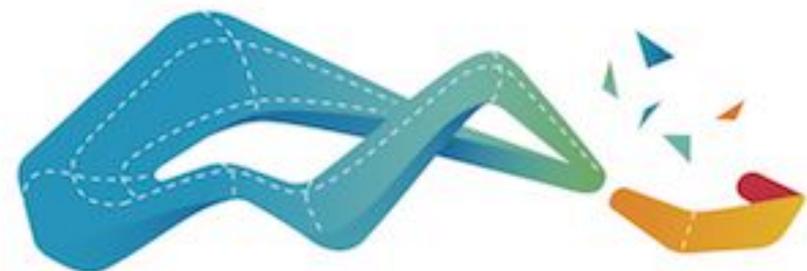


众创空间与创新创业的人才培养



创客大爆炸
Maker Collider

克强总理给创客添了一把柴！



1月4号总理李克强到深圳“柴火创客空间”

“万众创新，人人创业”

和年轻大学生创客交换意见

"Our parents and our grandparents created the world's largest economy and strongest middle class not by buying stuff, but by building stuff — **by making stuff, by tinkering and inventing and building,**" President Obama said before the inaugural White House Maker Faire in June.



奥巴马在
2014/6/18号在白
宫举办Maker
Faire

期许创客再把美
国动手创造的精
神带回来

“There may be a ‘next big thing’ that comes out of that [Maker] community,” Krzanich said in Maker Faire



英特尔CEO 科再奇在上任后把创客当做是重要的公司策略，期待和创客合作找到“Next Big Thing”

4月份呼应中国策略宣布“英特尔众创空间加速器”

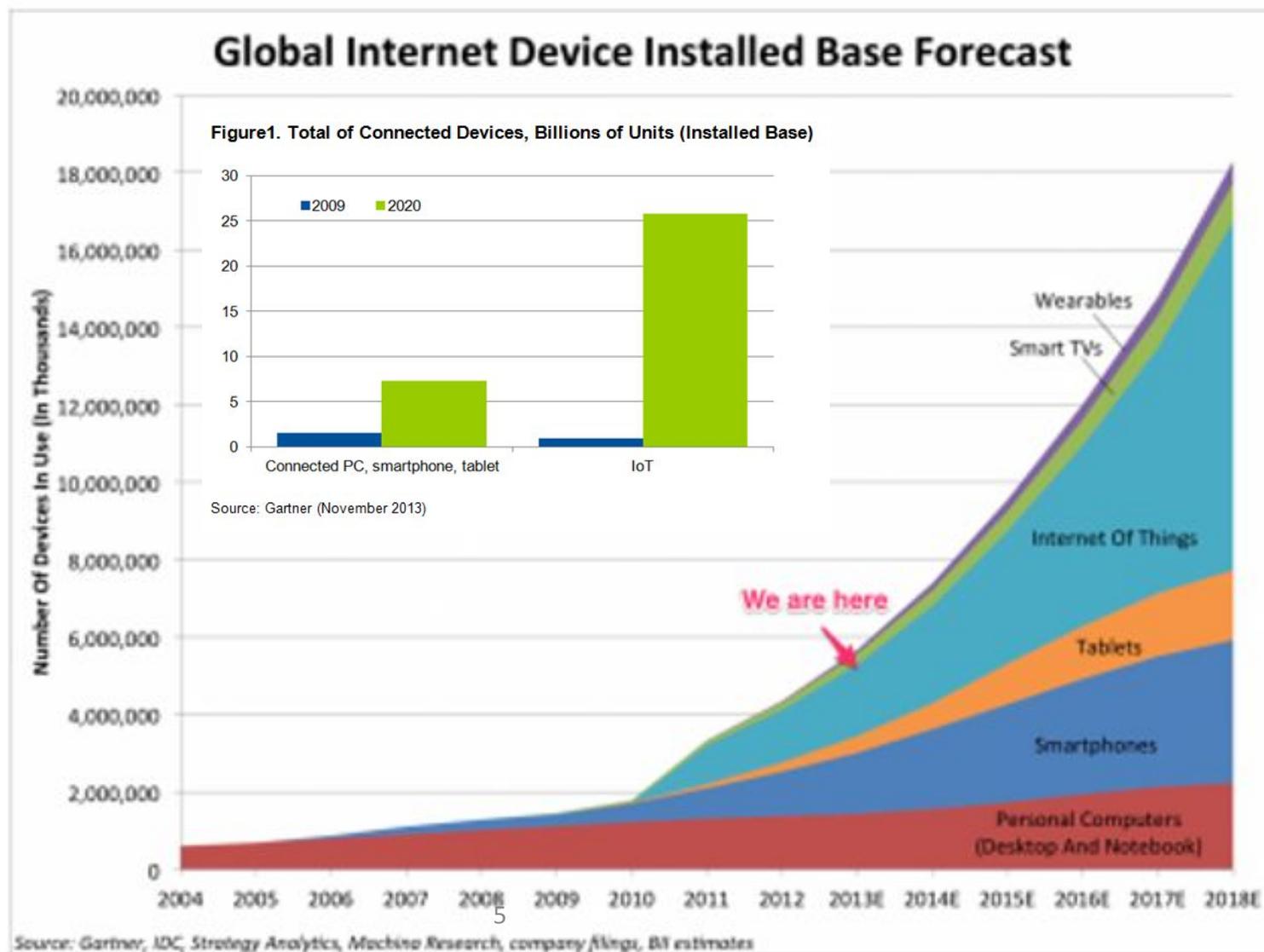
创客：物联网的万众创新

Gartner报告

- 2015年有**50亿**的物联网装置
- 2020年有**250亿**的物联网装置
- **50%**（100亿）的新物联网装置会来之未来**3年内**创立的创客公司

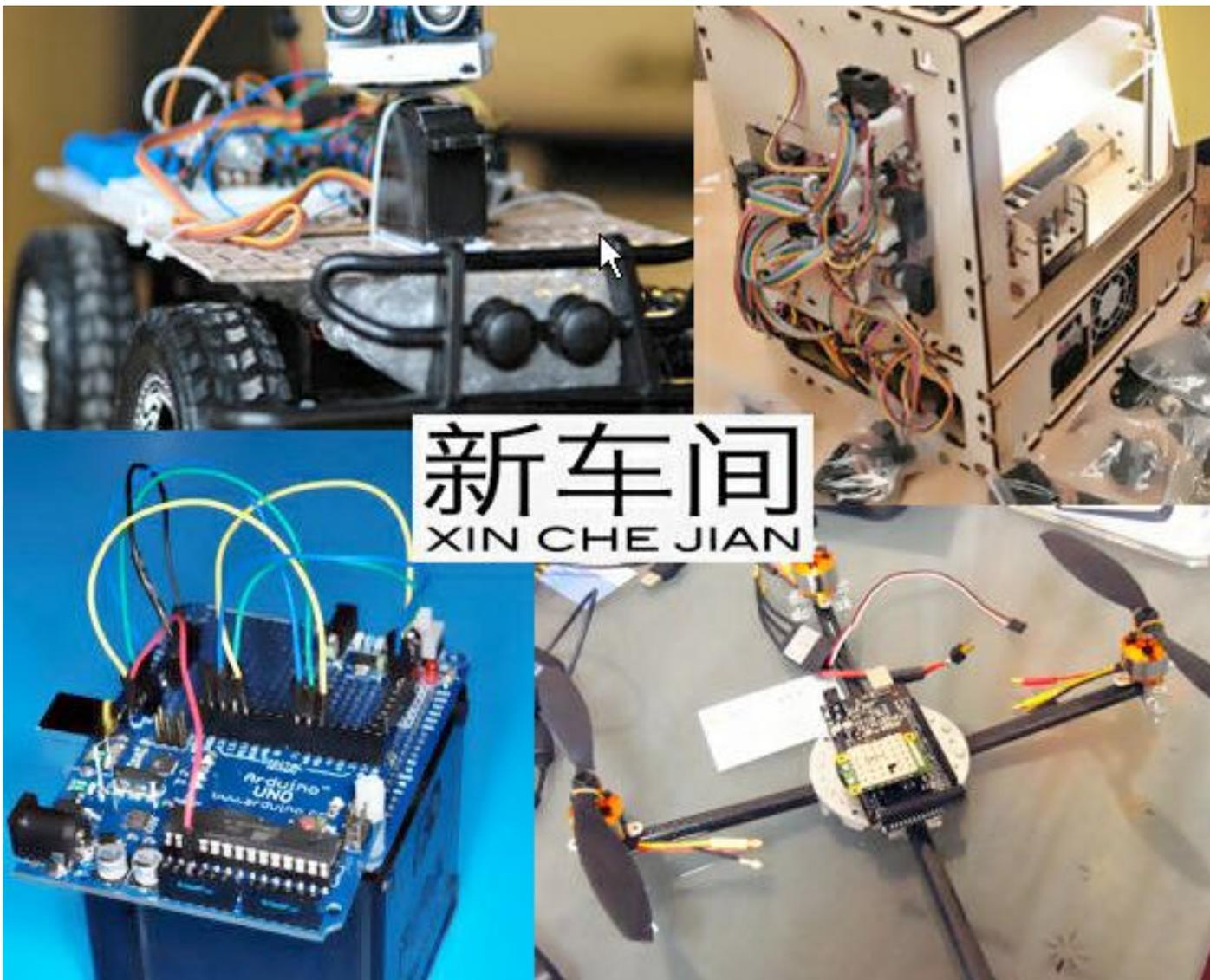
物联网是比互联网还大的机遇

不再是少数技术控，而是“万众创新，人人创业”

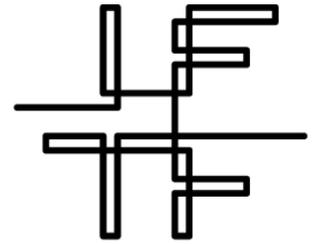


我和创客

2010: 中国第一个创客空间“新车间”



2011: 开放创新智库 Hacked Matter



INSTITUTE FOR THE FUTURE



学术期刊和会议报告

Shanzhai: China's Collaborative Electronics-Design Ecosystem

In Shenzhen, there are hundreds of smart watches, not just design prototypes. Here's why.
SILVIA LINDTNER, ANNA GREENSPAN, AND DAVID LI | MAY 18 2014, 2:13 PM ET



ParisTech REVIEW

INDUSTRIES BUSINESS SOCIETY SCIENCE & TECH

The new shanzhai: democratizing innovation in China

David Li / Co-founder of Xinchajian (hackerspace) and Hacked Ma

THE WALL STREET JOURNAL

Asia Edition | 22 April 2015 | Today's Paper

Home World U.S. Politics Economy Business Tech Markets Opinion Arts Life



ESSAY

In China, Lessons of a 'Hackerspace'

re giving a boost to startups and investors

The Economist

World politics Business & finance Economics Science & technology Culture

Technology Quarterly: Q4 2013

Monitor
Made in China

Technology and society: China has its own distinctive version of the maker movement,

Bloomberg Business

News

Markets

Insights

Video



NEW! Guide to Selling Your Small Business
By Barbara Schenck
Published: Aug 21, 2012 Price: \$49.95 FREE



SCHEDULE

DIY

The Maker Movement Gains Ground in China

SX SCHEDULE

Imitation as Innovation: Lessons from the Shanzhai

Like 1 Tweet 0

#sxsw #shanzhai

From watches, bags and shoes to touchscreen tablets, fast fashion cars -- you can find thousands of knockoff brands in China. Local coordinated networks of innovative companies take the products we love in the U.S., alter them relentlessly and make them ... they speed them to one of the world's largest consumer markets.

