

Innovation to maintain the competitive advantage



Carlo Alberto Pratesi – Roma Tre University

The lifespan of corporations is getting shorter

- **“Creative Destruction”** - The process by which large companies eventually get crushed by innovations made elsewhere
- The rate at which companies get bumped off the S&P 500 has been accelerating: back in 1958, a company could expect to stay on the S&P 500 list for 61 years. These days, **the average is just 18 years.**
- By 2020, more than three-quarters of the S&P 500 will be companies that we have not heard of yet.
- To stay big, companies need to be willing to **exit old businesses and enter new ones**

Source: Professor Richard Foster's Research from Yale University

- The most important factor for survival is an emphasis on **innovation and reinvention**.
(Nokia was a pulp manufacturer before it got into electricity and then mobile phones)
- Companies must **balance** the concerns of capital markets and shareholders, who demand quarterly profits and who are not necessarily interested in decades-long research projects.

Source: www.bbc.co.uk/news/business-16611040

How to innovate?

- **Be part of the growth**: the entire organization needs to be involved in the innovation process
- **Know your business**: strengths and weaknesses of your company, of competitors and of the market
- **Challenging objectives**: Create deep changes (disruptive innovation)
- **Feasible and sustainable**: set the suitable objectives
- Choose **only one field** in which innovate: preferably in which your company is more strong
- **Do it NOW**

Source: www.ceccarelli.it/

One year in Europe

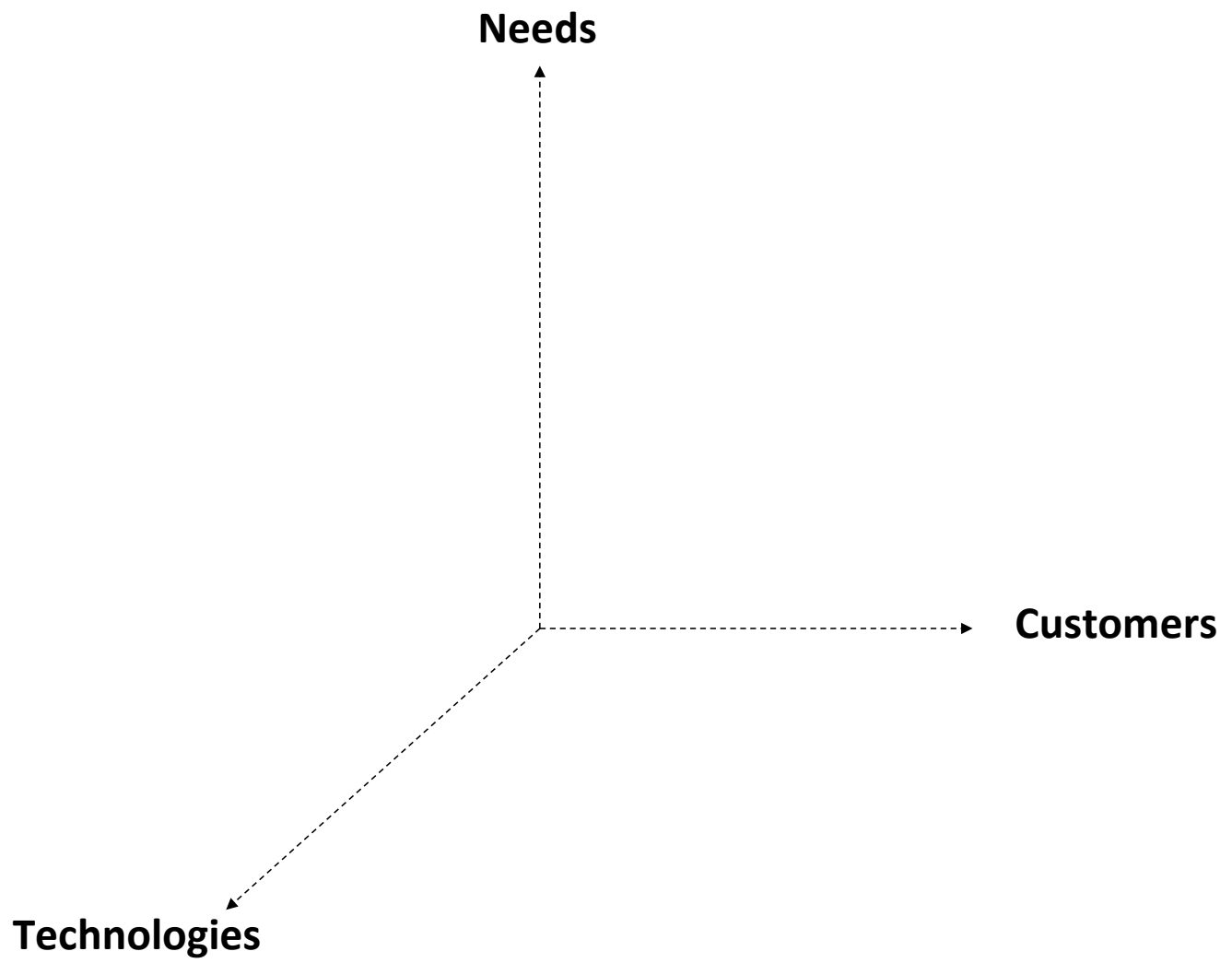
• failed	27%
• almost failed	16%
• hanged up	37%
• success	14%
• star	6%
TOTAL	100%

