



# DESIGN THINKING for Innovation



\$30,000,000,000  
145,000 Employees



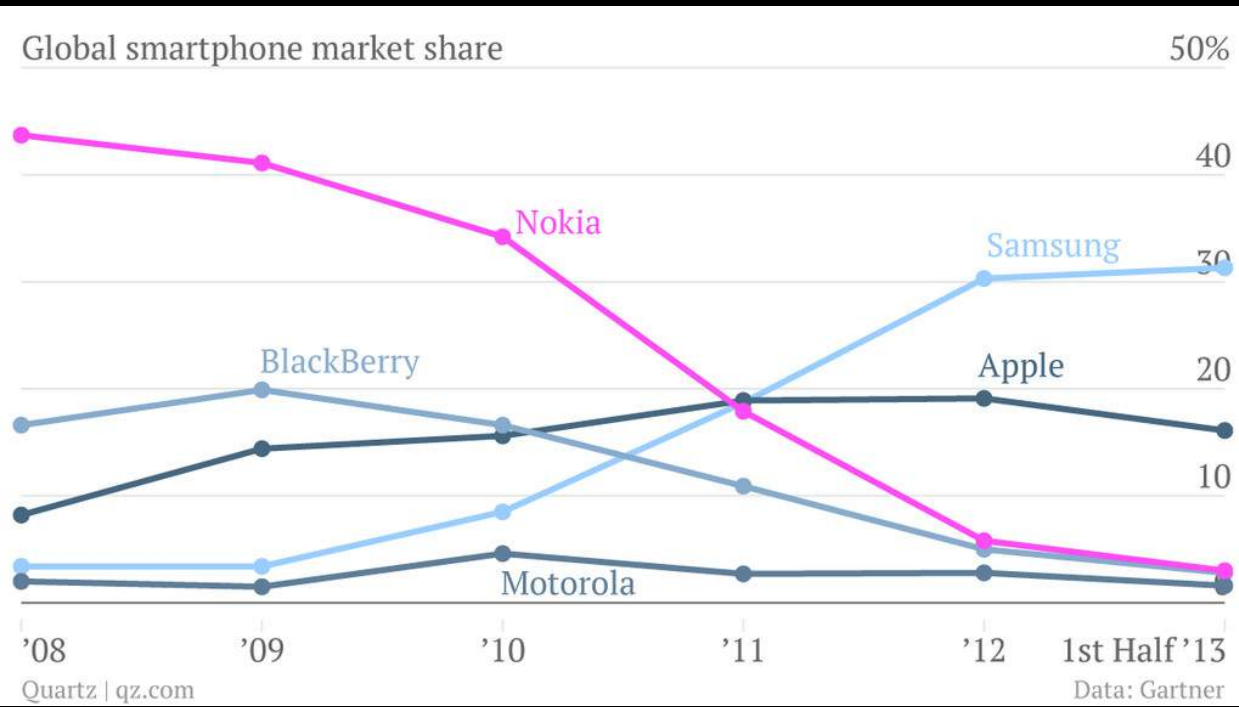
\$5,000,000,000  
60,000 Employees



\$303,000,000,000  
132,000 Employees

Technology is Changing the Face of Business

Source: <https://ijgolding.com/2015/07/07/the-burning-platform-customer-experience-misjudgment-do-something-about-it-now-before-its-too-late/kodak-nokia-blockbuster/>



### An ugly picture

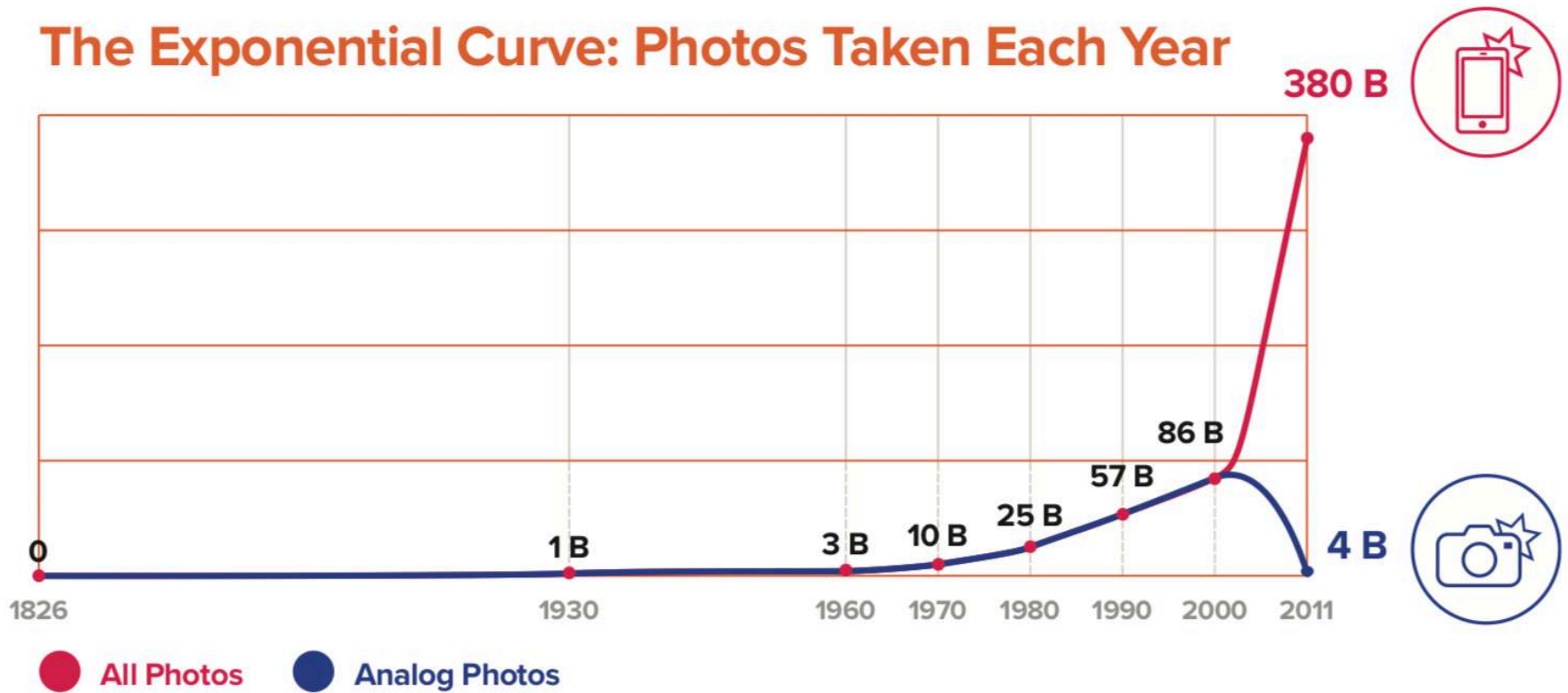
Kodak's:

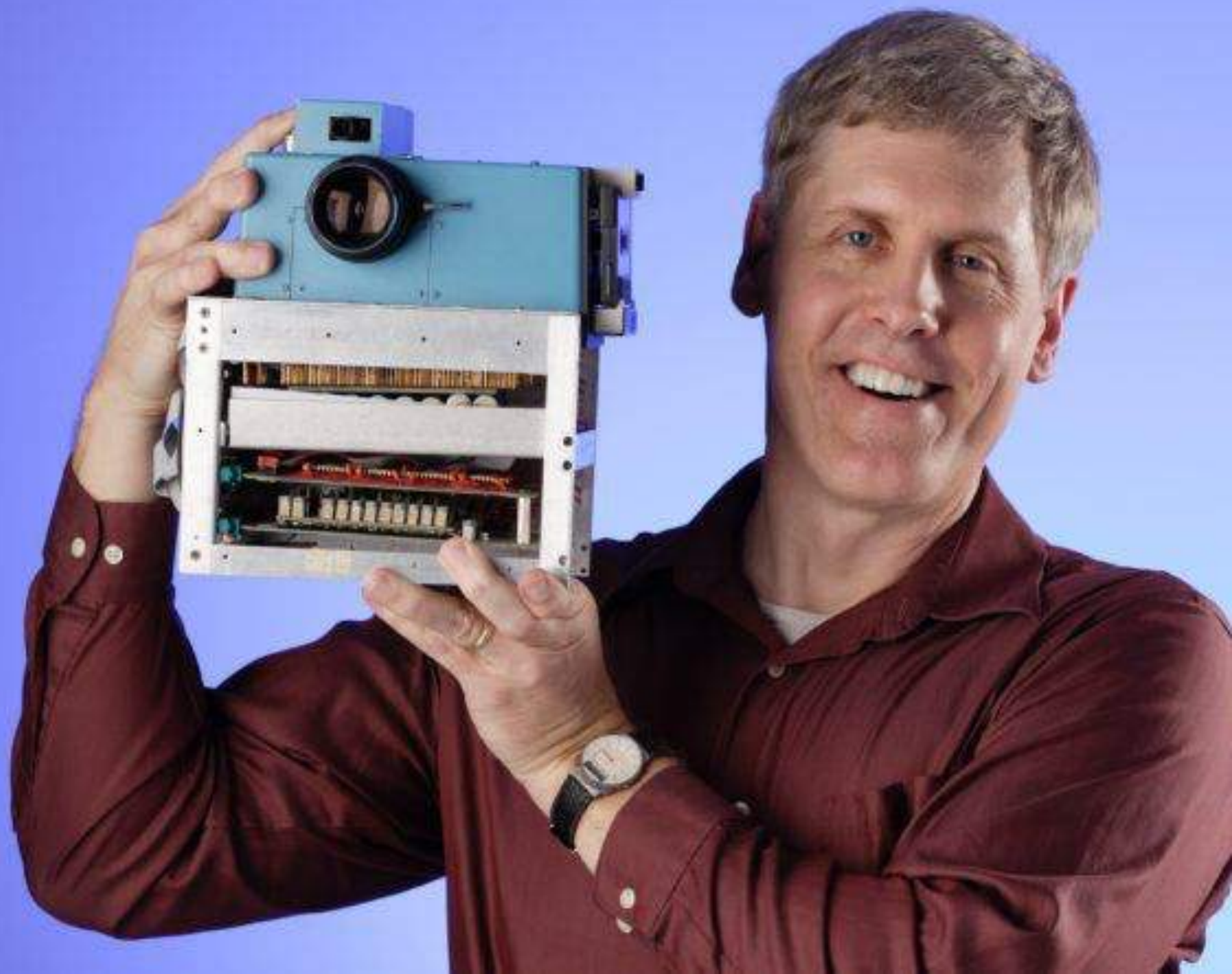


Sources: Company reports; Thomson Reuters

Source: <https://www.linkedin.com/pulse/jettisoned-from-top-whats-common-between-kodak-nokia-yahoo-sehgal/>

## The Exponential Curve: Photos Taken Each Year









UBER

World's largest taxi company

Owens NO

~~Taxis~~



World's largest Accommodation provider

Owens NO

~~Real estate~~



World's largest Phone companies

Owens NO

~~Telco infra~~



World's most Valuable retailer

Owens NO

~~Inventory~~

facebook.

Most popular Media owner

Owens NO

~~Content~~



World's fastest Growing bank

Owens NO

~~Actual money~~

NETFLIX

World's largest movie house

Owens NO

~~Cinemas~~



World's largest Software vendors

Owens NO

~~Apps~~

# Disruption

กระบวนการ การแทรกแซง โดยการดำเนินธุรกิจรูปแบบใหม่.



11:30 AM

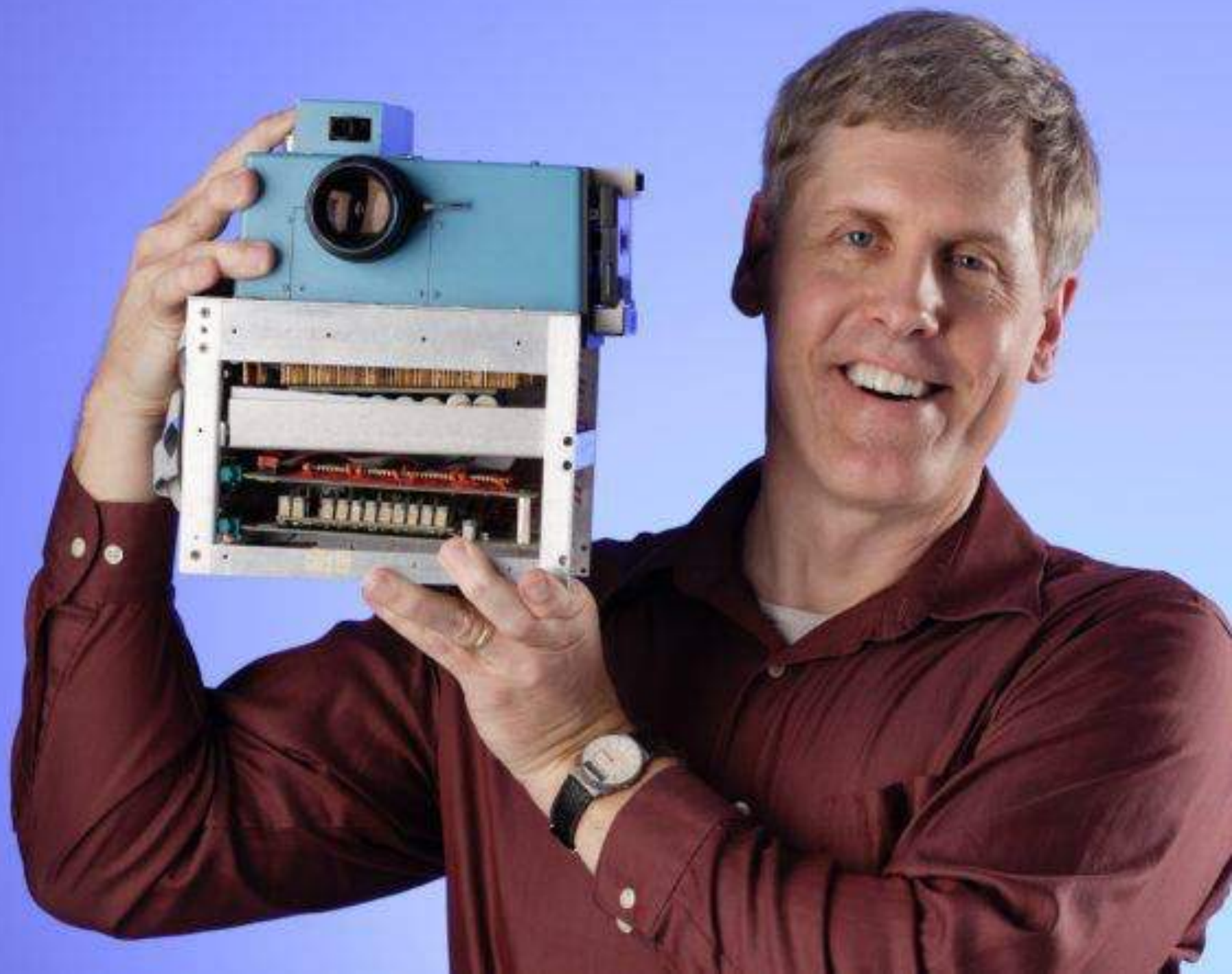


WeChat



# Agile

คล่องแคล่วว่องไว ซึ่งคือสามารถเคลื่อนตัวได้อย่างรวดเร็วและง่ายดาย



**Frontal Lobe**

- Motor control (premotor cortex)
- Problem solving (prefrontal area)
- Speech production (Broca's area)