USC Annenberg Innovation Lab

HOME ABOUT RESEARCH EVENTS PEOPLE NEWS

Silvia Lindtner Recap: Created In China

Tuesday, October 8, 2013 | By Alex Gold

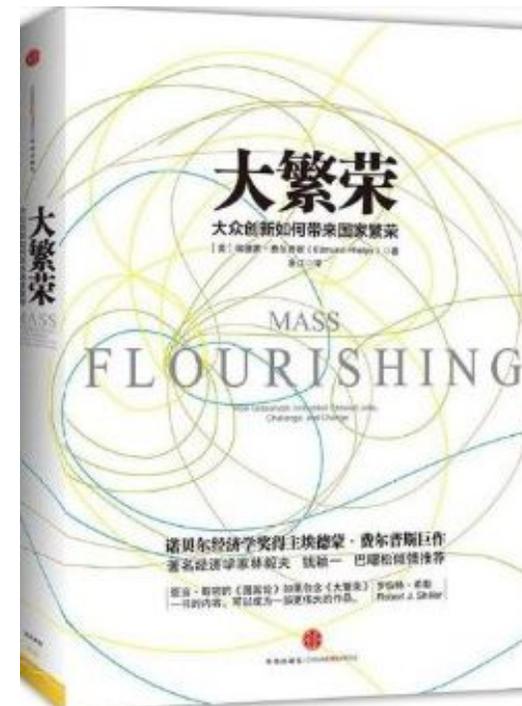
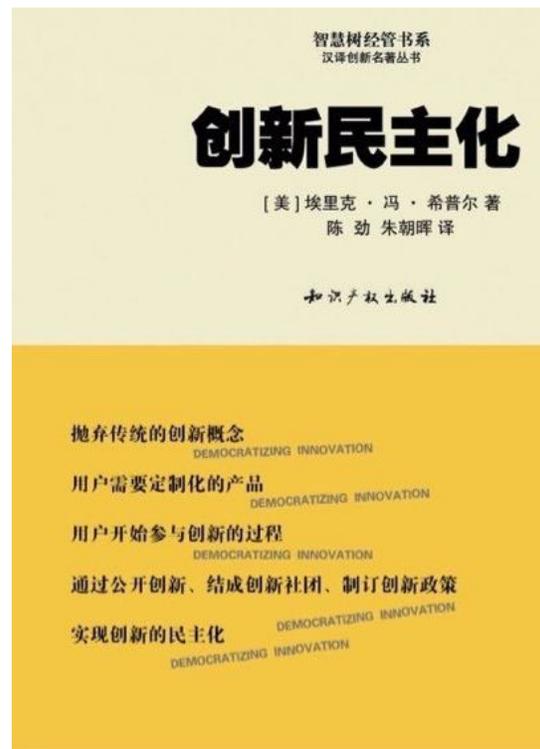
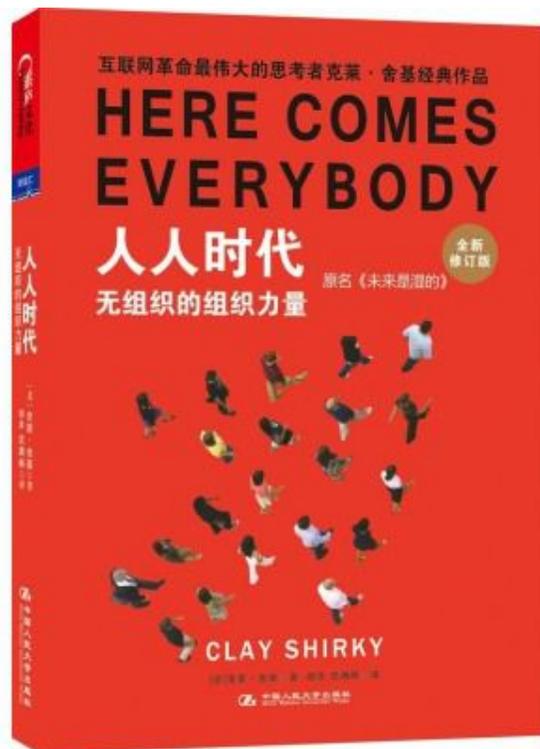
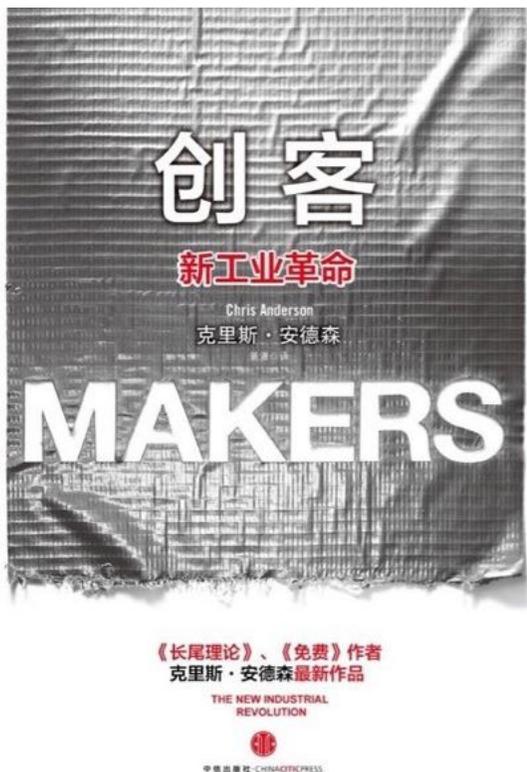
TAGS: Top Stories accelerator annenberg innovation lab Arduino china Chinese Ministry of Culture Chuangke digital technology DIY ethnography hackerspace incubator innovation it development open source Seedeuino Shanzhai Shenzhen silvia lindtner startups usc usc annenberg USC Annenberg Innovation Lab

Like 0 Tweet 2

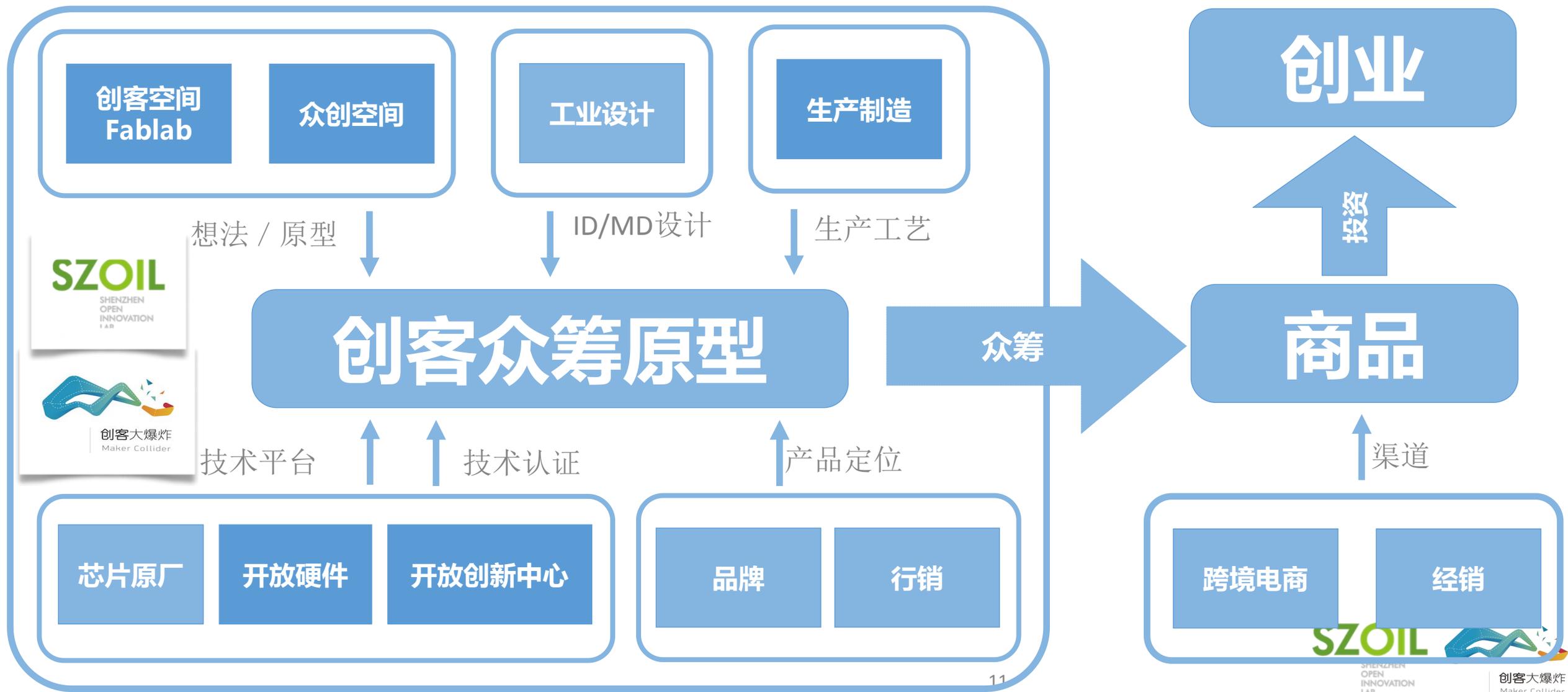


Made with China: Hackers, Makers & Manufacturers

创客：开放创新和万众创新的大繁荣



2015: 为创客打造物联网众创生态系



创客运动

我们都是创客



Sylvia是个12岁，喜欢动手的小女孩

创客运动让她可以从网上吸收足够的知识来做出有趣的穿戴式

创客运动的基础

创客社区

开源硬件

互联网分享

数字制造

开源硬件让人人可以开发智能互动

数字制造让人人可以制作物件

互联网分享让更多人可以快速入门

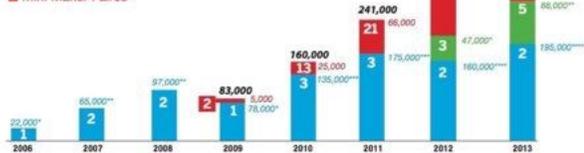
创客人数透过互联网效应指数性的成长

3000+创客空间，近百万的创客

Maker Faire

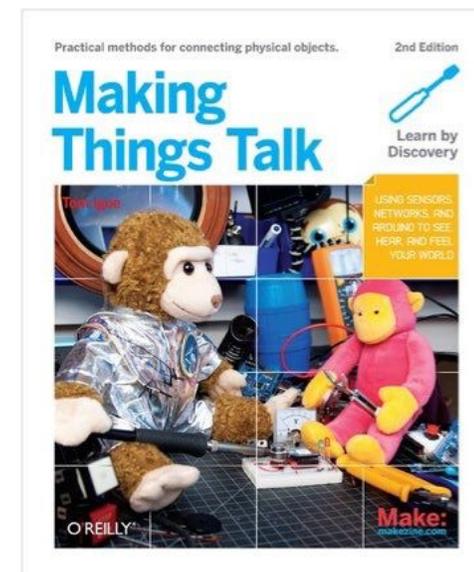
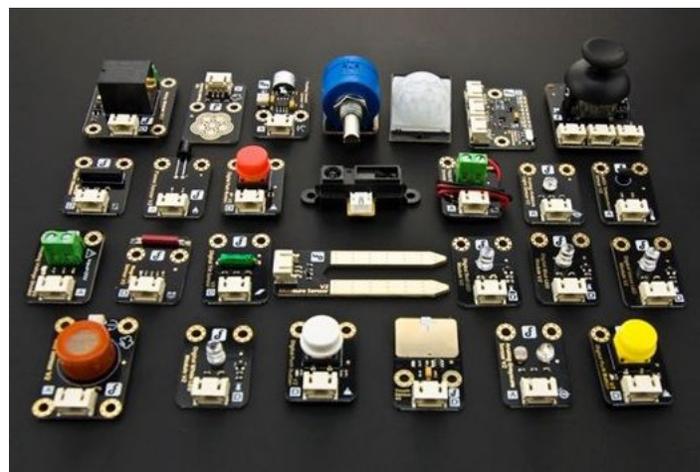
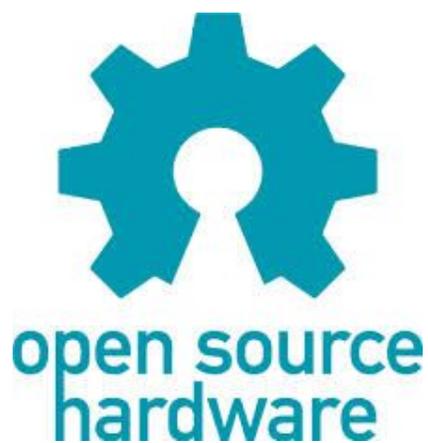
Eight Year Growth

■ Flagship Faires
■ Featured Faires
■ Mini Maker Faires



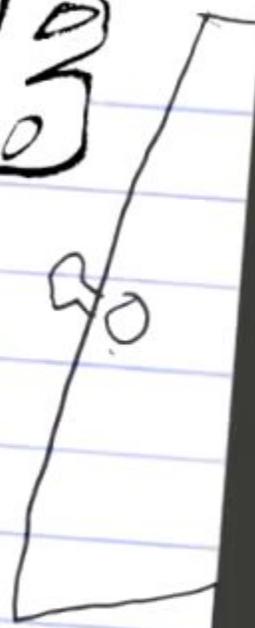
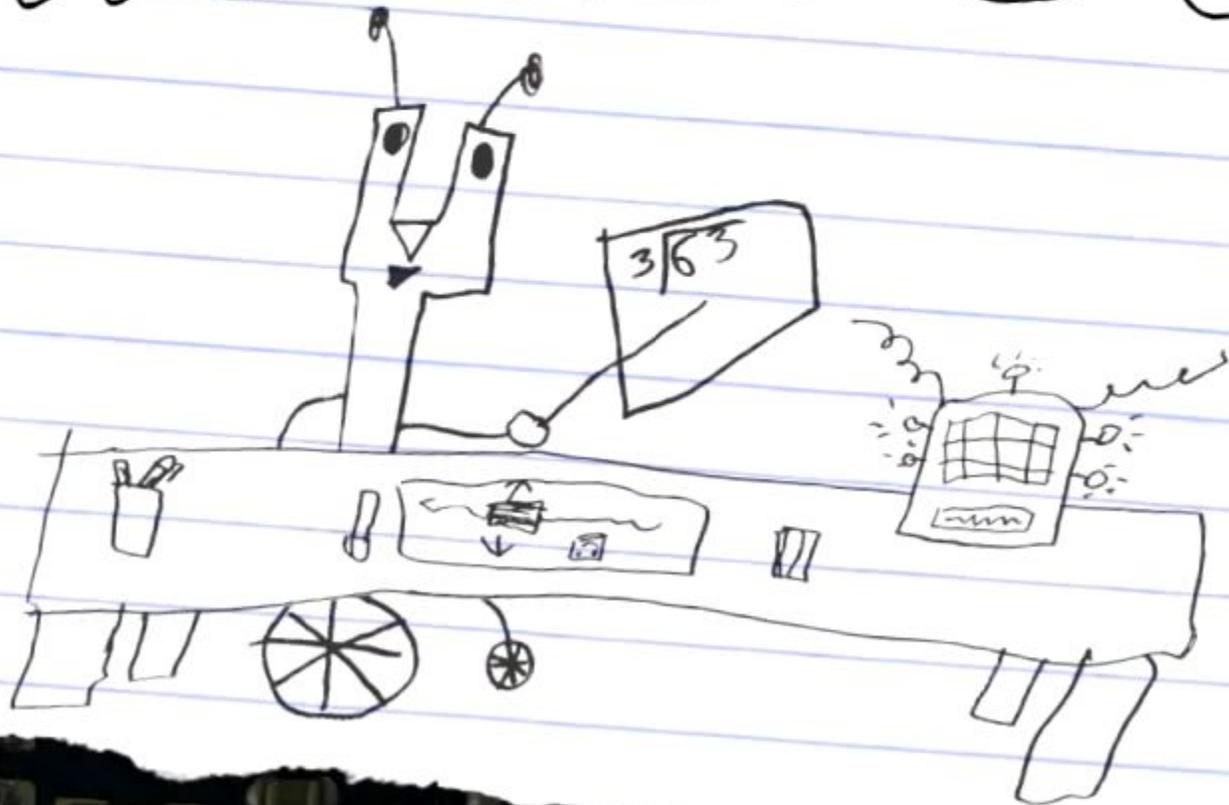
开源硬件和物理运算