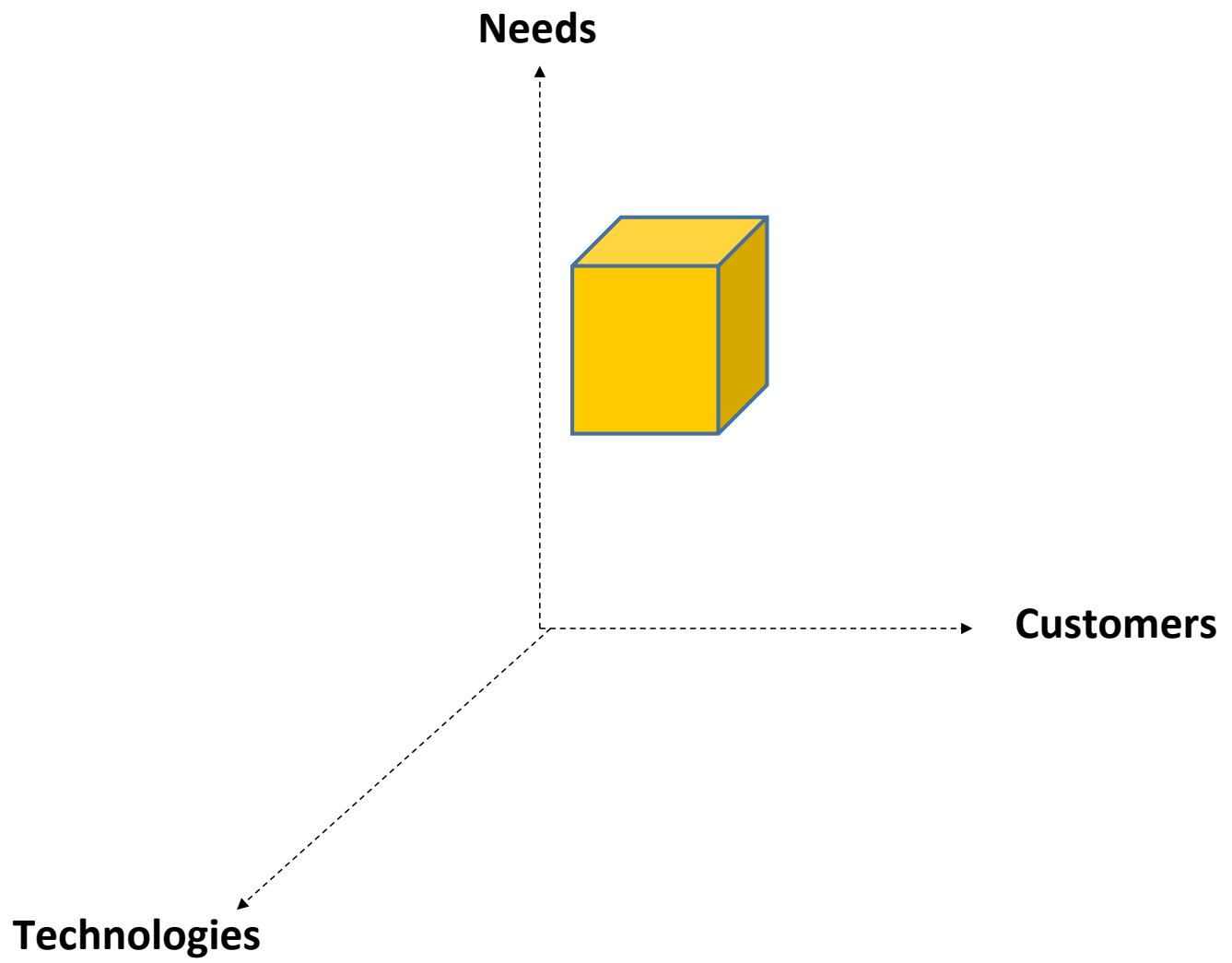
Different types of innovation

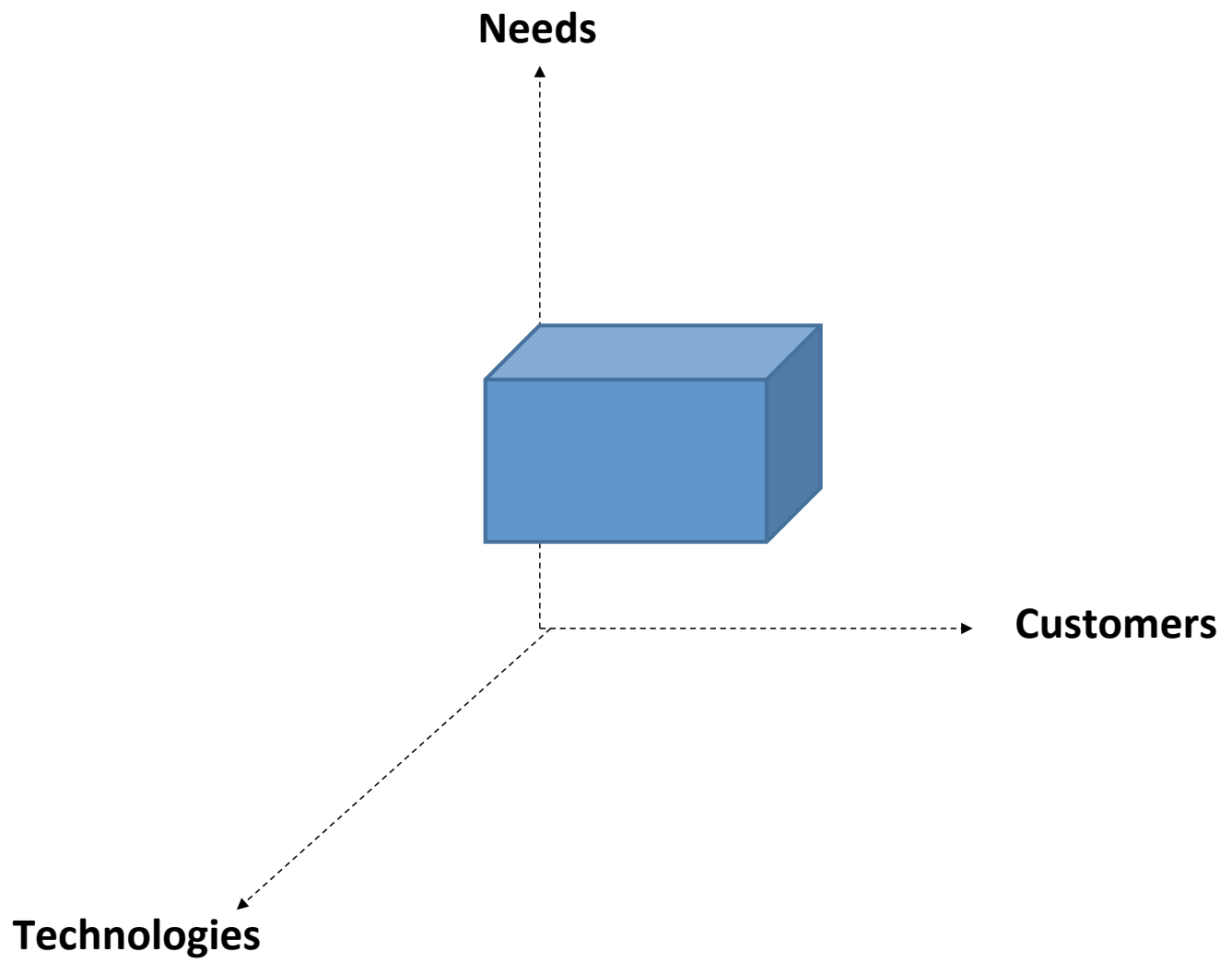
• BREAKTHROUGH	334	(1,4%)
• LINE (O CATEGORY) EXTENSIONS	1.705	(6,9%)
• ME TOO	18.814	(76,7%)
• Others (seasonal etc)	3.690	(15,0%)
	24.543	(100%)