**Parietal Lobe**

- Touch perception (somatosensory cortex)
- Body orientation and sensory discrimination

**Temporal Lobe**

- Auditory processing (hearing)
- Language comprehension (Wernicke's area)
- Memory / information retrieval

**Occipital Lobe**

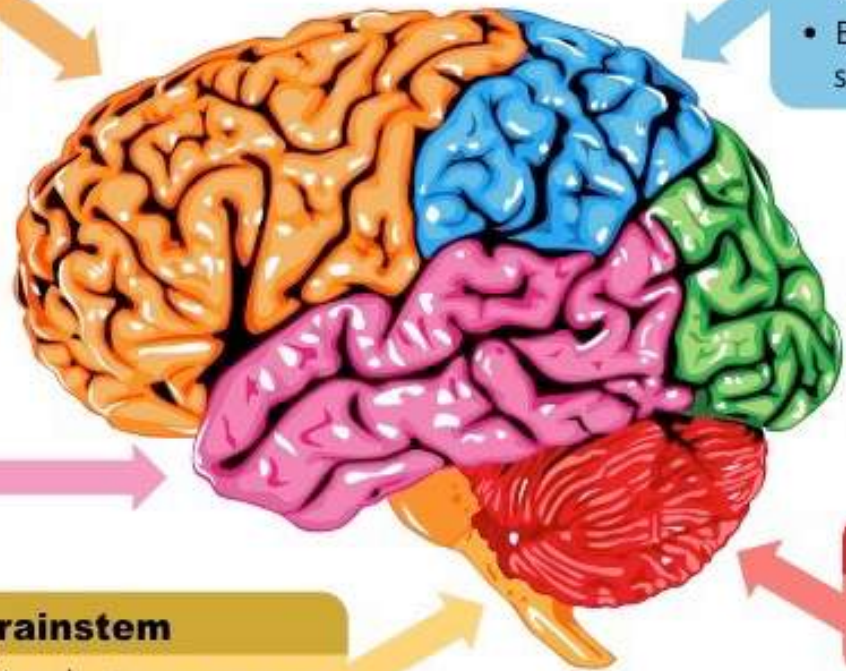
- Sight (visual cortex)
- Visual reception and visual interpretation

**Brainstem**

- Involuntary responses

**Cerebellum**

- Balance and coordination



# Creativity

ความคิดสร้างสรรค์

**INNOVATE  
OR DIE:**

จะสร้างนวัตกรรม หรือ

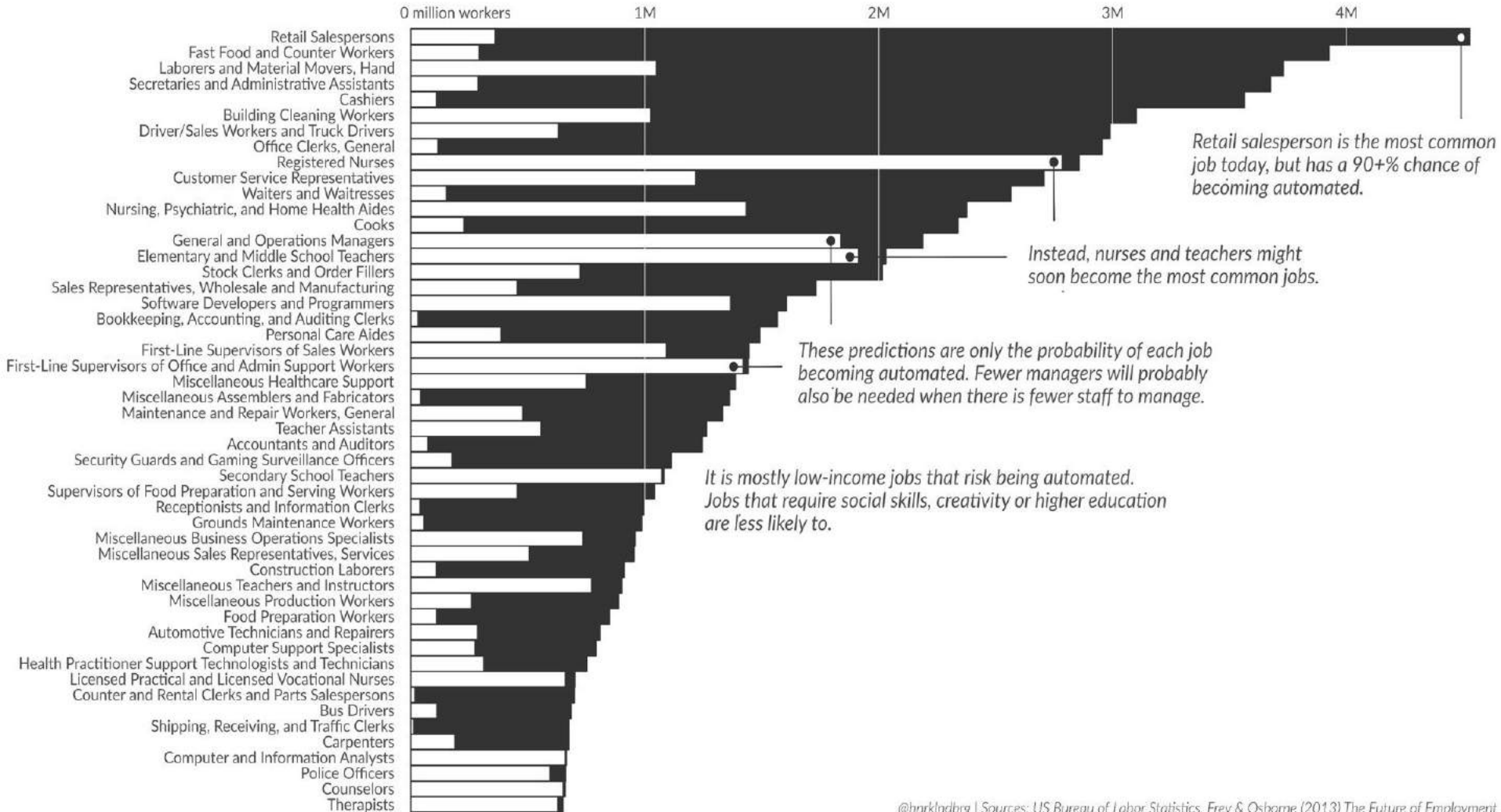
จะแข็ง



# The future of employment

About half of today's jobs will likely be done by computers in a decade or two. Automation has so far taken over mostly well-defined routine tasks, shifting jobs from middle-income manufacturing to lower-income service jobs. As computers get better at for example perception – think self-driving cars – those services jobs are likely next up to be replaced by machines. Frey and Osborne (2013) estimate the probability of each job becoming automated. Here are how their predictions apply to 2016 US employment statistics.

**Black** fields are jobs likely to be automated and white fields are jobs that are likely to remain.





แล้วจะทำยังไงกันดี?

ดีไซน์ ดึงก็ดึง (อาจจะ)

เป็นทางออก

HBR.ORG

# Harvard Business Review

## THE EVOLUTION OF DESIGN THINKING

IT'S NO LONGER JUST FOR PRODUCTS. EXECUTIVES ARE USING THIS APPROACH TO DEVISE STRATEGY AND MANAGE CHANGE.  
PAGE 55



SEPTEMBER 2015

44 **The Big Idea**  
The Organizational "I'm Sorry"  
Maurice E. Schweitzer et al.

60 **Risk Management**  
Cybersecurity: Lessons from the Pentagon  
James A. "Sandy" Wisniewski Jr. et al.

108 **Managing Yourself**  
How to Embrace Complex Change  
Linda Brisan

**PROFITS 1ST QTR RESULTS FOR 900 COMPANIES**

**BOOK EXCERPT THE NEW RATIONAL EXUBERANCE**

**INVESTING FINDING THE BEST ONLINE BROKERS**

The McGraw-Hill Companies

# BusinessWeek

MAY 17, 2014

www.businessweek.com

## THE POWER OF DESIGN



A tiny firm called **IDEO** redefined good design by creating experiences, not just products. Now it's changing the way companies innovate.