Arduino: 为了给艺术家好用而设计的8位单片机
共同的平台分享想法, 程序, 制作
启动了3D打印和DIY无人机
社区的接受度和亲和力决定了项目的成功

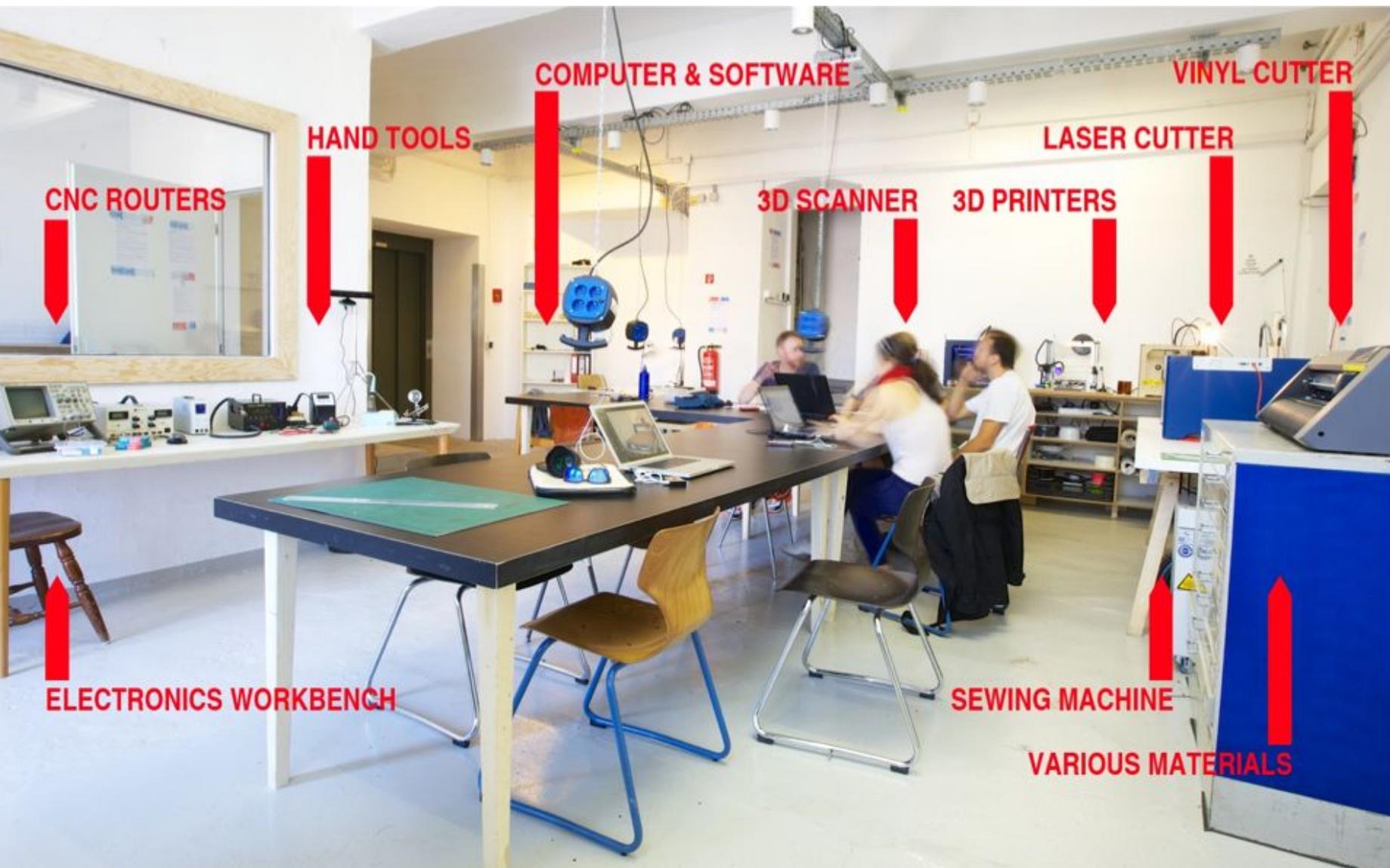


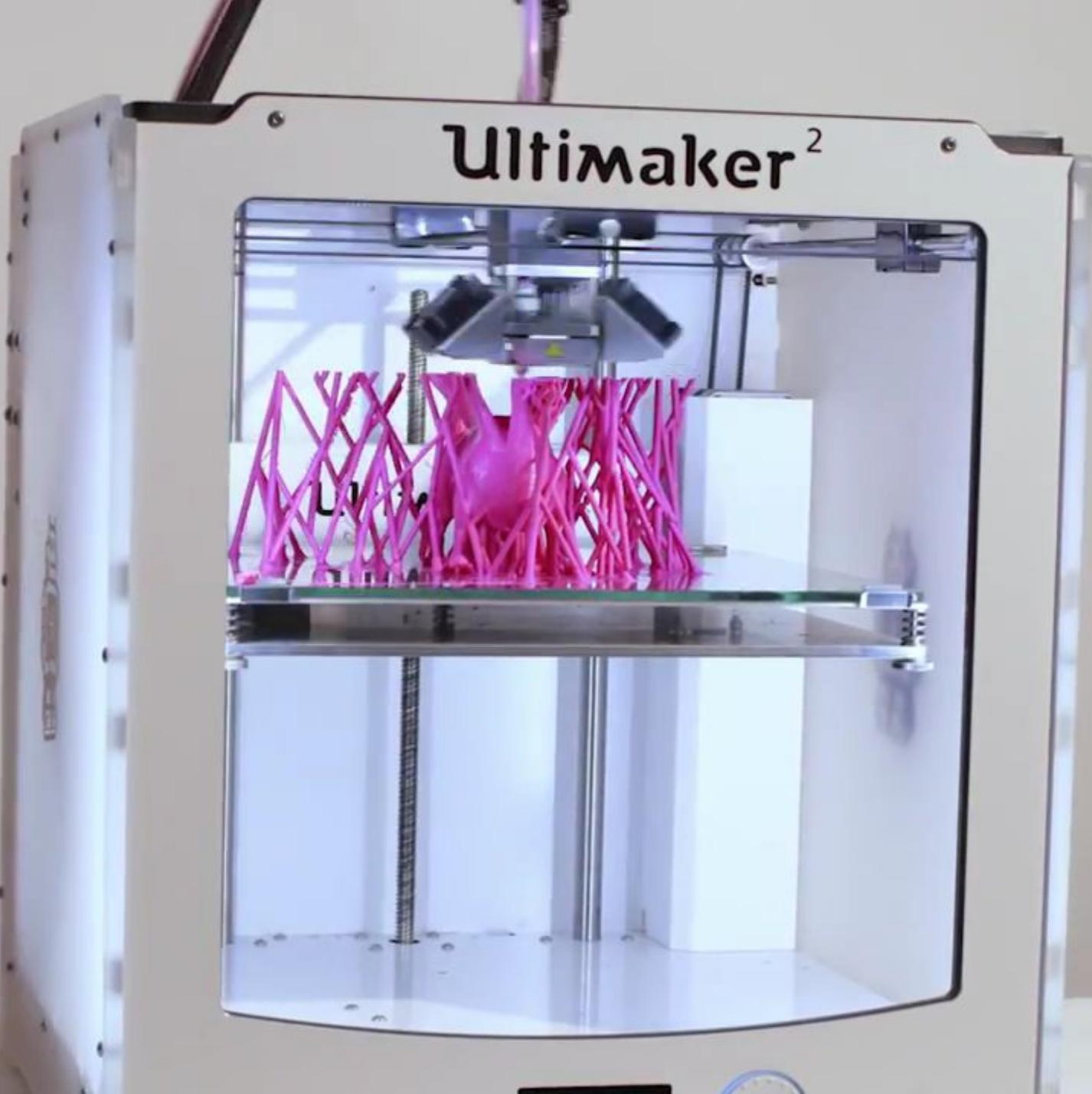


SMART BOT'S THINKING LAB



数字制造工具



An Ultimaker 2 3D printer is shown in operation. The printer is white with a clear front door. Inside, a pink lattice structure is being printed on a glass bed. The printer's name "Ultimaker 2" is printed on the top of the front door. The printer is positioned on a white surface against a light-colored wall.

Ultimaker²

PRINT SPEED
35mm/s

FILL
0%

TRAVEL SPEED
150mm/s

PRINT TEMP
210°C

BED TEMP
60°C

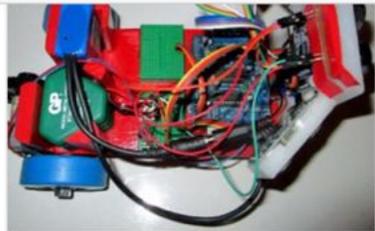
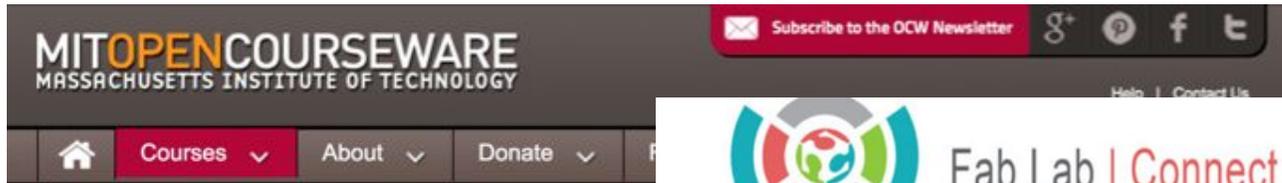
LAYER HEIGHT
100 micron





#3 plant holder

透过互联网分享知识和制作过程



R3: Rolling Red Robot
by powell in Robots



Battery Eliminator from a recycled wall wart
by doncrush in Reuse



DIY SPEEDOMETER AND ODOMETER
by electroguyz in Arduino



Tripod Mount for an iPad
by Phil B in Photography



USB Power Bank
by DIYByKey in USB



FAB LAB PROJECTS

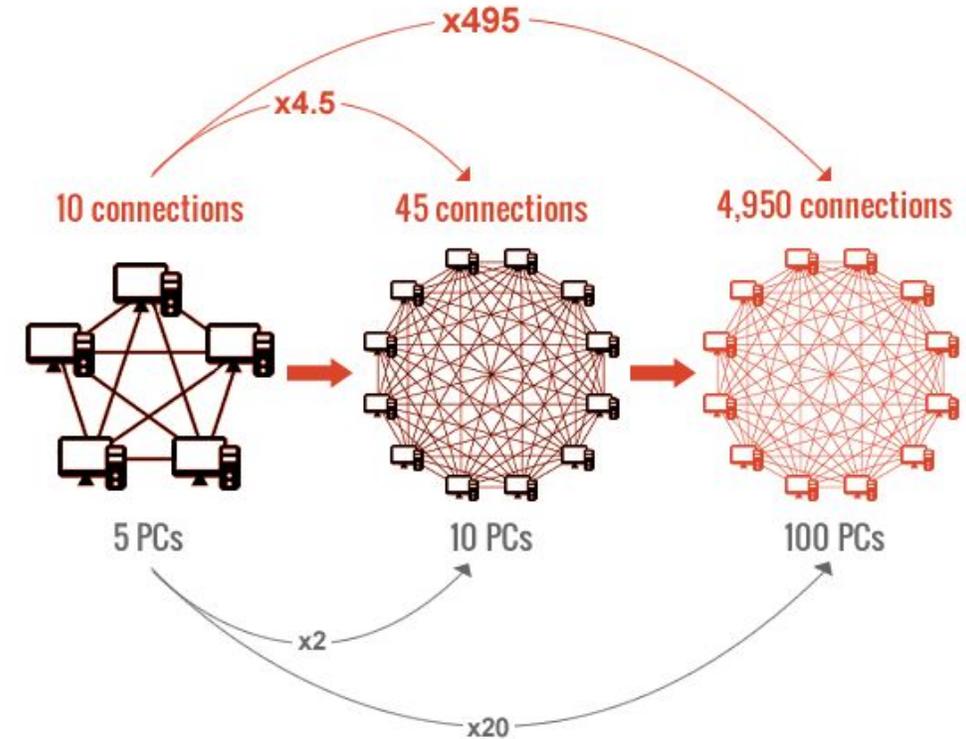
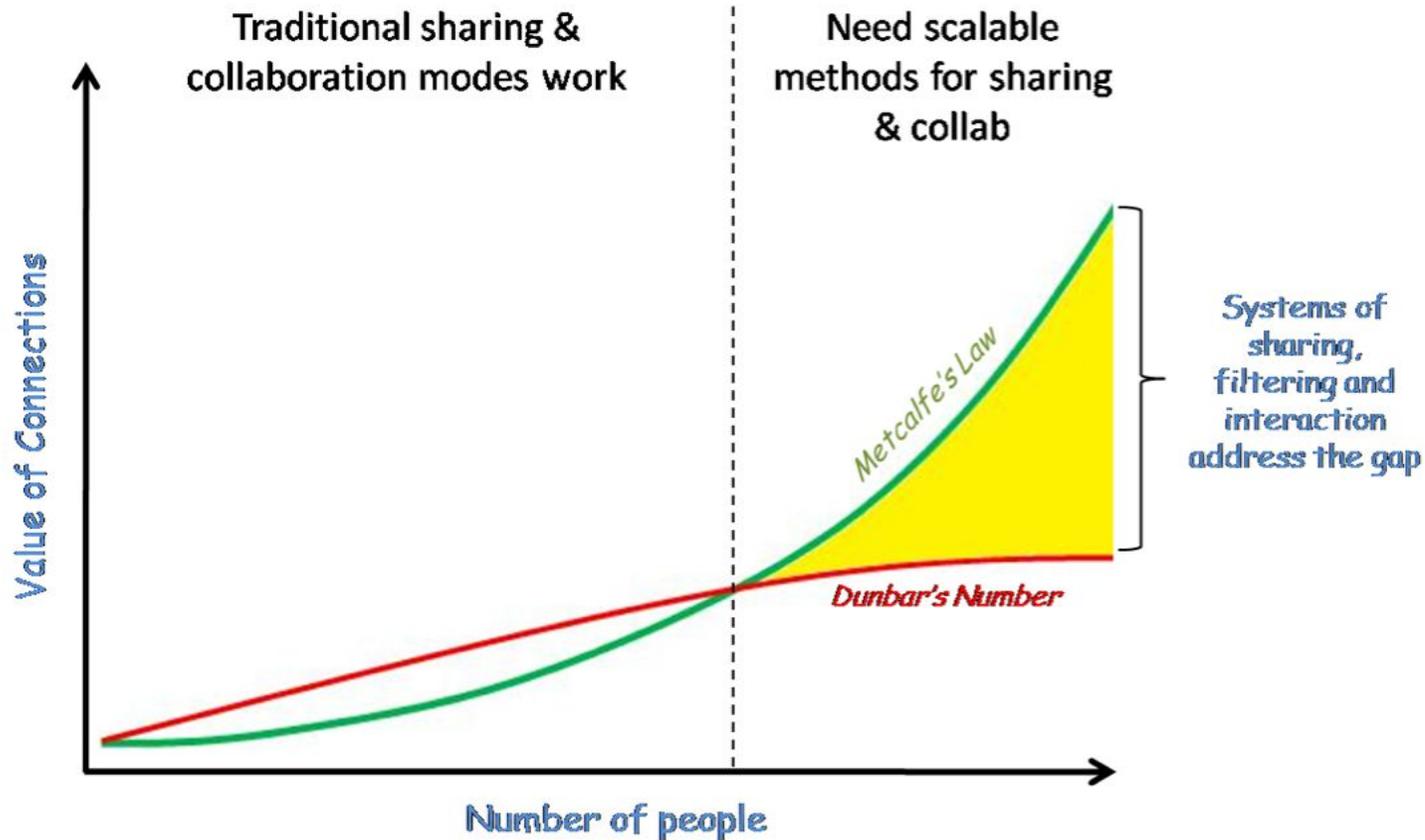
cts

you will find a list of Fab Award Projects, not all of them are eligible for the Replication Grant.