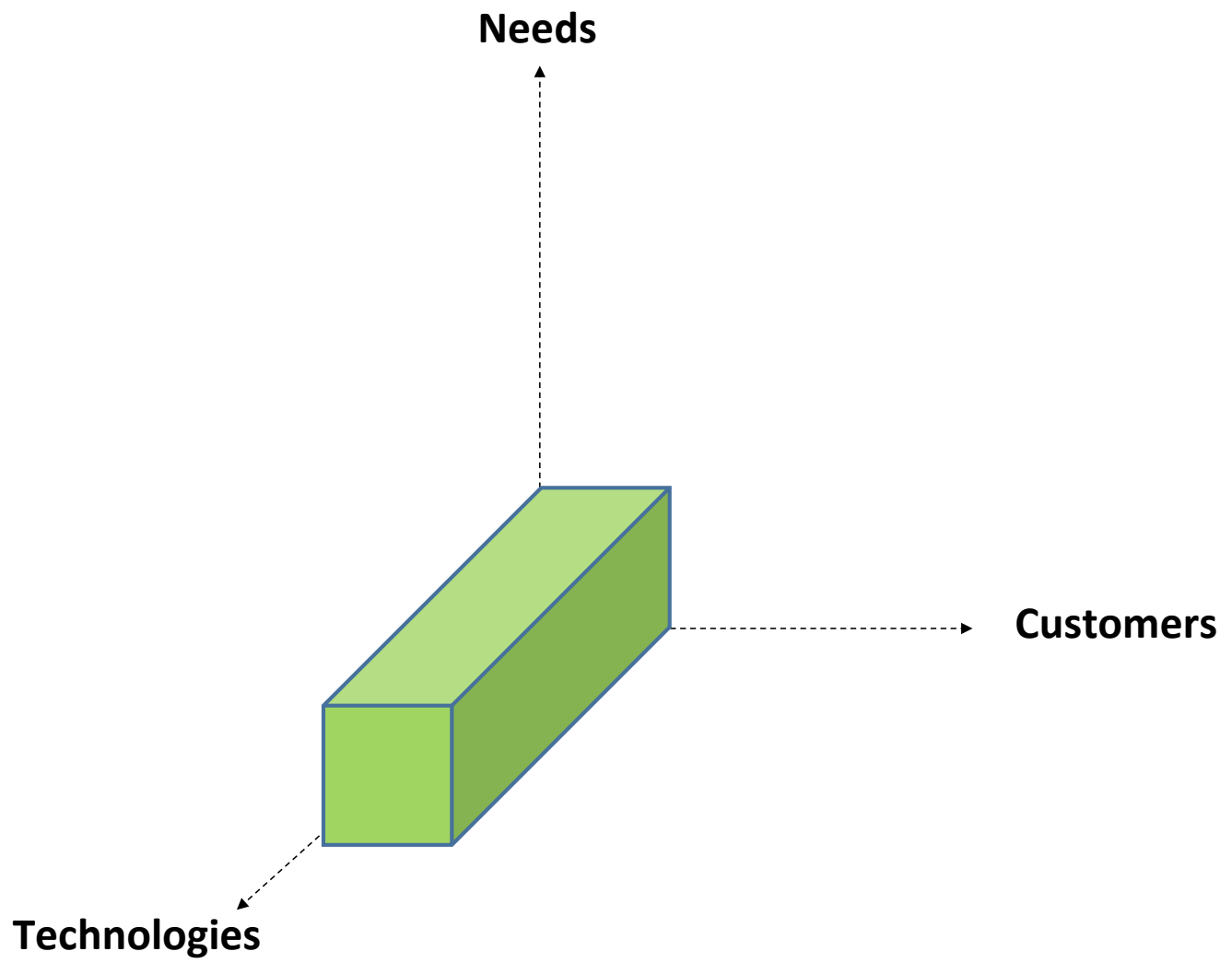
Fonte: Nielsen

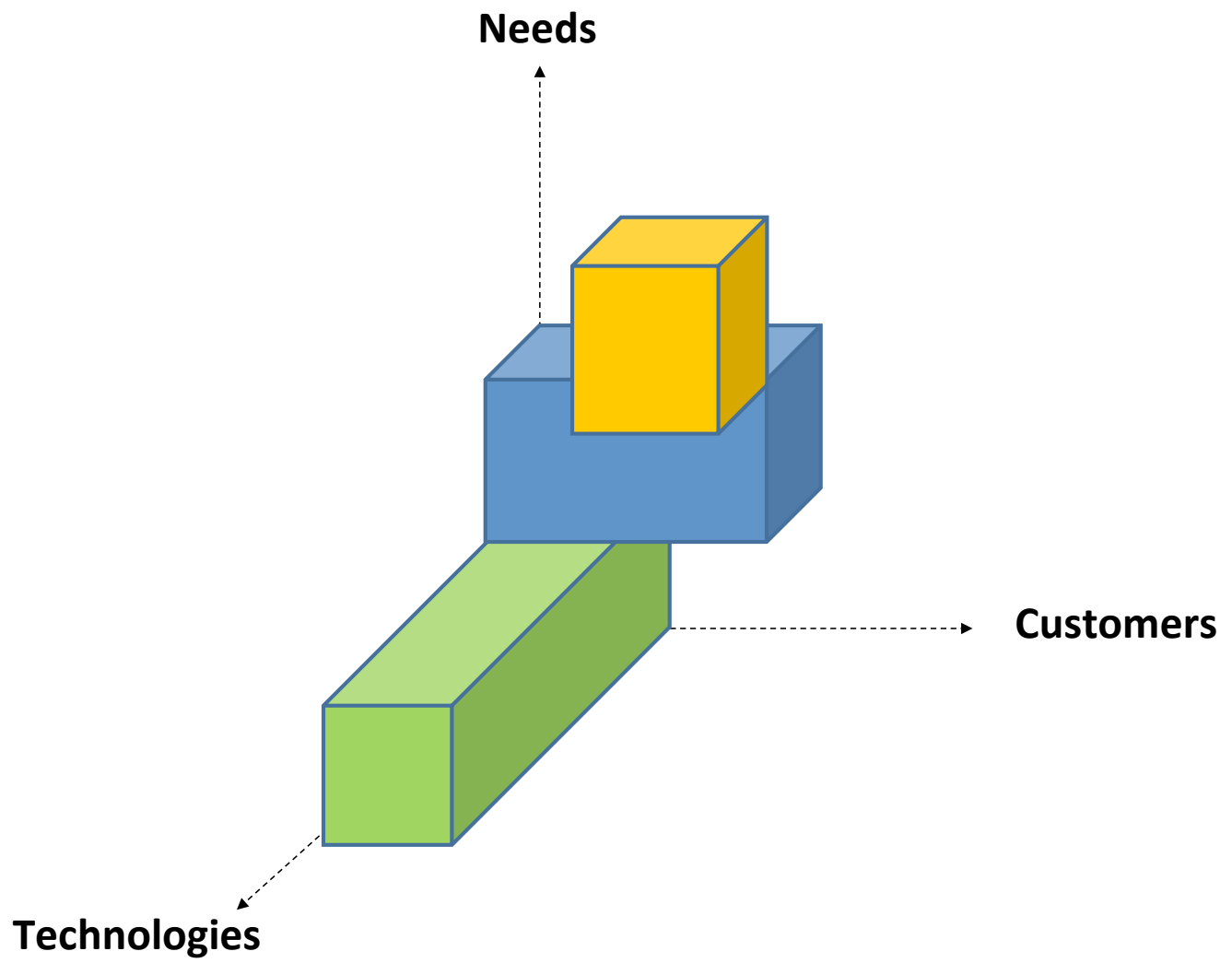
Product is not the matter











#1: do we really need it?

After 10 years of testing, in 1964 AT&T launched the *Picture Phone: flop*

1990 new trial with *Videophone 2500*, another flop.

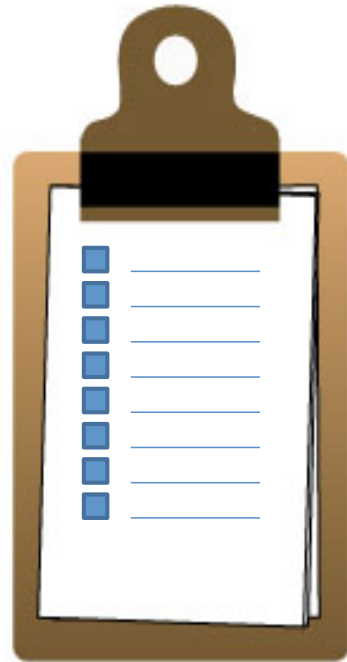
In 1997 Bosch launched a prototype of a video-cellphone: flop again.



