve its operations and increase citizen participation and awareness? Through a collection of essays and case studies, leading visionaries and practitioners both inside and outside of government share their ideas on how to achieve and direct this emerging world of online collaboration, transparency, and participation.

Contributions and topics include:

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Open Government: an ecosystem of professions, tools, books...

Source: <http://shop.oreilly.com/product/9780596804367.do>

Opening Open Government... with books

The screenshot shows a GitHub repository page for 'oreillymedia/open_government'. The repository is public and has 858 stars and 132 forks. The 'Code' tab is selected, showing a commit history. The commit history details minor changes made by 'odewahn' a month ago to files like source, LICENSE.txt, README.md, open_government.epub, open_government.mobi, and open_government.pdf to force pages to rerender on GitHub.

File	Time	Description	Author
source	a month ago	Made minor changes in each file to force pages to rerender on github	[odewahn]
LICENSE.txt	a month ago	Initial commit	[odewahn]
README.md	a month ago	Made change to try to force github to rebuild asciidoc pages	[odewahn]
open_government.epub	a month ago	reduced cover image for smaller file size	[adamwitwer]
open_government.mobi	a month ago	reduced cover image for smaller file size	[adamwitwer]
open_government.pdf	a month ago	reduced cover image for smaller file size	[adamwitwer]

... which may be open themselves!

Source: https://github.com/oreillymedia/open_government

The Internet of Things



What about the data that we get by connecting all the machines?

Source: <http://youtu.be/sfEbMV295Kk>

Open Data and the Internet of Things



What about releasing machine data as
Open Data?

Source: http://youtu.be/o03m7r_p2sc

Open Data and the Internet of Things

The screenshot shows the Cosm platform homepage. At the top, there's a navigation bar with the Cosm logo (red 'cosm' text with a dot), 'About', 'How it works' (highlighted in red), 'Support/API', a search bar, and a sign-in section for 'Forgot password' and 'Sign Up'. Below the navigation is a large orange circle containing the text 'How Cosm Works'. To the right of this circle, a text block reads: 'The Internet of Things was an idea. Now it's a reality. Right now on the Cosm platform, developers and companies are connecting devices and apps to securely store and exchange data. It's the one solution that brings big ideas about the world to the world.' Below this, there are two main sections: 'Build.' on the left and 'Engage.' on the right, each with a sub-section and a central icon. The 'Build.' section has a 'Connect your device' sub-section with text about prototyping with Arduino and deploying products. The 'Engage.' section has a 'Search for devices' sub-section with text about querying devices and finding commercial products. A central gray circle contains a smartphone icon.

How Cosm Works

The Internet of Things was an idea. Now it's a reality. Right now on the Cosm platform, developers and companies are connecting devices and apps to securely store and exchange data. It's the one solution that brings big ideas about the world to the world.

Build.

Connect your device

Prototype with Arduino, configure commercial fitness trackers, energy monitors and air quality sensors, or [deploy your own product](#).

Engage.

Search for devices

Query for devices and sensors by user, location, tag and unit or find [commercial products](#) that are pre-configured for Cosm.

What about releasing machine data as
Open Data?

Source: <https://cosm.com/>

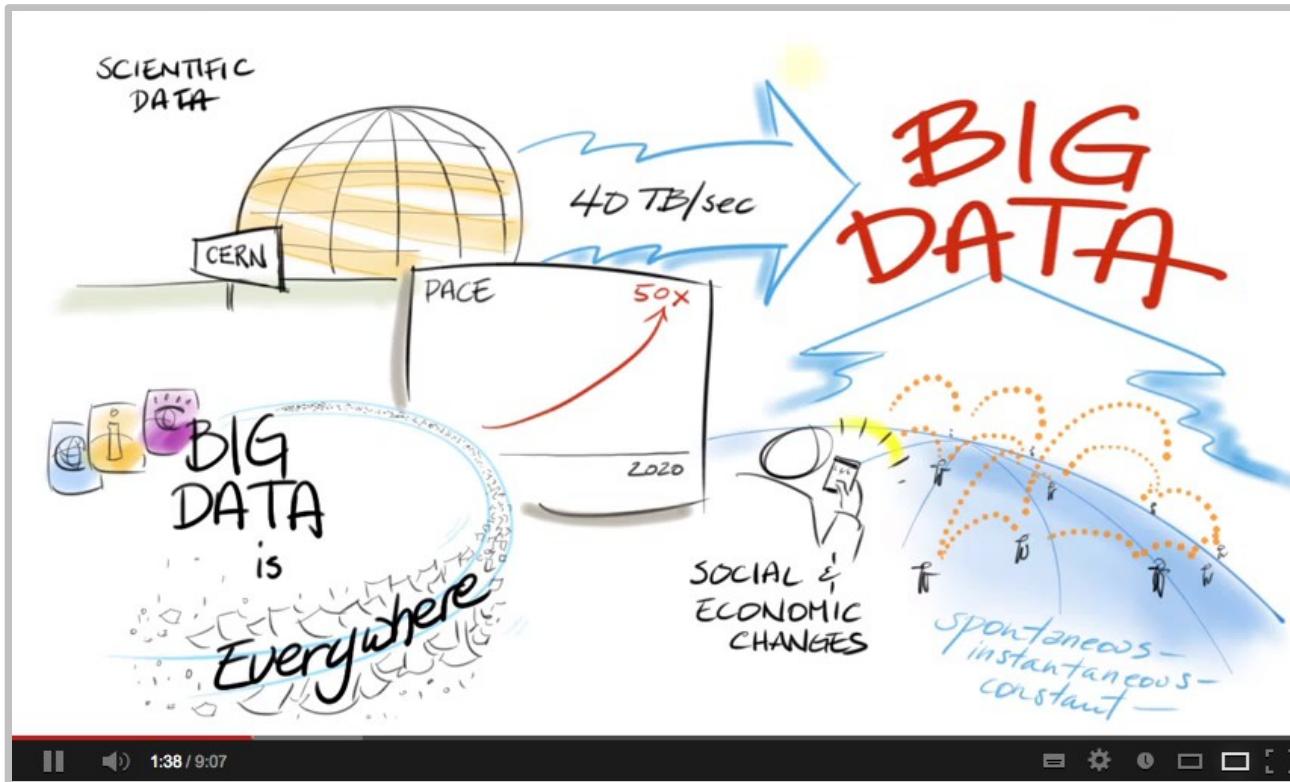
Big Data: the numbers



And data becomes big, so we need different tools, concepts and perspectives.

Source: <http://youtu.be/qqfeUUjAIyQ>

Big Data: the types



And data becomes big, so we need different tools, concepts and perspectives.

Source: <http://youtu.be/eEpxN0htRKI>

Big Data: the effects



Intrigued by the sheer scales involved, photojournalist Rick Smolan wanted to see how data was transforming the world.

Source: <http://www.bbc.co.uk/news/technology-21535739>



Aalto University

Thank you!!

Massimo Menichinelli
Aalto Media Factory
massimo.menichinelli@aalto.fi
@openp2pdesign
<http://www.slideshare.net/openp2pdesign>



11.03.2013