Fab Lab Projects



Metcalfe's Law



众筹：物联网的长尾

众筹：创意预售

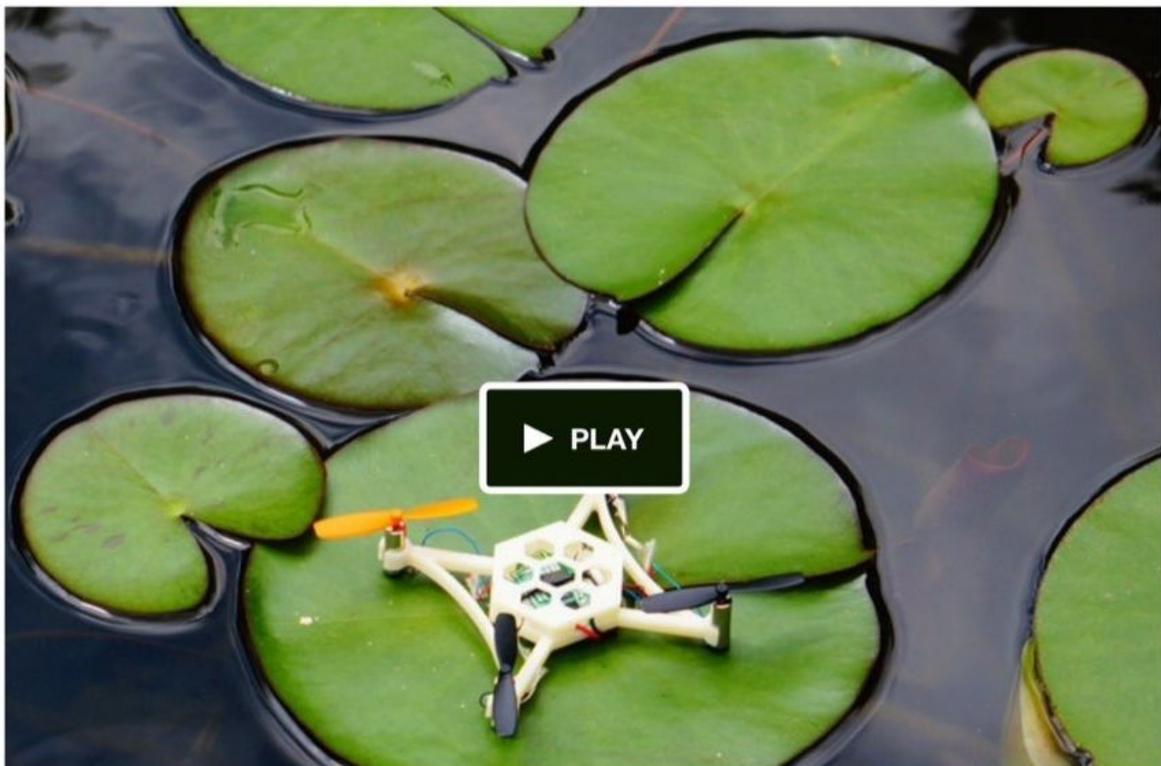
Hex: A copter that anyone can fly!

by Benjamin Black

Home Updates **14** Backers **4,670** Comments **501**

Los Angeles, CA Technology

Funded! This project was successfully funded on Oct 10.



4,670

backers

\$563,721

pledged of \$10,000 goal

0

seconds to go

Hex
HexAirbot.com

Project by
Benjamin Black
Los Angeles, CA
[Contact me](#)

uArm: Put a Miniature Industrial Robot Arm on Your Desk



uArm is an Arduino-powered desktop 4-axis parallel-mechanism robot arm, modeled after the ABB industrial PalletPack robot.

Created by
UFactory



uArm Put a Miniature Industrial Robot Arm on Your Desk

1,263 backers pledged \$251,887 to help bring this project to life.



SZOIL
SHENZHEN
OPEN
INNOVATION
LAB

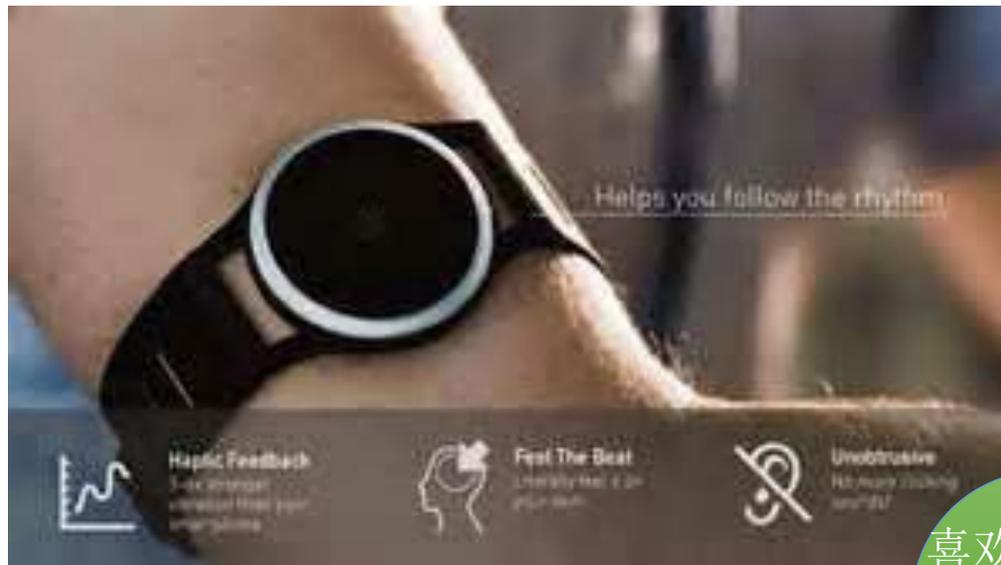


创客大爆炸
Maker Collider

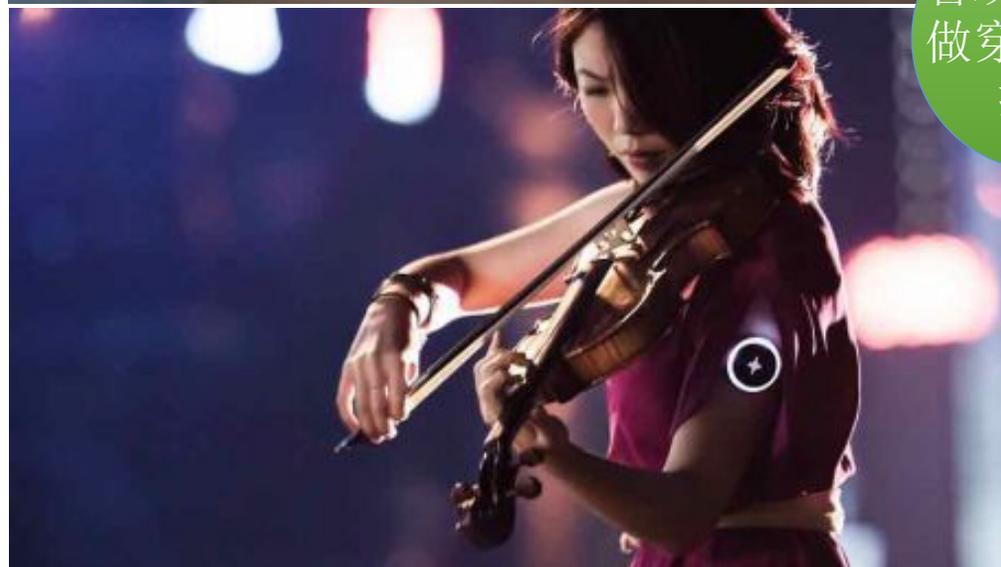
不止是做极客玩具



喜欢做饭的
做法式慢煮
机器



喜欢音乐的
做穿戴式节
拍器



长尾市场

销售量

短头(热门产品)



长尾(利基产品)