NEW LOOK **PICTUREPHONE** Now you can see as well as talk. The Picturephone has Touch-Tone controls to make calls and control the television screen so you can see the person you're talking to, be seen yourself, or have a darkened screen. Attended service between New York, Washington and Chicago began in 1964.

Pretotyping*

H. Miller in the UK (1993)



* Copyright (c) Alberto Savoia 2011

Text-to-speech



The risk of wrong underestimation...

Telecom Italia forecast in 1988: 525.000 end-users by 1995



The true number: 3.863.374 (15%)

#2: do we know who the real customer is?

Who are the B2Cs?

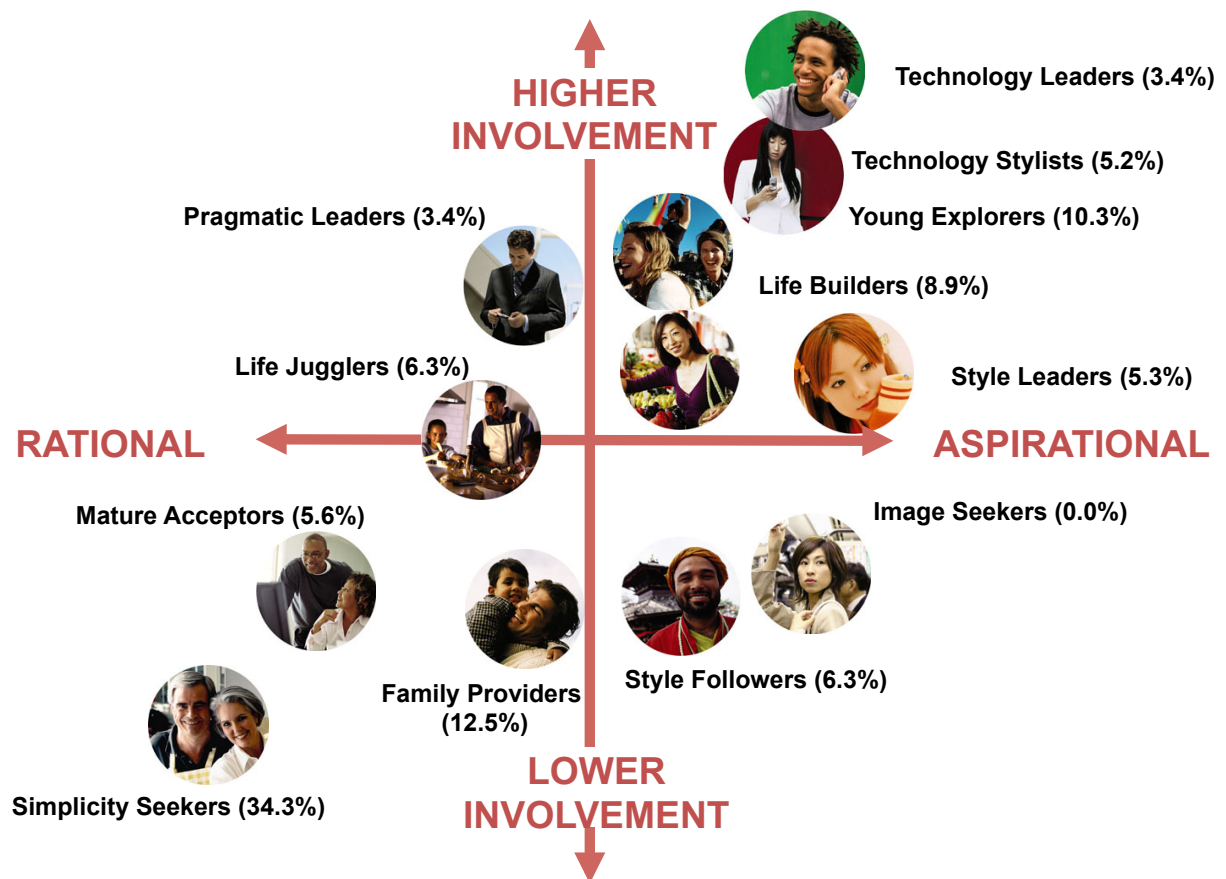


la Repubblica

facebook



Cell phones world segmentation

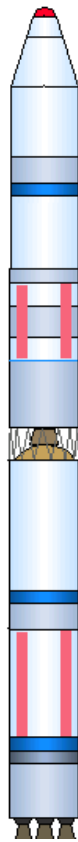
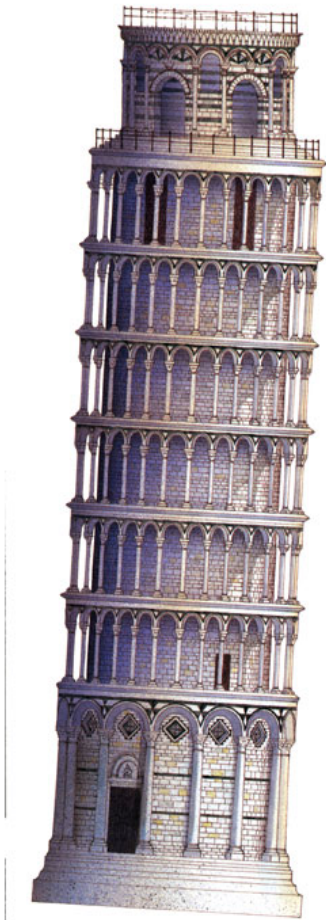


#3: is it the right technology?

Satellite phone 1995



1991: US\$66 bn for 77 satellites



 iridium®

2000: US\$50 mln to destroy the satellites



“We’re a classic MBA case study on how not to introduce a product. First we created a marvelous technological achievement. Then we asked how to make money on it.”

– Iridium Interim CEO John A. Richardson, 1999

“What it now looks like is a multibillion-dollar science project. There are fundamental problems: The handset is big, the service is expensive, and the customers haven’t really been identified.”

– Chris Chaney, Analyst, A.G. Edwards, 1999

#4: Which is the killer app of the technology?

YANKEE
DOODLE



THOMAS A. EDISON
1877-1931

Nine styles from \$10.00 to \$100.00
Catalogues at all dealers.

NATIONAL PHONOGRAPH COMPANY

New York Office, 135 Fifth Avenue.

Chicago Office, 144 Wabash Avenue.

Foreign Dept., 15 Cedar Street, New York.

An Unequaled "Record"

After building the prototype in 1877, Edison wrote an article in which he proposed 10 possible uses for the new tool:

- Record for ever the last words of the dying
- record books for blind people
- announce the exact time
-

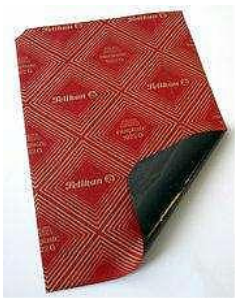
Only 20 years later the jukebox was born



Which is the killer app?







#5: do we really know who the competitors are?



ZARA

UNITED COLORS
OF BENETTON.