BY BRUCE WOODRUM



CEO Tim Brown (left) Founder David Kelley

# FAST COMPANY

**EXCLUSIVE SECRETS OF PIXAR**

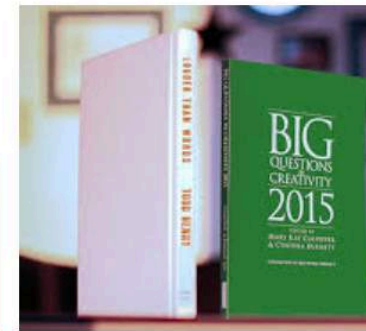
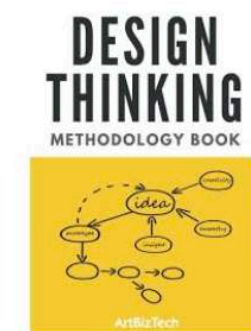
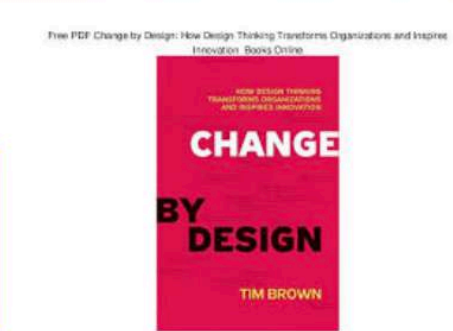
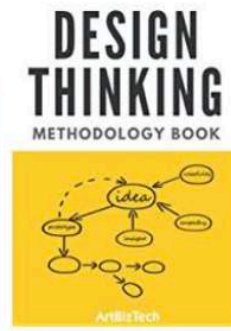
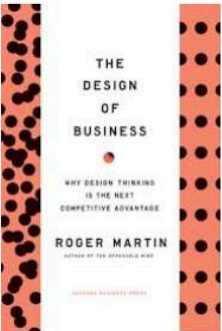
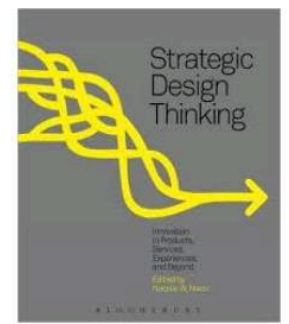
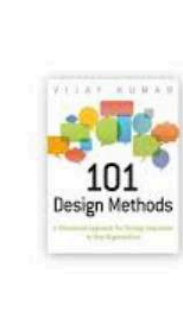
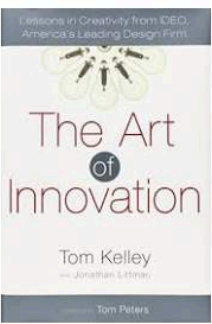
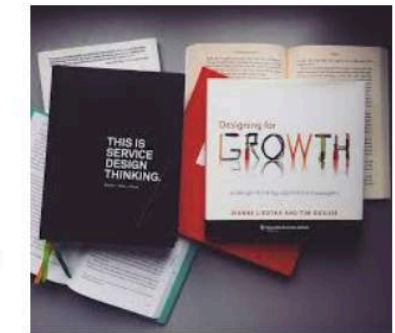
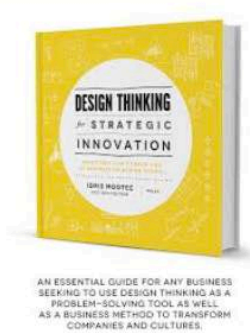
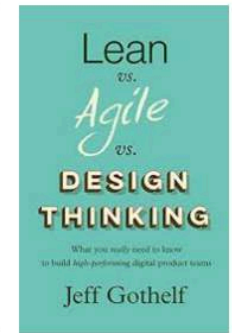
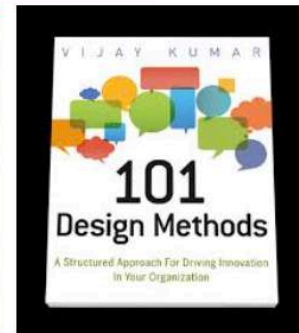
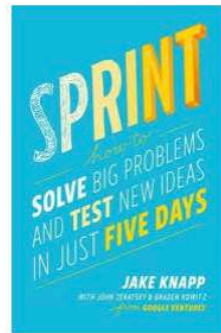
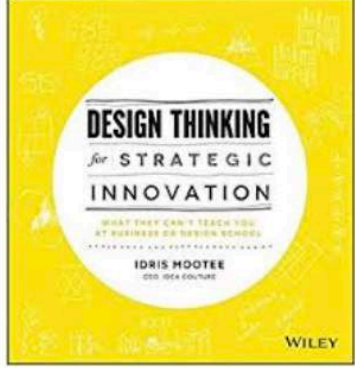
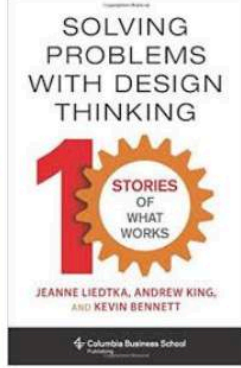
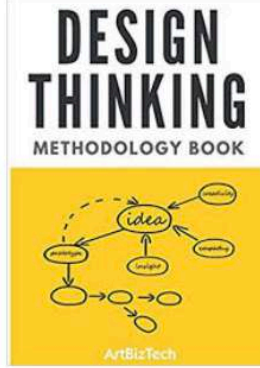
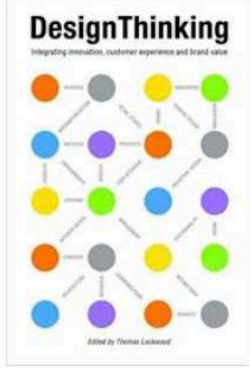
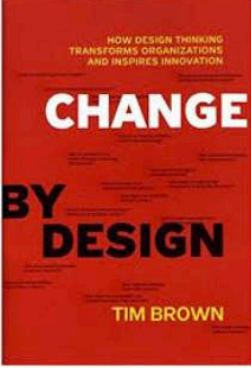
Fourteen #1 hits in a row doesn't happen by accident

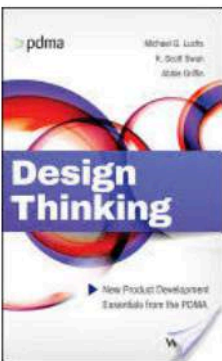
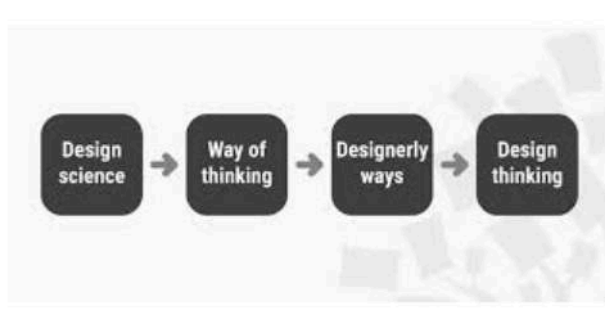
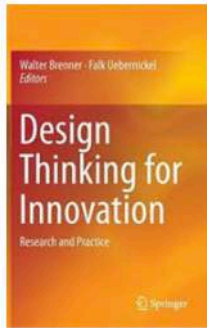
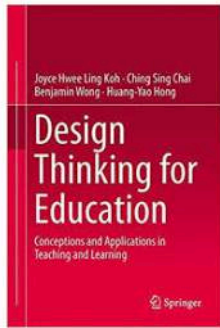
## HOW TO UNLEASH CREATIVITY

WHAT MAKES JO CATMULL THE BEST MANAGER IN BUSINESS?