产品



创客大爆炸
Maker Collider

创客运动到物联网万众创新



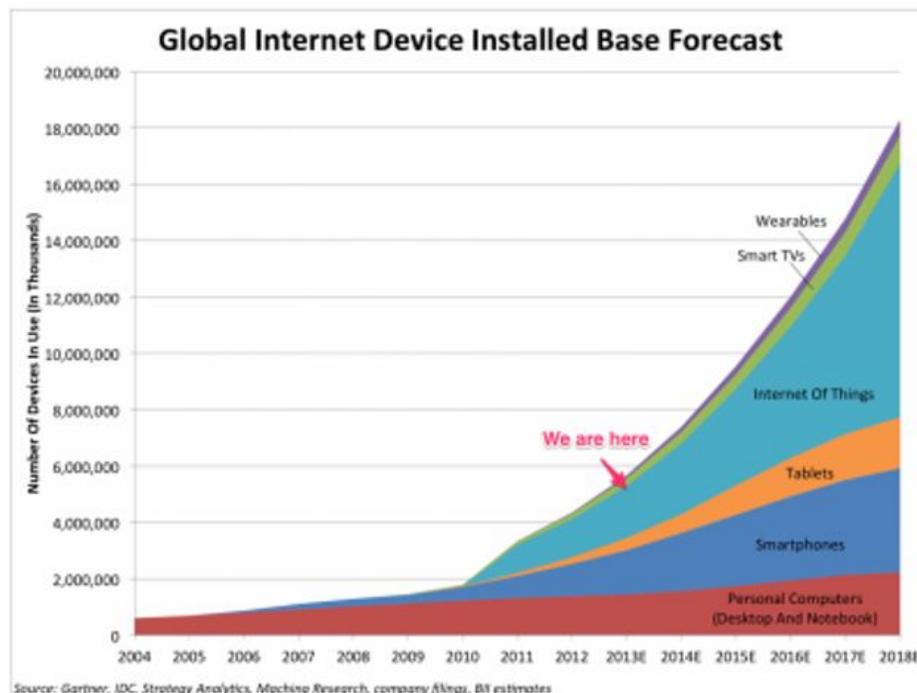
创客运动

开源硬件

数字制造

互联网分享

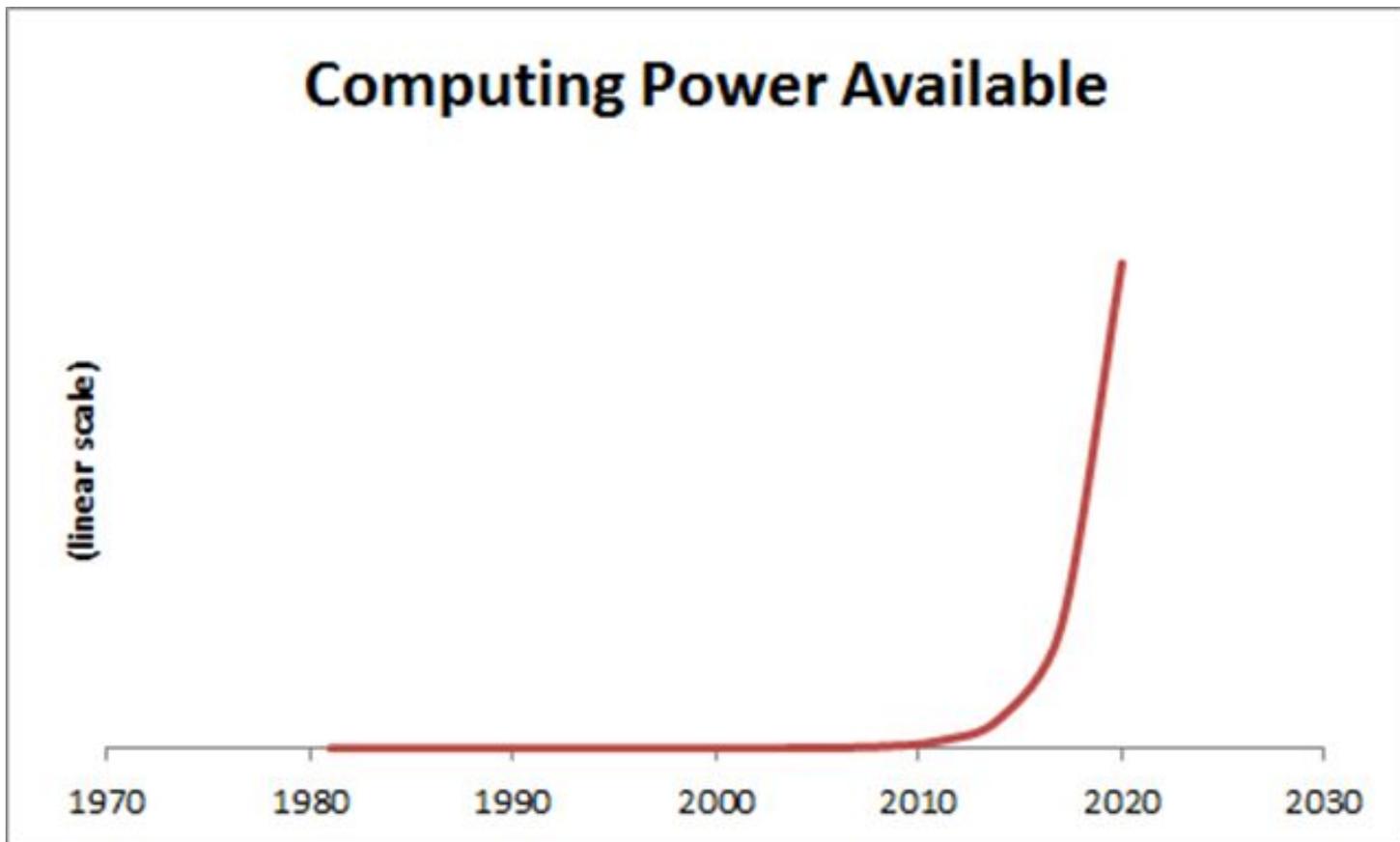
众筹



物联网创造的大规模业余化

摩尔定律：指数型的驱动力

摩尔定律



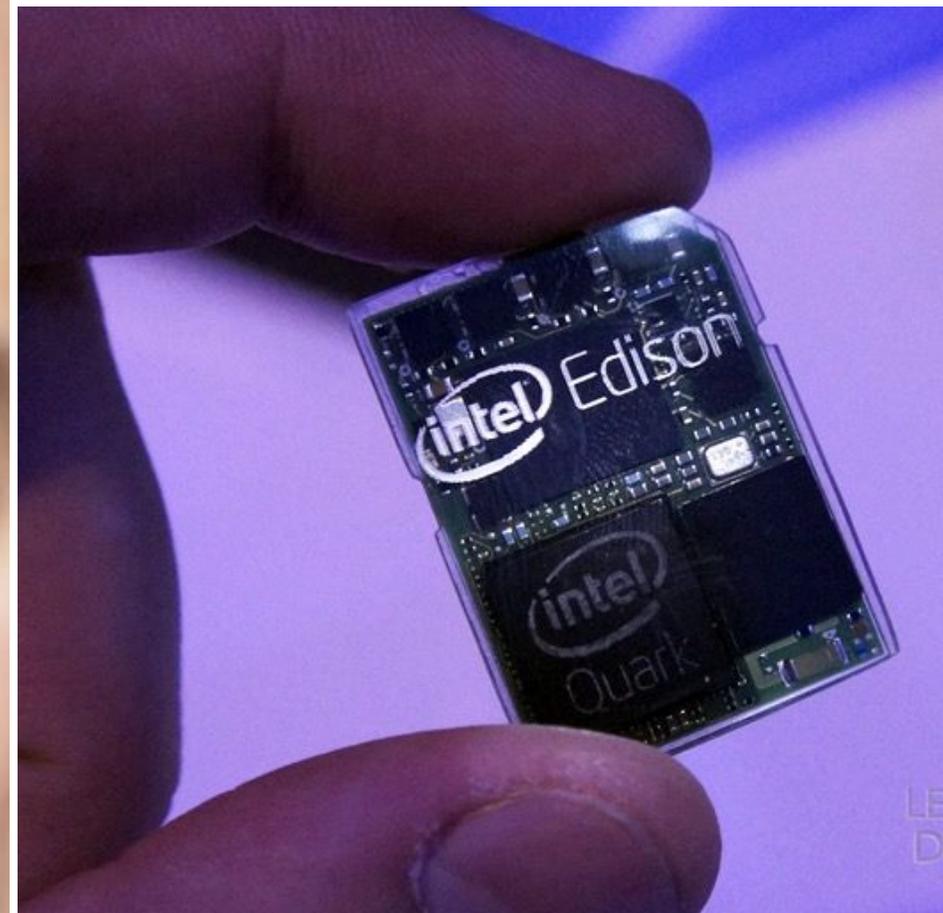
风口：指数型成长的科技
摩尔定律驱动过去40年

- 电脑，互联网，智能时间
- 2015 物联网

未来5年200亿物联网装置的成长，50%会由未来3年创业的公司

技术开放开源下的万众创新

越来越小的开放 / 开源智能核心



高性能的智能核心

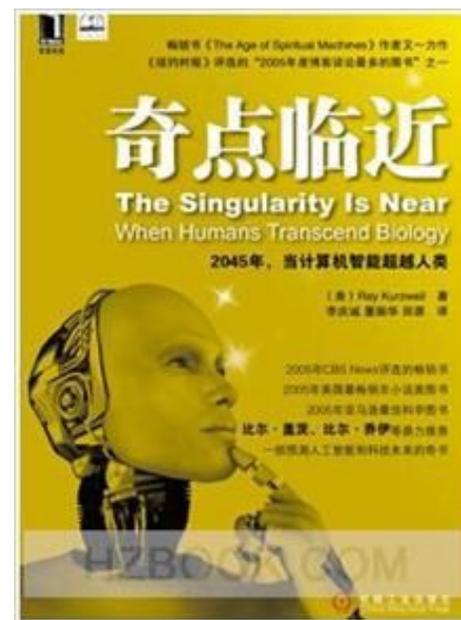
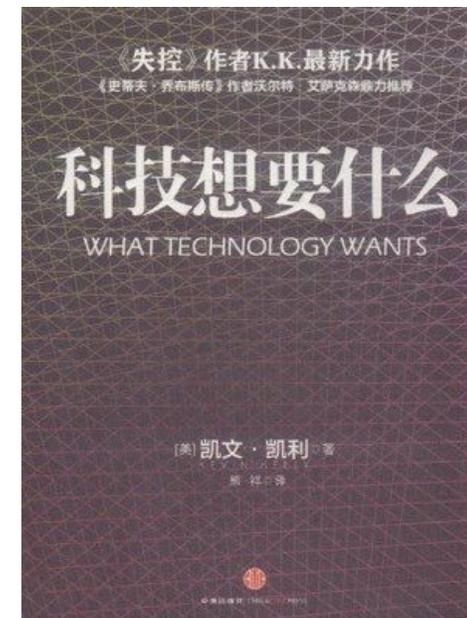
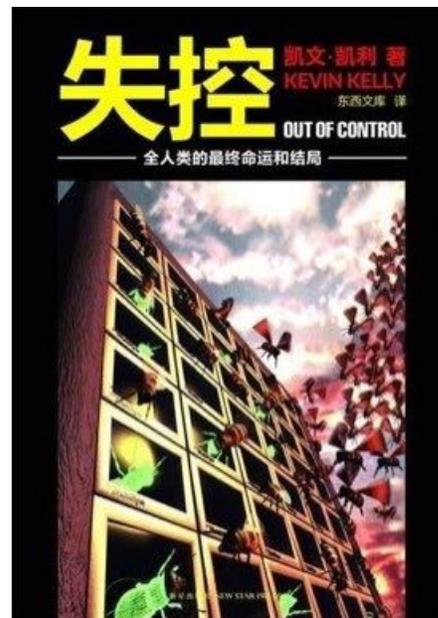
寻找10x的改变生活的应用

机械人领域正在体验指数型成长

- 计算机视觉
- 人工智慧
- 机械学习

机械人能充分利用高性能智能核心

- 机器人智能的核心在软件
- 开源软件是产业主流





pepper

 **Alibaba Group**
阿里巴巴

 **SoftBank**

FOXCONN



中新网
Chinanews.com

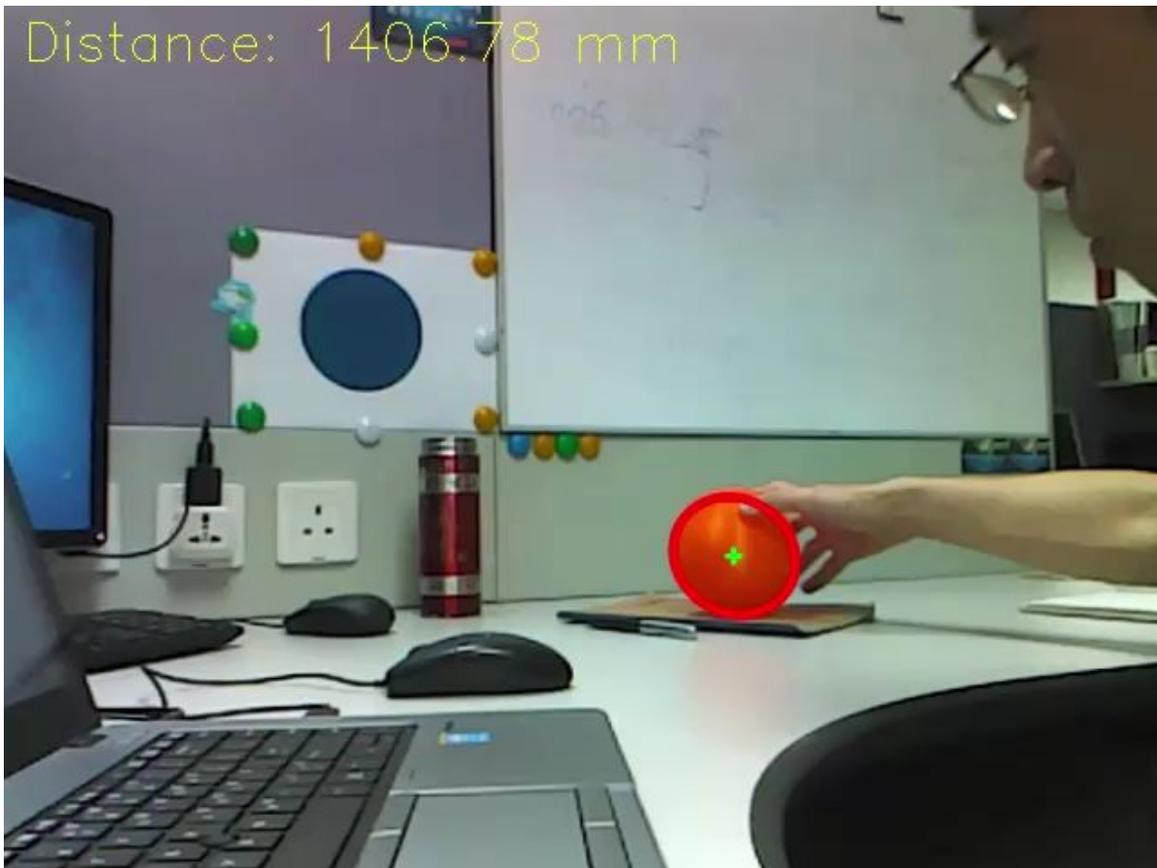
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LAB



创客大爆炸
Maker Collider

英特尔的Square Bot



1 The accelerating pace of change ...

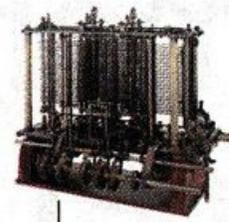


2 ... and exponential growth in computing power ...

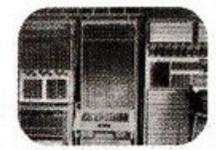
Computer technology, shown here climbing dramatically by powers of 10, is now progressing more each hour than it did in its entire first 90 years

COMPUTER RANKINGS

By calculations per second per \$1,000



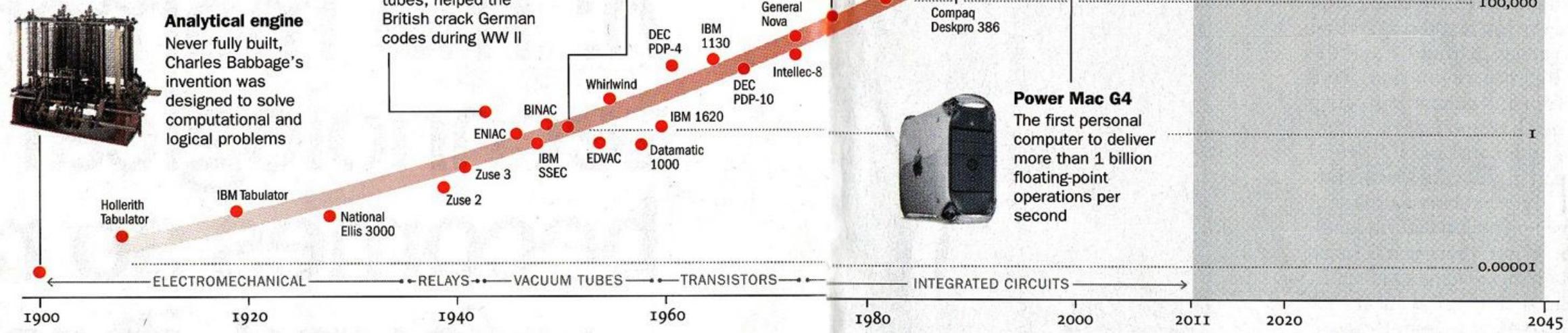
Analytical engine
Never fully built, Charles Babbage's invention was designed to solve computational and logical problems



Colossus
The electronic computer, with 1,500 vacuum tubes, helped the British crack German codes during WW II



UNIVAC I
The first commercially marketed computer, used to tabulate the U.S. Census, occupied 943 cu. ft.



3 ... will lead to the Singularity



Apple II
At a price of \$1,298, the compact machine was one of the first massively popular personal computers



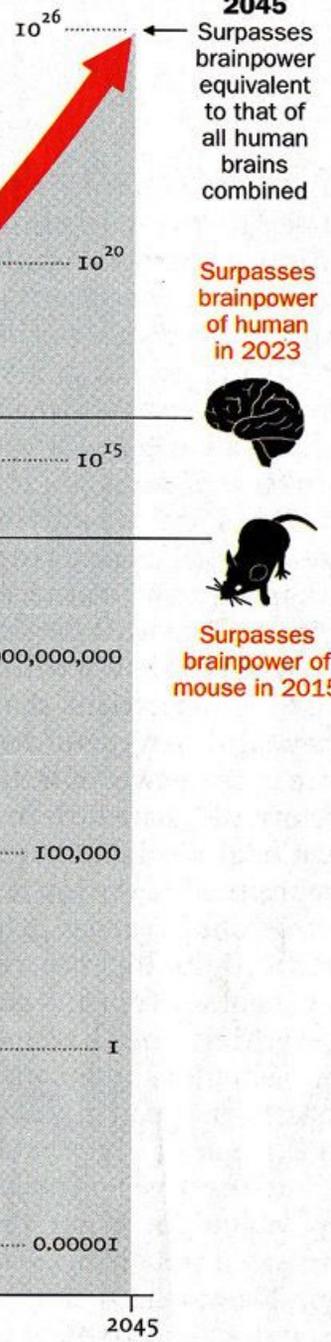
Power Mac G4
The first personal computer to deliver more than 1 billion floating-point operations per second



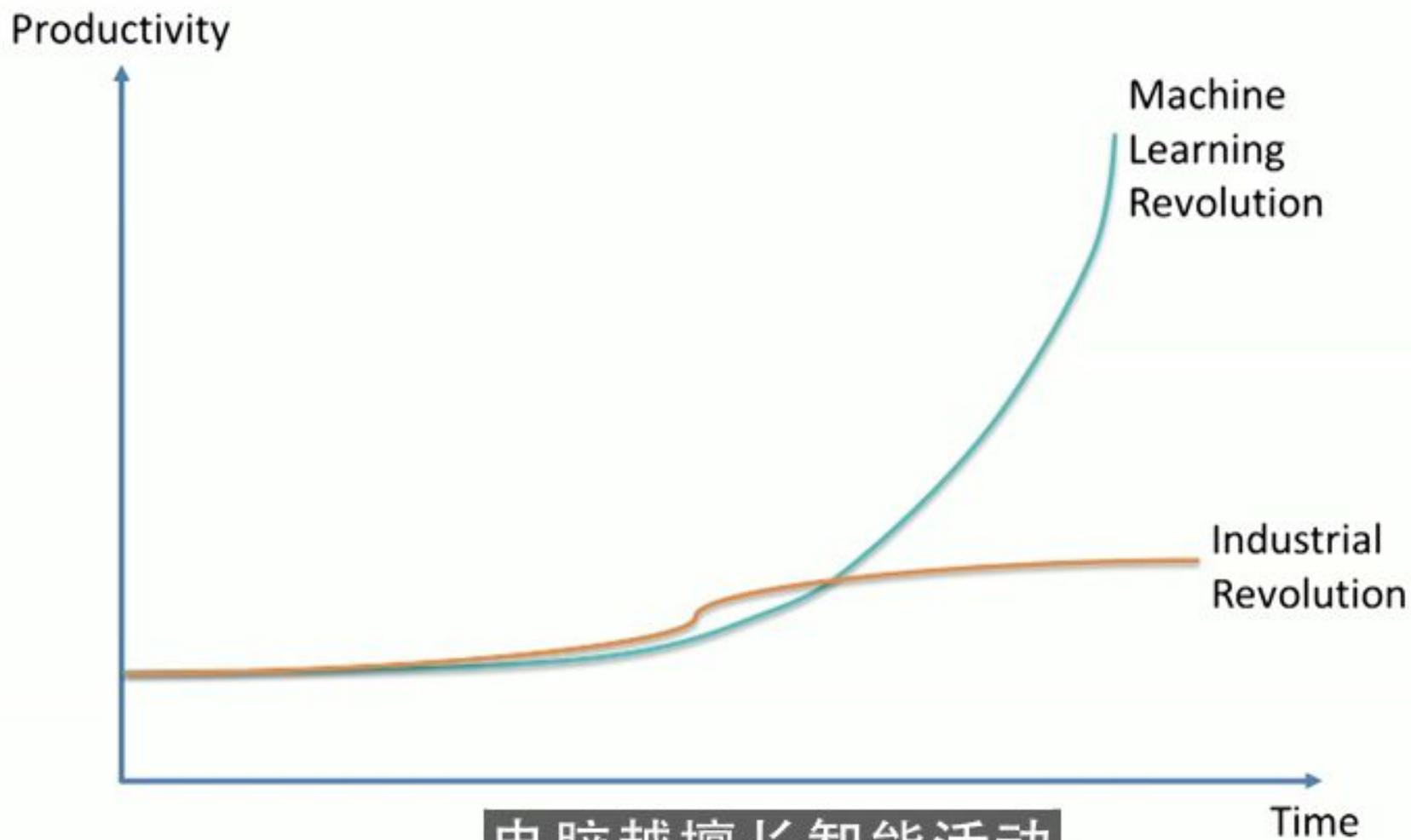
Surpasses brainpower of human in 2023



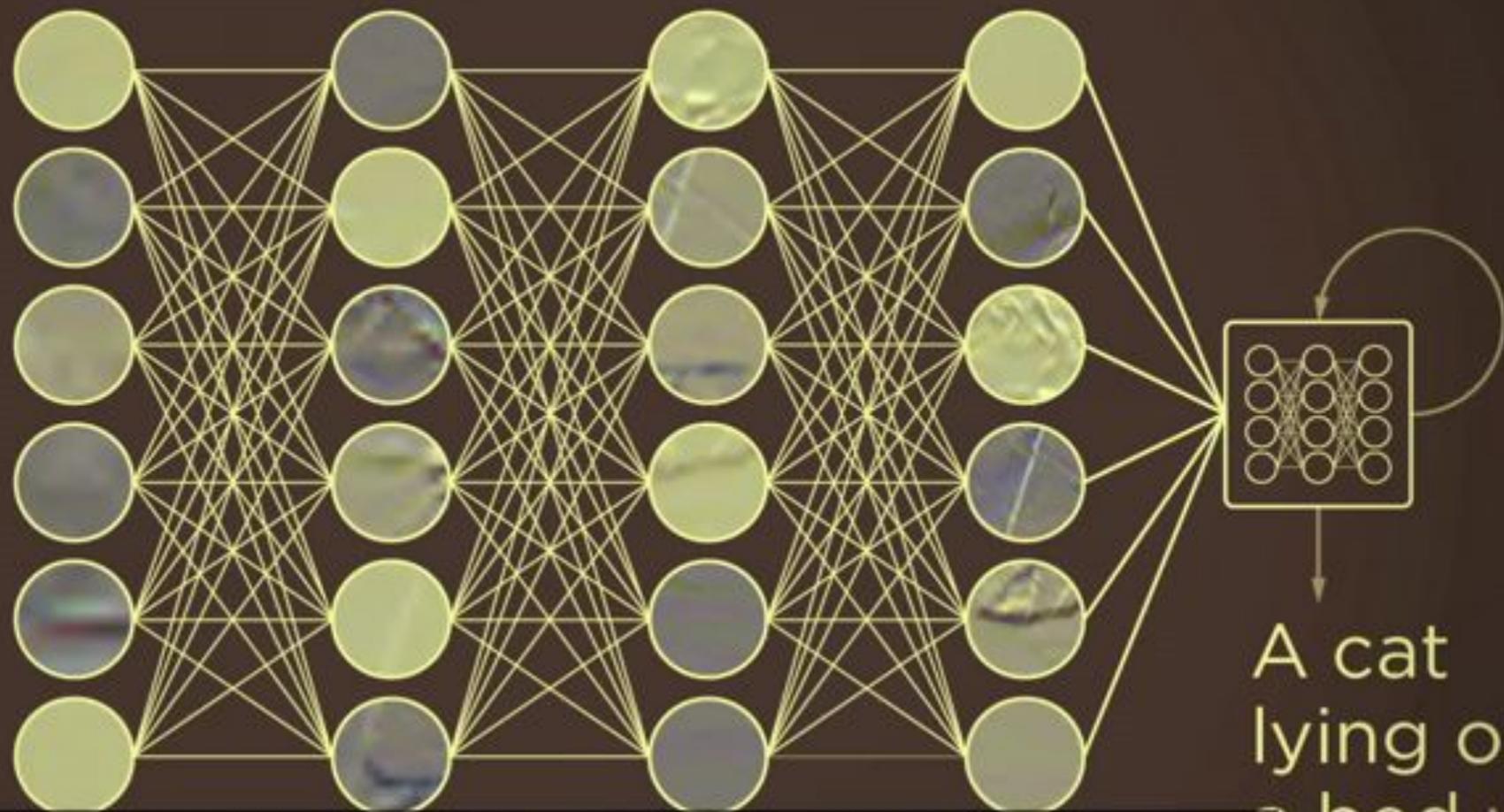
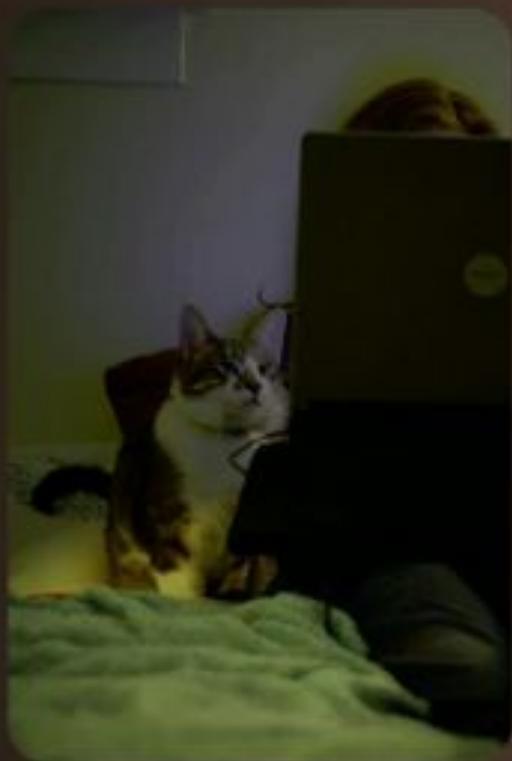
Surpasses brainpower of mouse in 2015



深度学习的人工智能



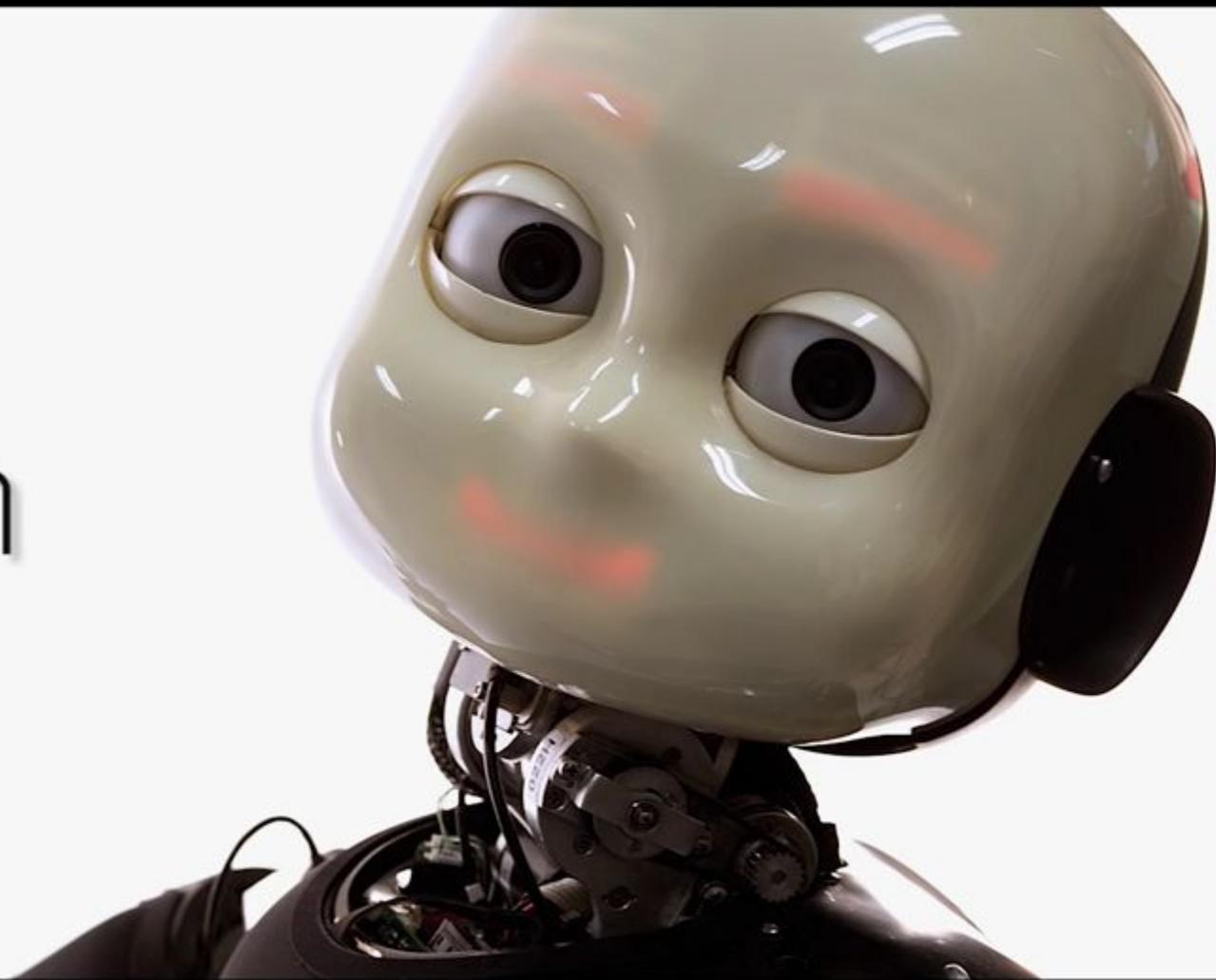
电脑越擅长智能活动



可以把一部分视觉信息，像视觉片段，与语句中的文字、短语联系起来。

A cat lying on a bed with a laptop

THE iCub PROJECT: living 10 years with a humanoid robot



创客与创业教育

创客运动到“万众创新，人人创业”