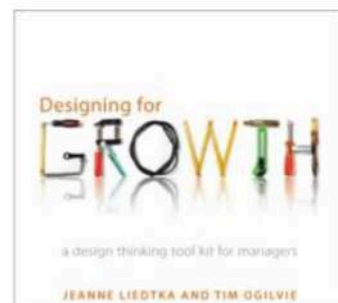
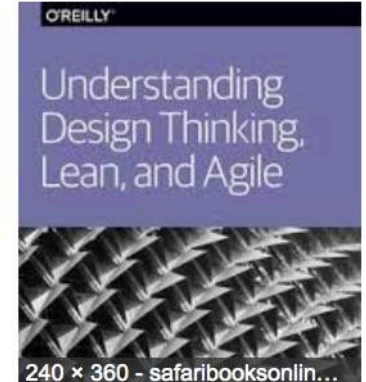
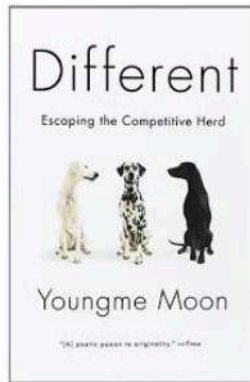
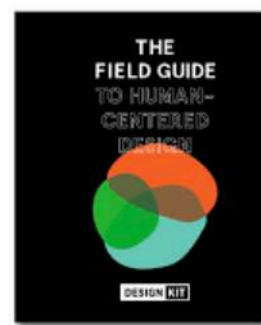
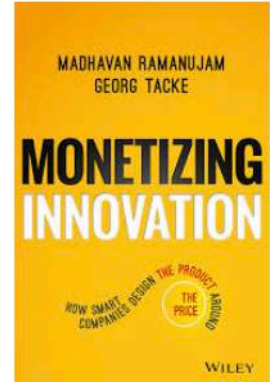
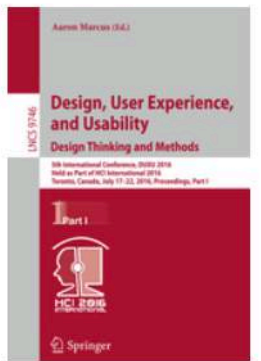
WHY YOUR SWARPER

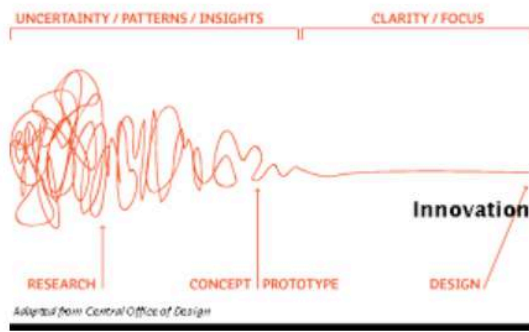
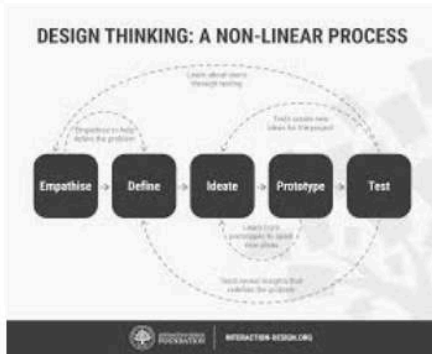
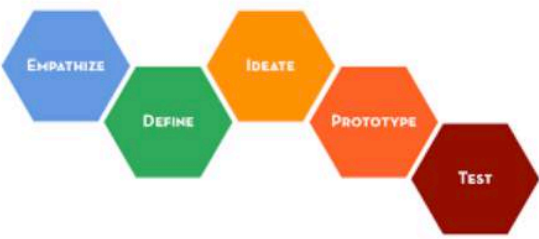
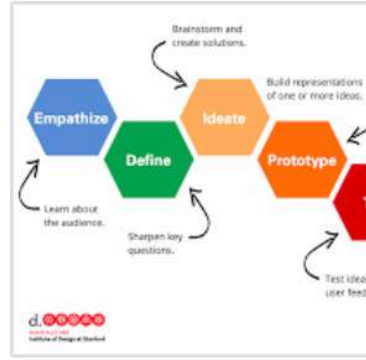
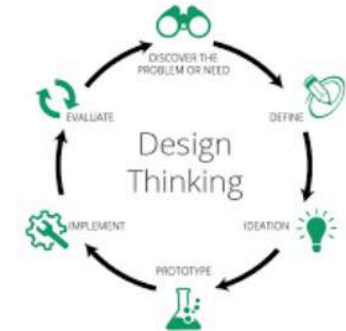
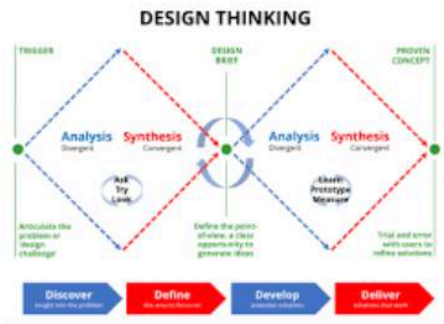
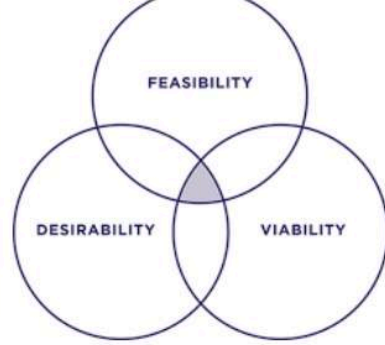
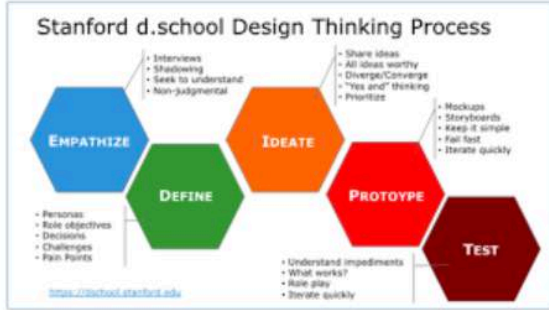
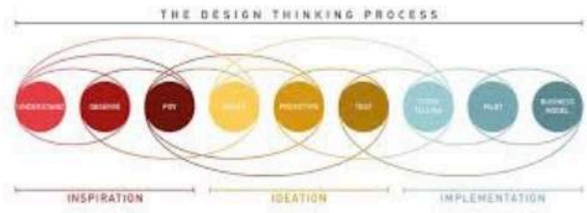
DESIGNING YOUR BRAIN TRUST





One of the most satisfying things about thinking like a designer is that the results are tangible.





March 16<sup>th</sup>

# DESIGN THINKING CRASH COURSE!

Join us for a hands on introduction to the DT process & tools

6:30 - 9:30 pm @ Moonlighter in Wynwood

Eventbrite Registration Required  
[designthinkingmiami.eventbrite.com](http://designthinkingmiami.eventbrite.com)

CRASH COURSES ARE OPEN TO ALL LEVELS



DESIGN  
THINKING  
MIAMI

## DESIGN THINKING WORKSHOP

OUT-OF-THE-BOX THINKING  
FOR TEAM INNOVATION



## 60 MINUTES CRASH COURSE DESIGN THINKING



OPEN

BUCHEN SIE  
NOCH HEUTE

16. Februar 2017

## Design Thinking for Business Innovation





# Leadership and Design Thinking Program

March 14-17, 2017  
Harvard University Campus



**Date:** Tuesday, March 14, 9:00am →  
Friday, March 17, 2017, 4:00pm

**Location:** 59 Shepard St, Cambridge, MA – Harvard University campus

**CEUs:** 30 AIA/CES | 30 AICP/CM | 30 LA/CES

**Tuition:** \$5,500.00

[REGISTER NOW](#)



*what is* DESIGN  
THINKING?