人人都可以是创客：不懂得可以让12岁的小女孩教你
创客的万众创新驱动的是200亿个物联网设备的市场机会
从想法到众筹可以在3个月以内完成
了解摩尔定律带来的机器智能的功能

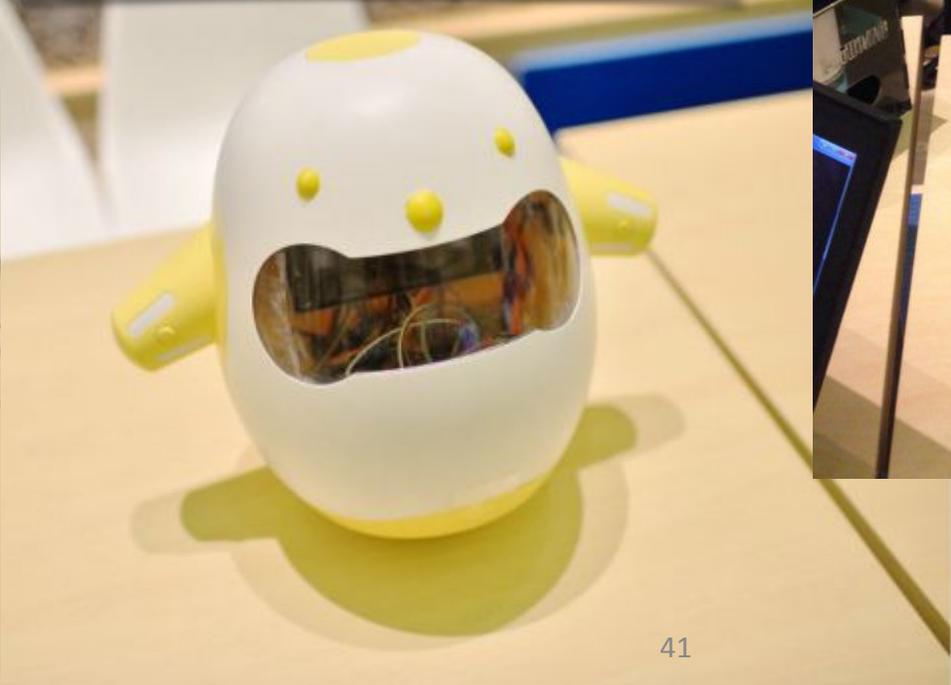
创客1.0

- “创客”一词来源于英文单词“Maker”，是指出于兴趣与爱好，努力把各种创意转变为现实的人

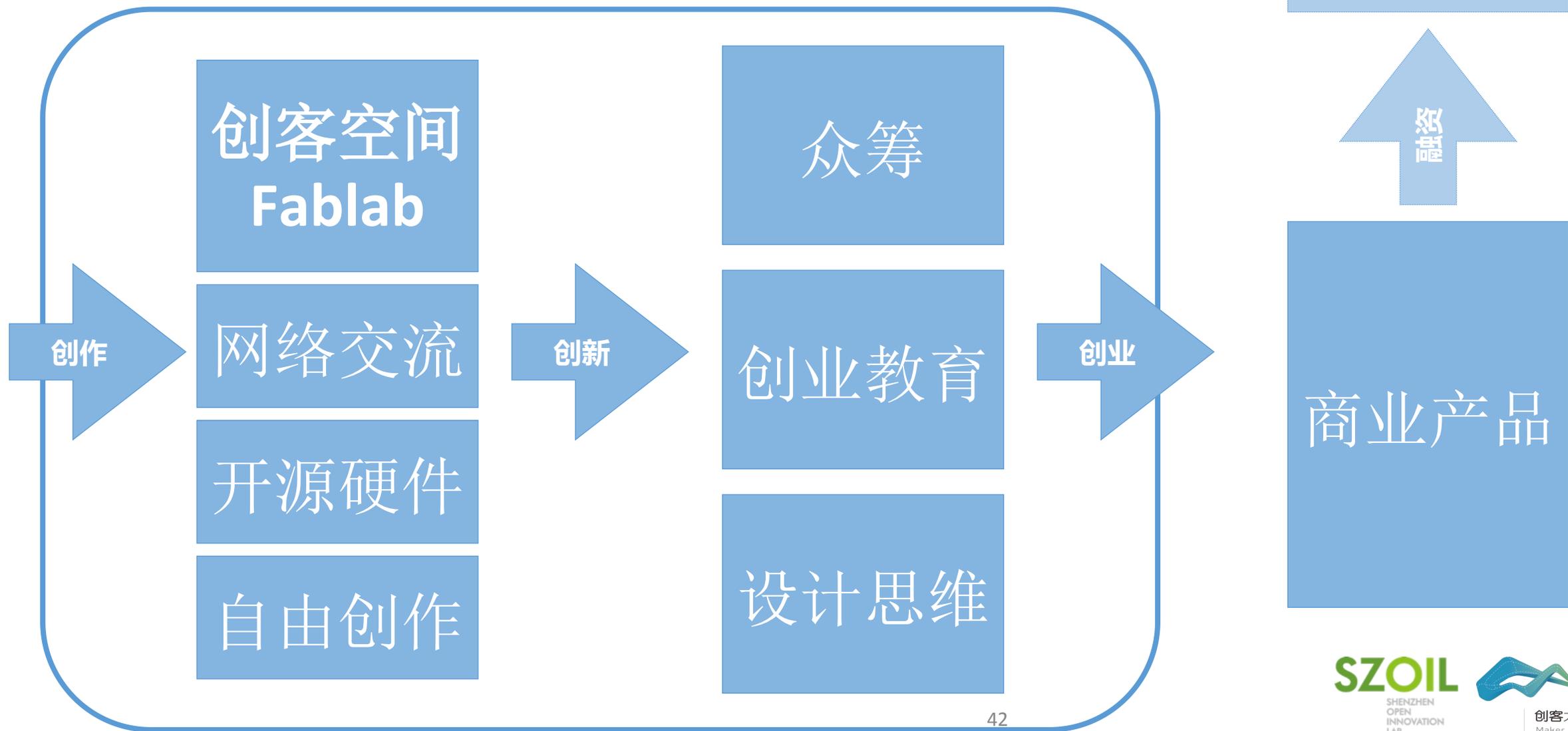
创客2.0：“万众创新，人人创业”

- 系统化，规模化，释放年轻人的想象力

2015 中美创客大赛（教育部 / 英特尔）



提供创客创业的教育环境



简易入门的开源智能套件



基础于英特尔的创客平台：爱迪生

图形化界面

支持高端的智能应用

- 计算机视觉
- 人脸辨识
- 人工智能
- 机器学习

支持大量的传感
套件和课程

Fablab: MIT微观制造实验室



由麻省理工比特和原子中心的主任Neil Gershenfeld创立

- FabLab就是一个可以让人们在里面应用数字以及模拟工具去制造自己想要的东西的低成本实验室。这是一个很简单的想法，但却可以带来深远的影响。

标准设备操作界面

创造入门课程

全球创意网络

[视频: "What's Fablab"](#)

大学创新创业课程：“开放创新和众筹认证”

14周从想法到众筹的课程

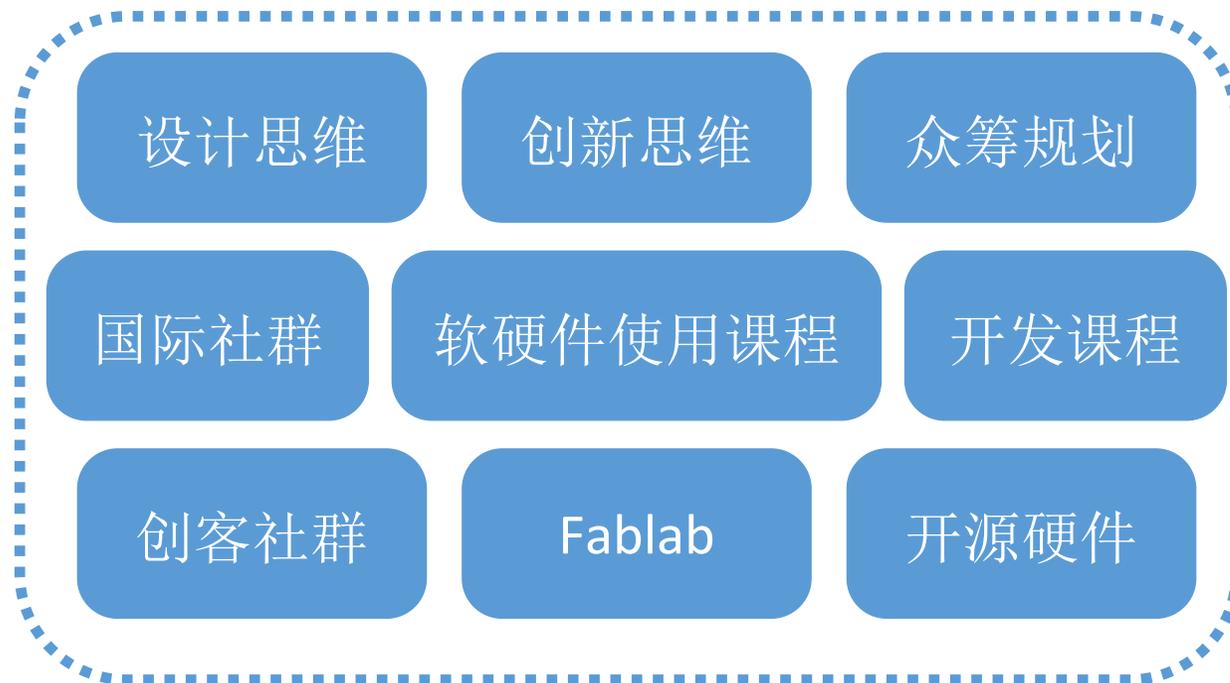
- 物联网的万众创新思维
- 以人为本的设计思维
- 品牌定位，客户群定位
- 众筹准备
- 社交媒体运作

2014在同济中芬中心开始

- 2个项目在准备众筹

2015：扩大范围

- 清华大学，厦门大学，同济大学，欧亚学院，上海科技大学



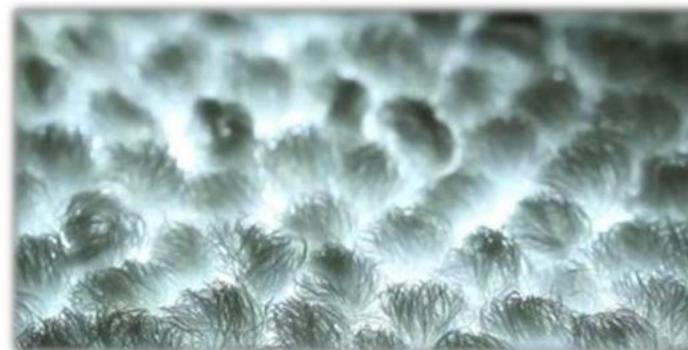
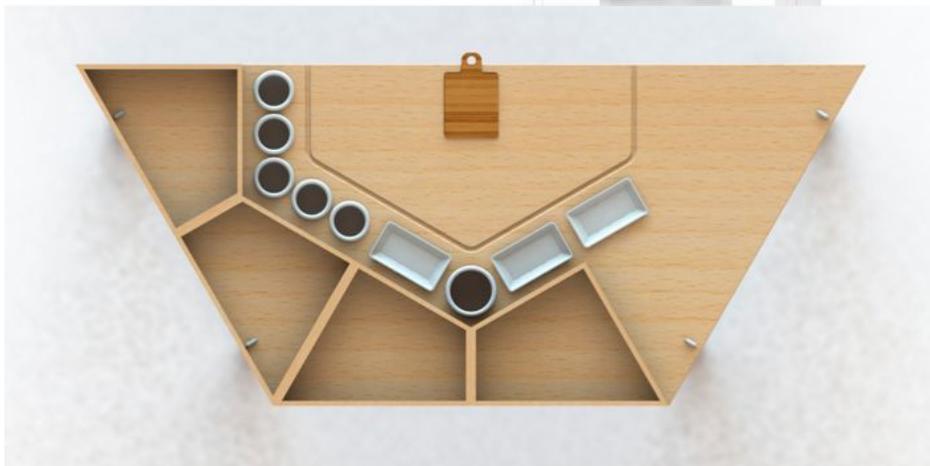
同济“开放创新” 2015

CERON – BATTERY POWER IRON

Ceron is a battery powered iron.
The iron plate is made of heat-resistant ceramic. This material is white colored at room temperature and transforms to a transparent appearance when heated. This allows the user to see exactly what is underneath the iron, to avoid crinkles in the fabric during the ironing. Besides it gives a good control about the iron temperature.
The handle can be removed by pushing a button and turning the body. With it's built-in battery-pack a disturbing cable can be omitted. The Handle gets charged on a charging station. Lithium Ion batteries deliver enough power for it's demand and can be charged within 15 minutes. A new generation of iron for the modern day customer, which gives a new enjoyable experience in use.



Introducing the **MagicCarpet**,
A device that will bring your night time visits into the light!