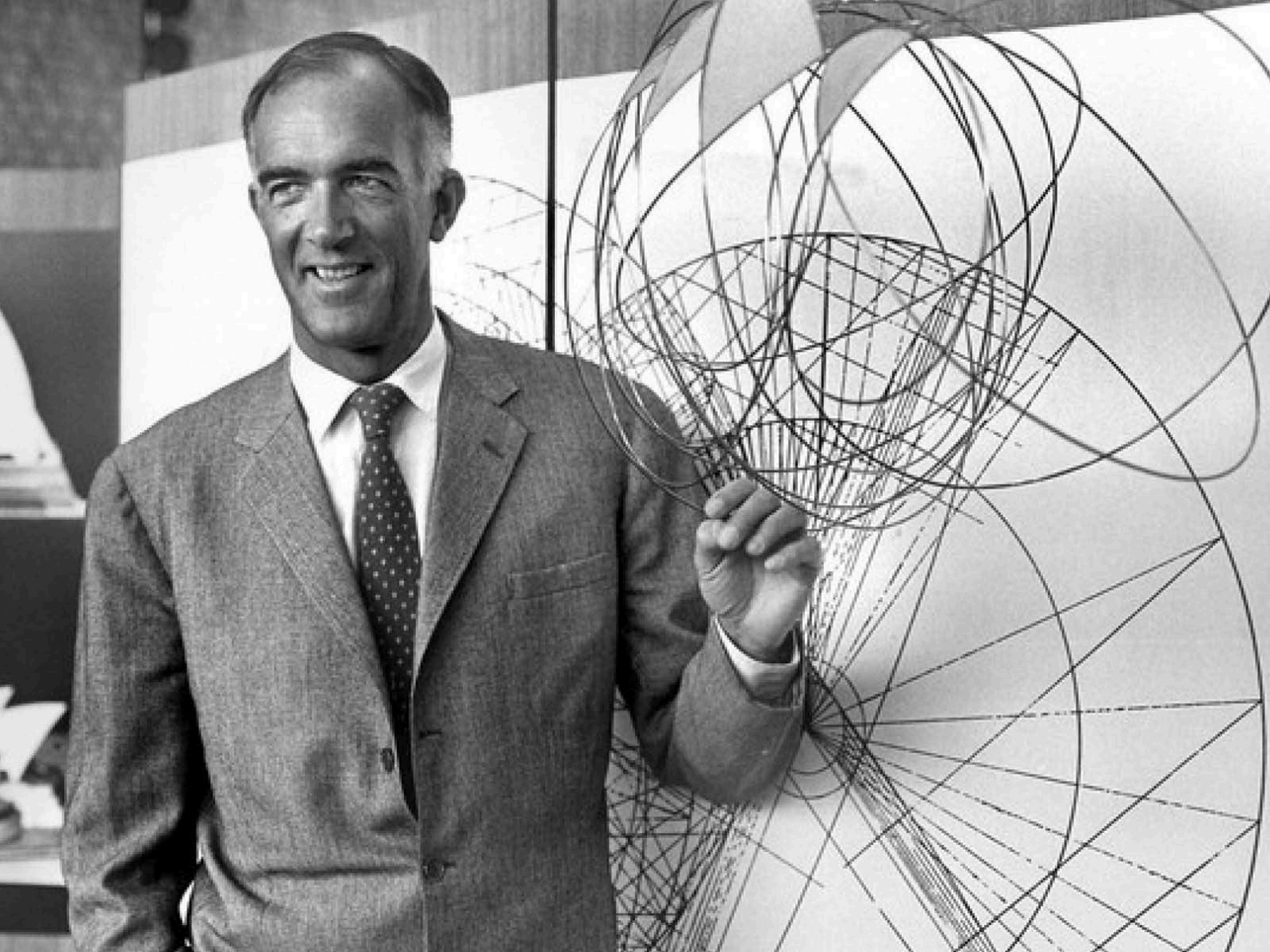
AERIAL VIEW OF BENNELONG POINT AND SURROUNDING HARBOUR FORESHORES LOOKING TOWARDS THE SOUTHWEST

*Photo by Courtesy of "Sydney Morning Herald".*











2





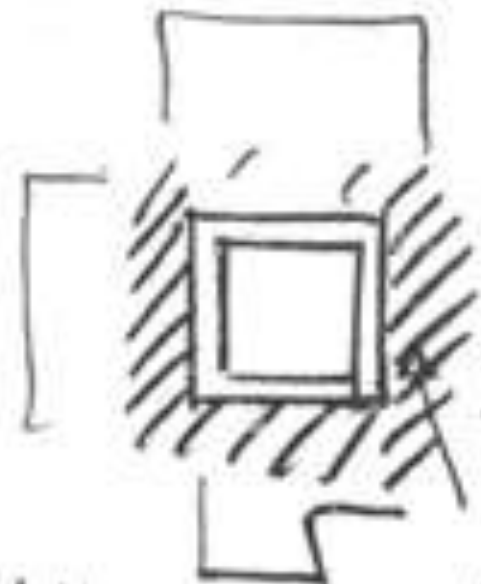
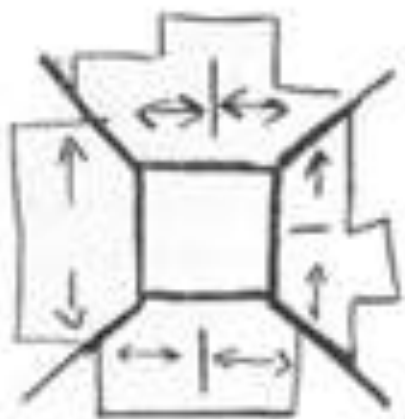
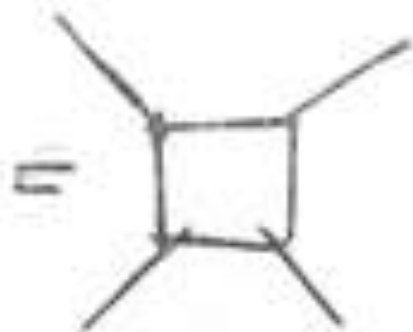
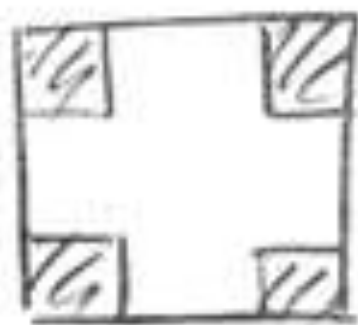




3



Architect Louis Kahn  
(1901 – 1974)



avg area

Smart avg also insulation

from edge to corner  
avg circulation



All spaces need water & light





# 4







**12 BINDER CLIPS**

**LIFE HACKS**





*Some aspects of*  
DESIGN

THINKING#1:

Simplicity/cognitive  
capacity



广告 「天猫双12」 年终盛典,r...



g for img1.bdstatic.com...



Some aspects *of*  
DESIGN  
THINKING#2:

Perspectives











## Working as a Power Bank

OUKITEL K10000 Pro has got enough power for several days use. It supports OTG function for reverse charge multi devices. If your friend needs power urgently, just help her!

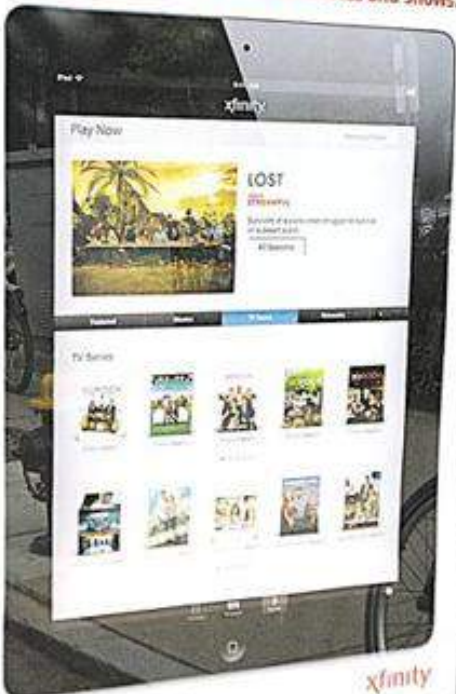


  
Hubway

Beacon St.  
at Mass. Ave.

Station Sponsored by  
  
new balance

**INTRODUCING XFINITY STREAMPIX.**  
Instantly stream your favorite movies and shows.



[comcast.com/streampix](http://comcast.com/streampix)

xfinity

2011048











Some aspects *of*  
DESIGN

THINKING#3:

Truth Versus Attitude





Alibaba Group  
阿里巴巴集团

Alibaba Group  
阿里巴巴集团

食品商店

支付宝 手机付款



欢迎使用支付宝扫码支付!

林小松

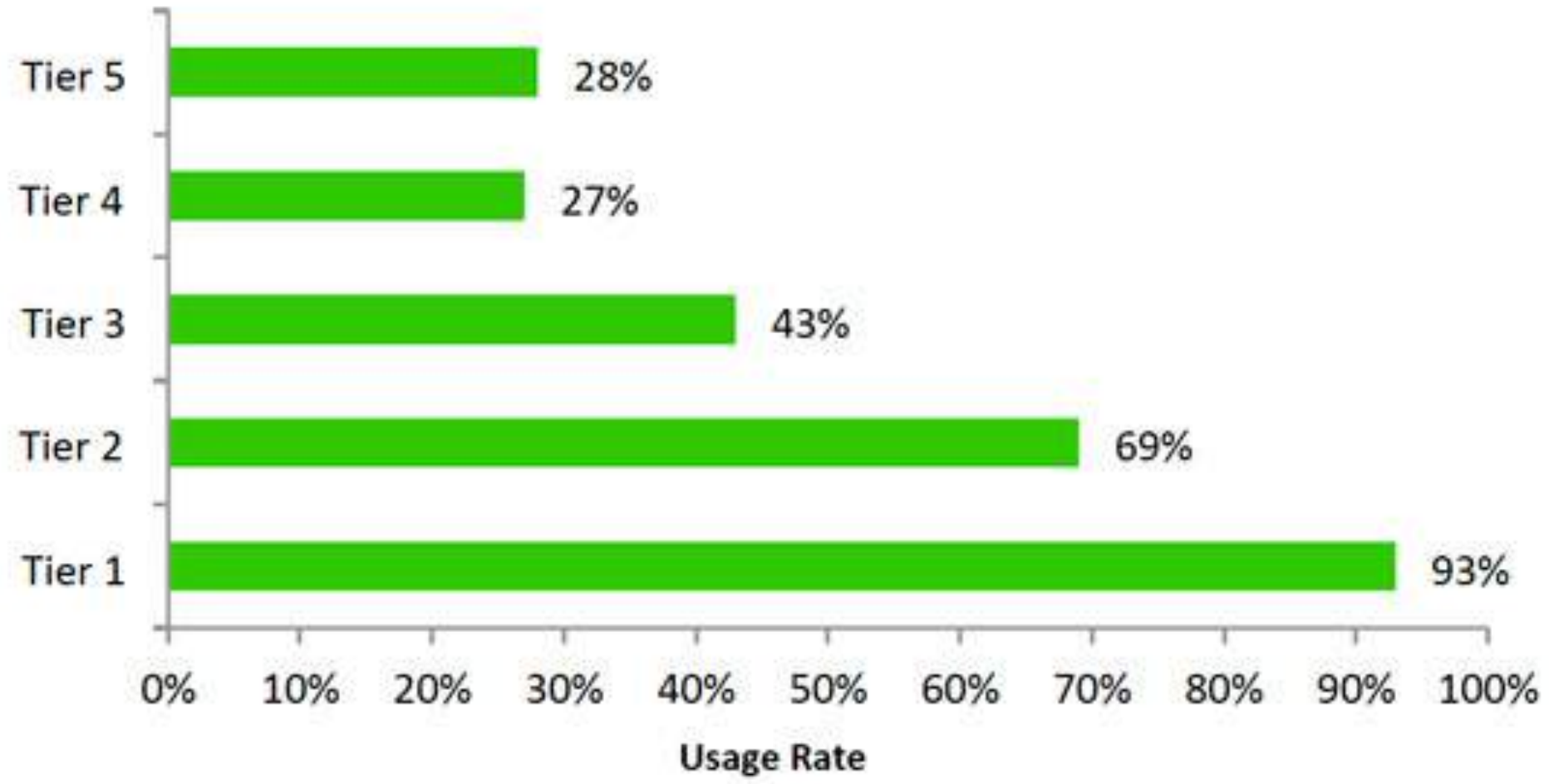








**Figure 21. WeChat Usage by City Tier, as of October 2015**



*Source: Company data/Fung Global Retail & Technology*



อะไรเนีย ยังพกเงินสดอยู่อีก QR CODE นะะ มีมั๊ย?

“你在开玩笑吗？你现在还在用现金？你难道没有QR码吗？”



快手

作者: a3582870

惜别的海岸、现所有人惊呆了



Some aspects *of*  
DESIGN

THINKING#4:

Harmless Self-Serving







*Some aspects of*

DESIGN

THINKING #5:

Attention to social details

# Anthropology Inc.

Forget online surveys and dinnertime robo-calls. A consulting firm called ReD is at the forefront of a new trend in market research, treating the everyday lives of consumers as a subject worthy of social-science scrutiny. On behalf of its corporate clients, ReD will uncover your deepest needs, fears, and desires.