真枪实弹的创新 / 创业教育

学分课程，确保项目的执行

混合不同背景的学生 3-5人组队

准备和执行创意众筹

众筹的产品训练

- 定义产品：设计思维，产品思维，创业思维
- 定义客户：如何做客户组群的分析
- 粉丝经济：使用互联网吸引客户

让学生的学习经历更丰富

- 众筹成功就可以对接今天的创业服务机制
- 众筹失败也强化学生的简历

7月西安欧亚极体营

极体营 西安欧亚学院公开课

19:00-21:30

E // eurasia
UNIVERSITY

5.4

李大维

「创客大爆炸」、「新车间」创始人
主题：创客和山寨：智能硬件的万众创新机遇

5.8

岳路平

跨界策展人
主题：极体营

5.5

梁春晓

阿里巴巴集团顾问
主题：互联网 X 生命

极体时间

5.6

雷童

艺术家
主题：超级身体 VS 风格战争

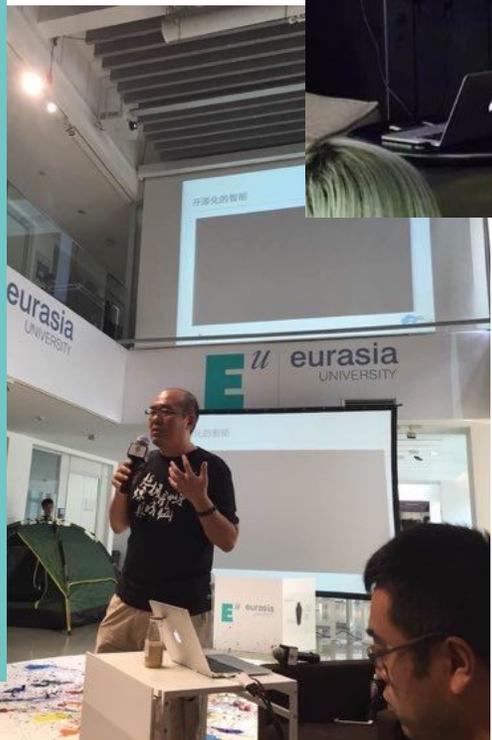
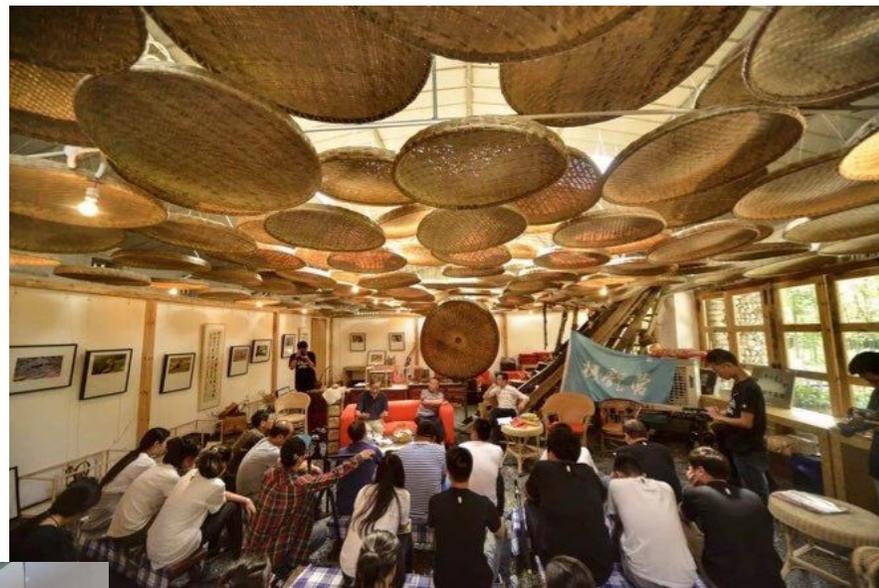
5.7

王子

建筑师
主题：寄生建筑

主办：西安欧亚学院 地点：艾德艺术设计学院

weibo.com/artdesign123



厦大，清华“开放创新”课程



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Forbes / Entrepreneurs

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JUL 22, 2013 @ 10:00 AM 73,330 VIEWS

Why 99.95% Of Entrepreneurs Should Stop Wasting Time Seeking Venture Capital



Dileep Rao, CONTRIBUTOR

I focus on how entrepreneurs grow smarter, bigger, and wealthier.

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It is difficult to pick up a major business publication today without reading about venture capitalists (VCs, defined as professionally-managed VC limited partnerships that invest in early-stage ventures), about their skills in finding great investment opportunities, and about the ventures they fund. And lately in states like [Minnesota](#), it is also about how they can create jobs if the governor would speak favorably about the need for VC and offer some state pension money for them to invest. And since we all like to talk about our successes, the stories are about how entrepreneurs secured VC and soared to wealth in a very short time via an IPO or a strategic sale. This can lead other entrepreneurs to think that this is the only model for success, that there is no other way to build a major company, and that they should write business plans, attend VC conferences, seek VC, and give VCs control of their venture.



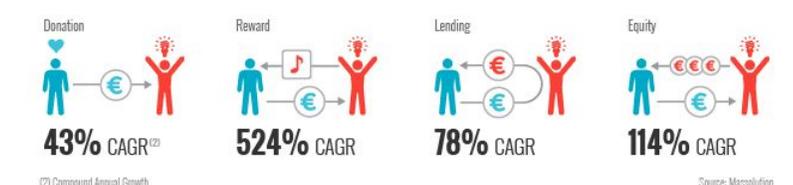
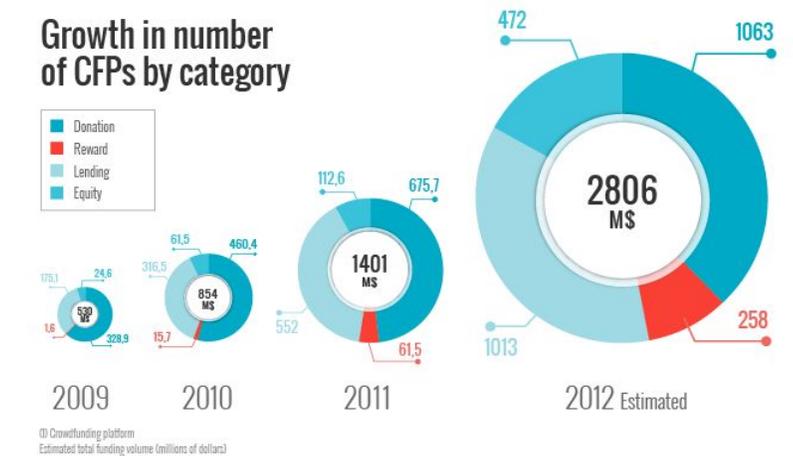
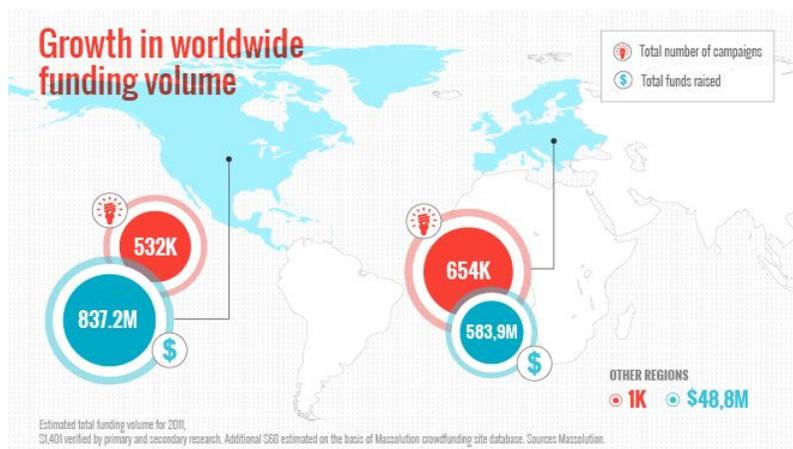
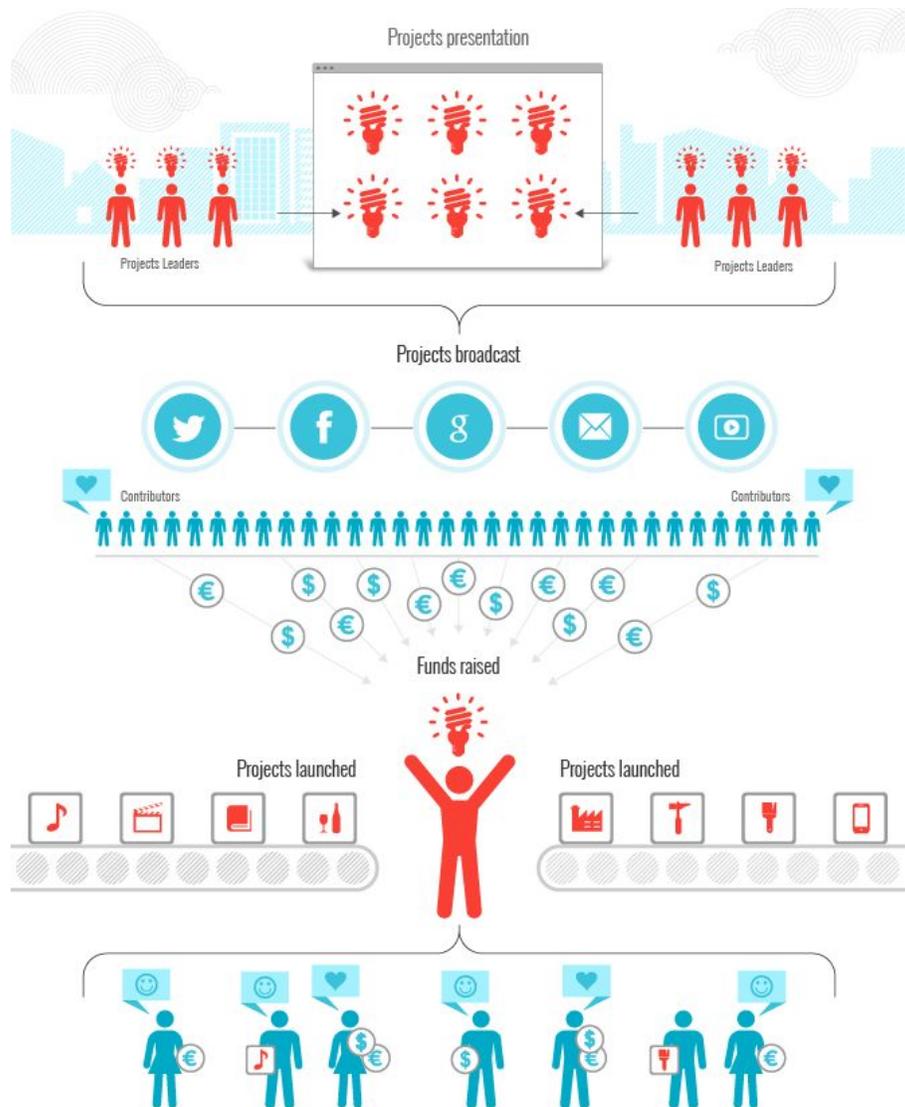
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创业街一样的现金生意
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 建立国际市场上的创新品牌和产品
 低风险的在校实验

“开放创新和敏捷创造”企业课程

“开放创新和敏捷创造”课程：4—8天

- 物联网的人人创新思维
- 以人为本的设计思维
- 产品品牌定位，客户群定位
- 众筹准备
- 社交媒体运作

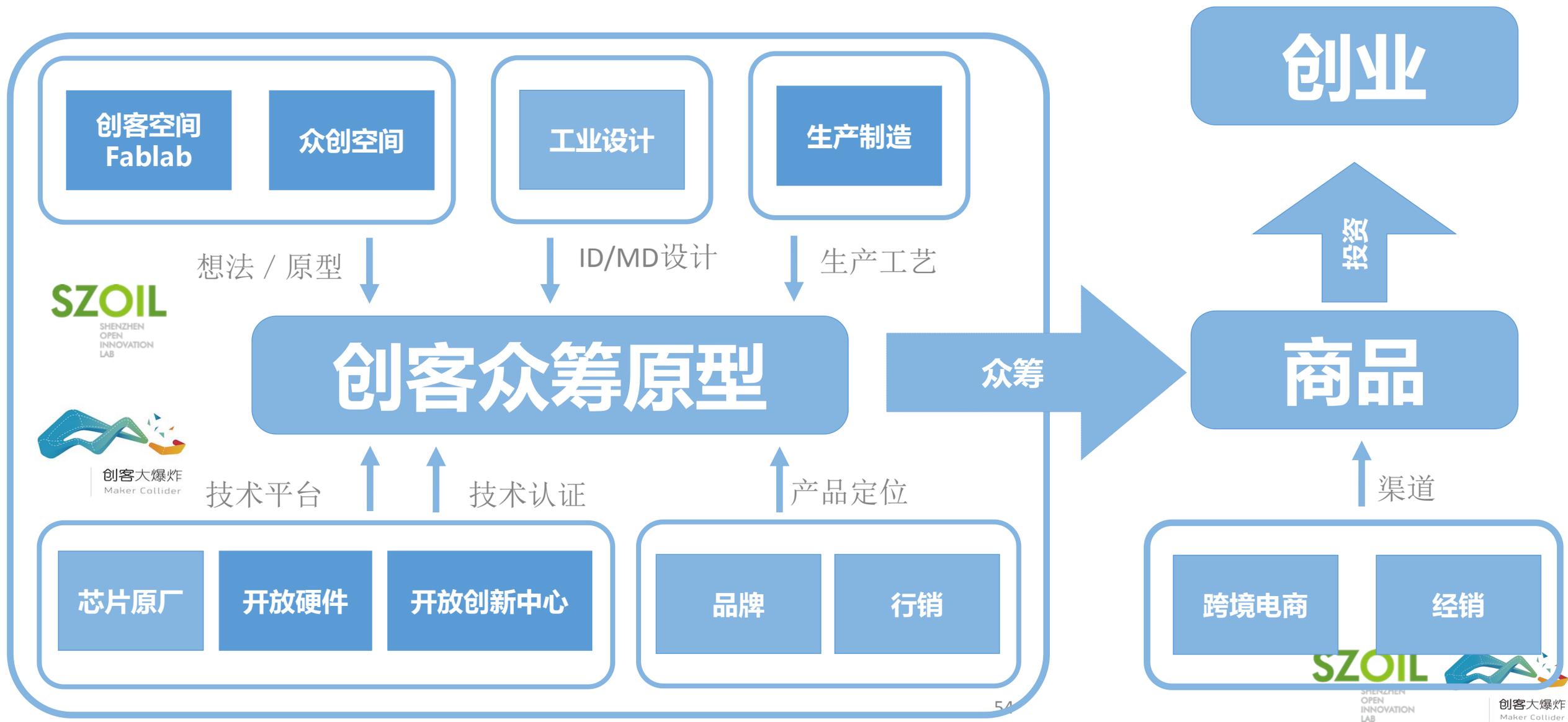
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