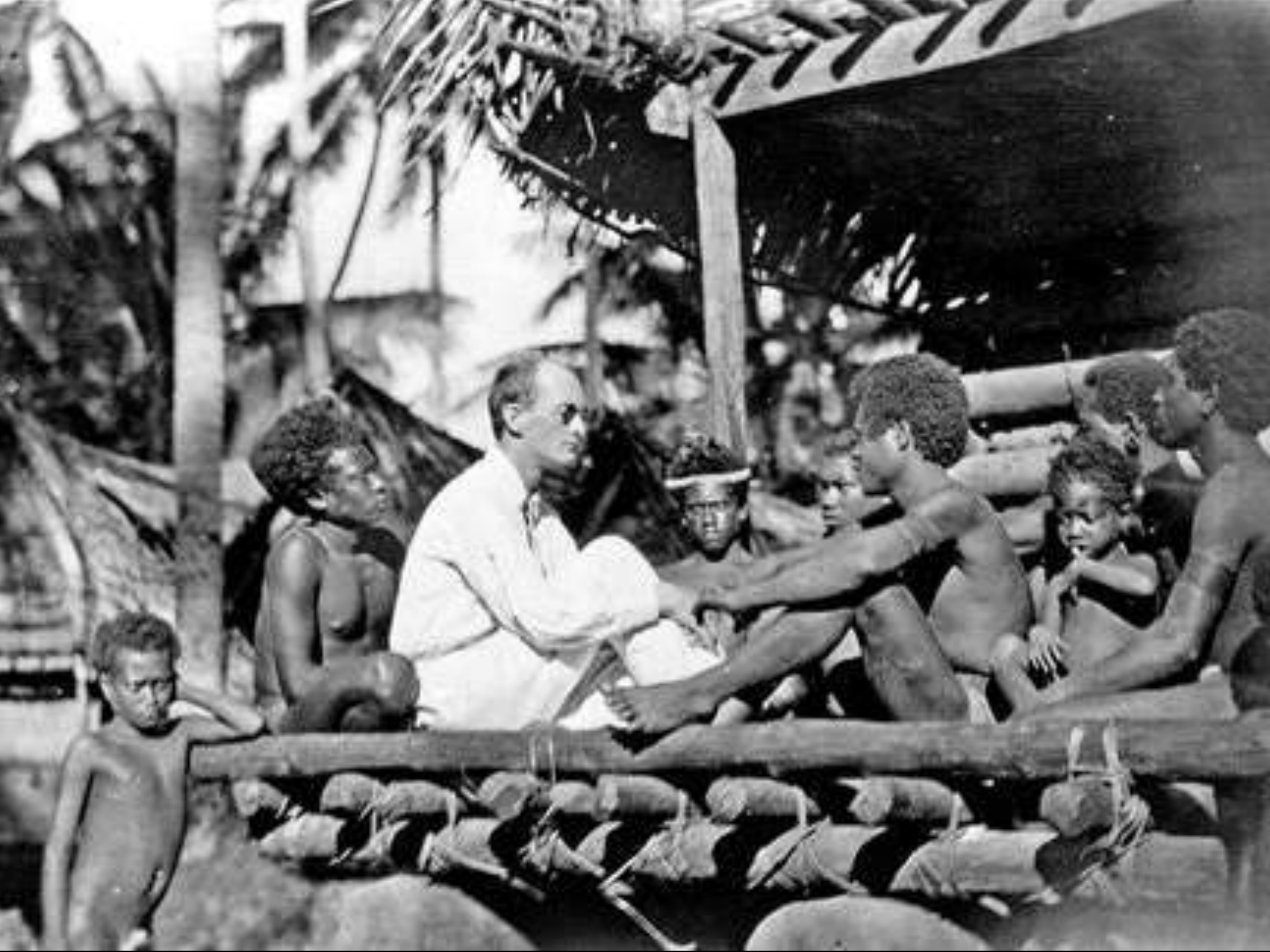
*Chief Creative Officer*

# Jane Fulton Suri

---

- *1987 founded Human Centered Design Research at IDEO*
- *Published IDEO Method Cards & Thoughtless Acts*
- *MSc in Psychology and Architecture*










/Standing to touch



hanging  to  
front



# *Oral B Kid Toothbrush by IDEO*

---

- Design Toothbrush for kid under age 5











解自己金壳壳

# “Anthropology Inc”.

- 1) To create innovation, consulting firms have turned to **social scientists** on field research for corporate clients.;
- 2) The largest margin of any market in the world is everyday consumerism, so these consultancies see the opportunity in treating everyday life—**and everyday consumerism**—as a subject worthy of the scrutiny normally reserved for academic social science;
- 3) “Heavy data” such as statistics might sound impressive, but what really matters is not the data, but the actuality of the usage: **“it’s not what the consumer says that we should pay attention to, but also the actions reveal about the social effect they crave from using it.**

Some aspects *of*  
DESIGN

THINKING#6:

Universal Methodology



Some aspects *of*  
DESIGN

THINKING#7:

Cross-Pollination

# POLLINATING AGENTS

## WIND

Flowers scatter pollen which is then carried by the wind to other flowers.



## INSECTS

Ripe pollen from a flower's stamens sticks to an insect's body. The insect then flies to another flower and deposits the pollen on the receptive stigma.



# TYPES OF POLLINATION



## SELF

Pollen from the anther of a flower to the stigma of the same flower.



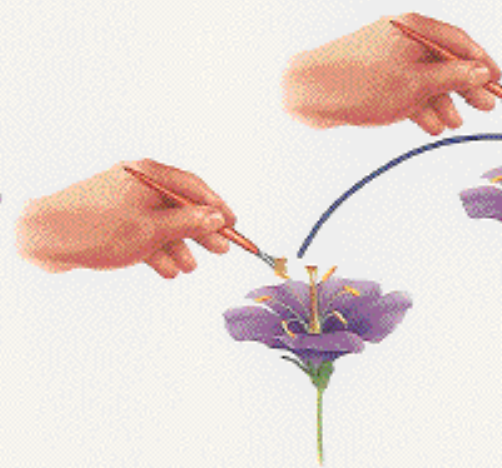
## SELF

Pollen from the anther of one flower to the stigma of another flower on the same plant.



## CROSS

Pollen from the anther of one flower to the stigma of another flower on a different plant of the same type.



## ARTIFICIAL

Pollen taken from one flower and placed by hand on the receptive stigma of another flower.









新生儿建档中心  
2017年11月15日

婴幼儿起





# Food Experience





Cauchy-Kriterium

$$\frac{f^{(n)}(x)}{(n-1)!} (x-a)^{n-1}$$

$$\frac{f^{(n)}(x)}{(n-1)!} (x-a)^{n-1} \rightarrow 0$$

Binomische Reihe

Sei  $x \in \mathbb{R}$ . Definiere  $\binom{x}{n} = \frac{x(x-1)\dots(x-n+1)}{n!}$

Für  $n \in \mathbb{N}$  entspricht das den alten Binomialkoeffizienten.

Die Reihe  $\sum_{n=0}^{\infty} \binom{x}{n} x^n$  konvergiert absolut

Im Ostentantenform:  $\frac{\binom{x}{n} x^{n+1}}{\binom{x}{n} x^n} = x$

$$f(x) = (1+x)^x, \quad |x| < 1$$

$$f'(x) = x(1+x)^{x-1} = (x-1)(1+x)^{x-2}$$

Tupel mit  $f$  hat Schnittpunkt  $0$

$$\sum_{n=0}^{\infty} \binom{x}{n} x^n$$













早餐

章記 香港仔魚旦王

牛腩、牛汁、魚香粉麵專車

供應時間：上午九時至晚上十一時

潮式湯粉麵早餐

各式冷熱粉麵飯類、汽水、特飲加\$2

- |           |      |       |      |         |      |
|-----------|------|-------|------|---------|------|
| 潮州三丸..... | \$31 | 雙魚丸   | \$28 | 潮州乳肉    | \$24 |
| 肉滑魚蛋      | \$24 | 煎魚卷   | \$20 | 牛腩炒牛筋   | \$27 |
| 炸魚角       | \$24 | 煎粉露卷  | \$24 | 雙魚丸伴雙魚蟹 | \$31 |
| 蟹黃丸.....  | \$24 | 鳳城水餃  | \$24 | 潮州四寶    | \$28 |
| 手打牛丸      | \$24 | 煎炸魚皮  | \$24 | 雙魚麵     | \$18 |
| 牛腩丸       | \$24 | 原汁牛腩  | \$24 | 潮州三牛三寶  | \$34 |
| 黑椒牛丸      | \$24 | 五香牛仔  | \$24 | 潮州三牛三寶  | \$34 |
| 賣丸        | \$24 | 柱候牛仔麵 | \$24 | 潮州八寶    | \$36 |
| 龍肉丸       | \$24 | 柱候牛肚  | \$24 | 潮州八寶    | \$36 |
| 魚餃王       | \$25 | 生灼肥牛  | \$24 | 潮州炸醬粉麵  | \$29 |

自選雙拼早餐 \$24

- 沙撈牛肉、煎蛋、紅腸
- 五香肉丁、火腿、香腸
- 午餐肉、豬扒
- 雪菜肉絲、雞中翼

以上任選兩款，豬扒、雞中翼、雞扒午飯供應

和湯炒粉/牛腩/炸魚卷

送仔麵、湯心粉、粥、麵、粉、米線任配，送出前一丁加\$1元

送粥、奶茶、豆漿、汽水任選一款，冷熱同價





*Some aspects of*  
DESIGN  
THINKING #8:

Define Your Real  
Competitor

**NETFLIX**



**NETFLIX**









# Design Thinking Secrets?

- I. Broad before deep -- Diversity of knowledge;
- II. Creativity is not about what is best – but what is better;
- III. Creative process can be nurtured; and,
- IV. The only way to be creative is to create something (sitting at your chair thinking won't create anything creative).



# DESIGN THINKING for Innovation

OSUPPOT

easy to use

develop connections provides measurement feedback

David

2005 by the name

What is the key to success?

Need immediate feedback

safe