sky



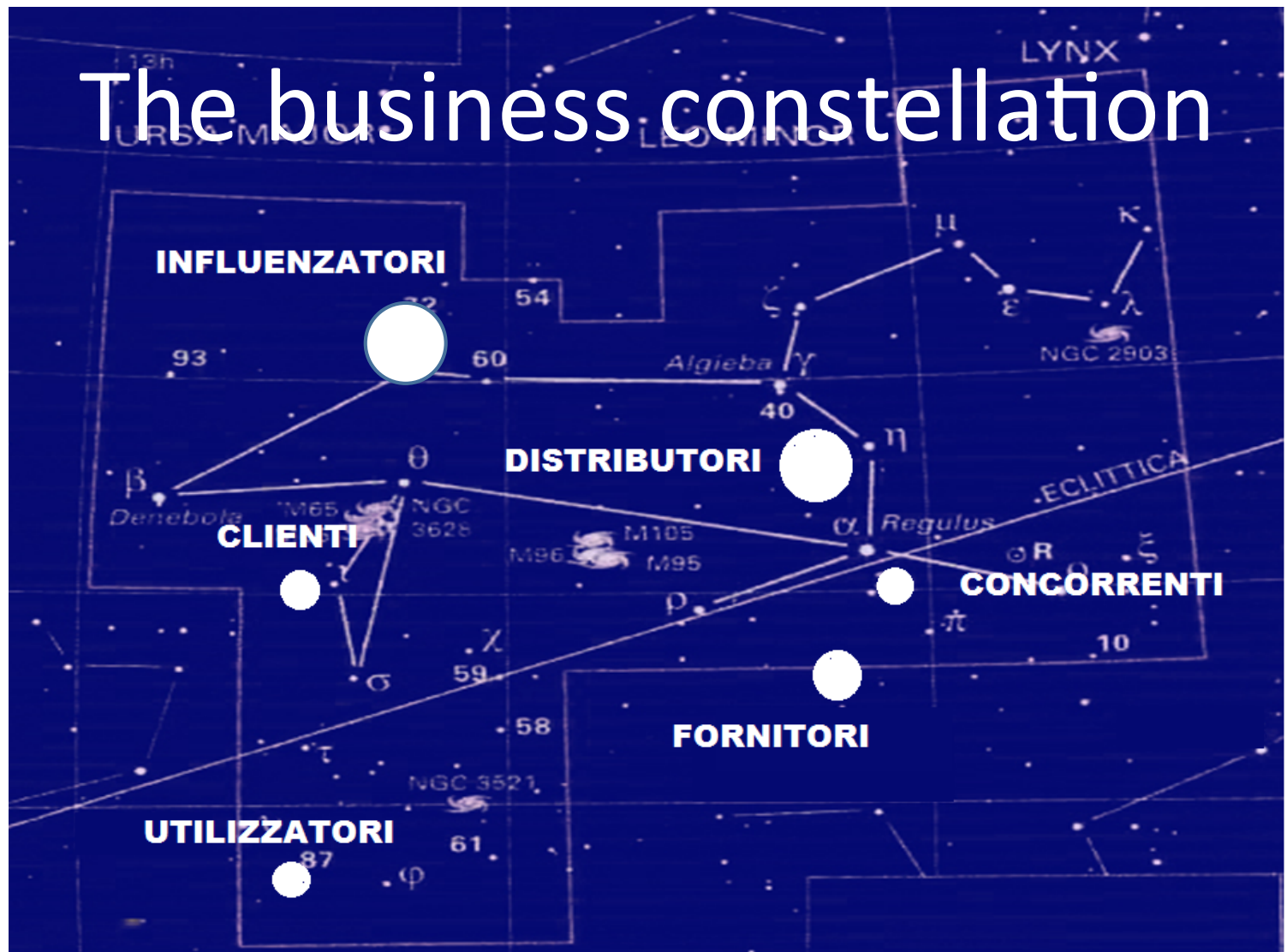
Slow Food®



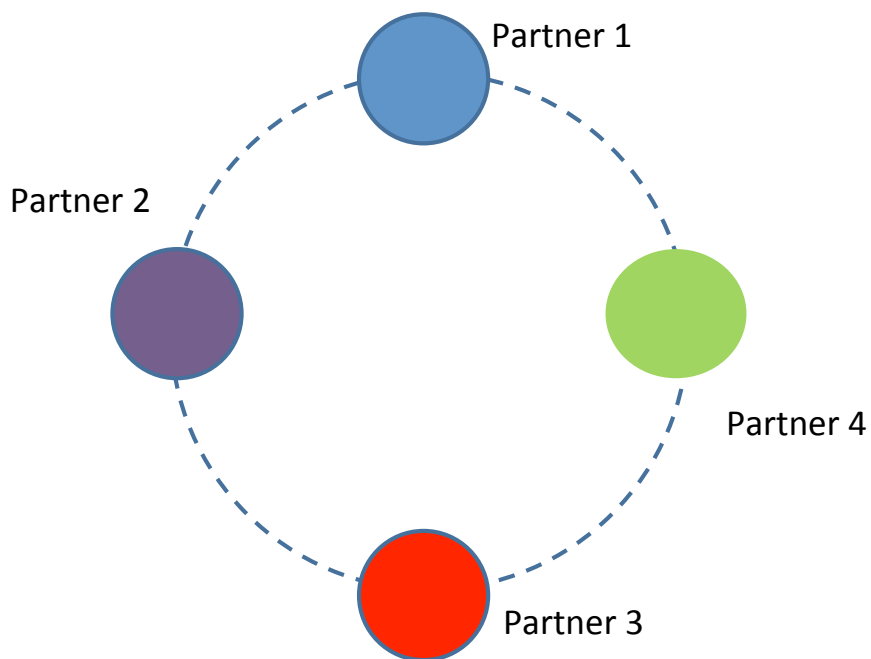
i'm lovin' it™

#6: is it possible to do it ourselves?

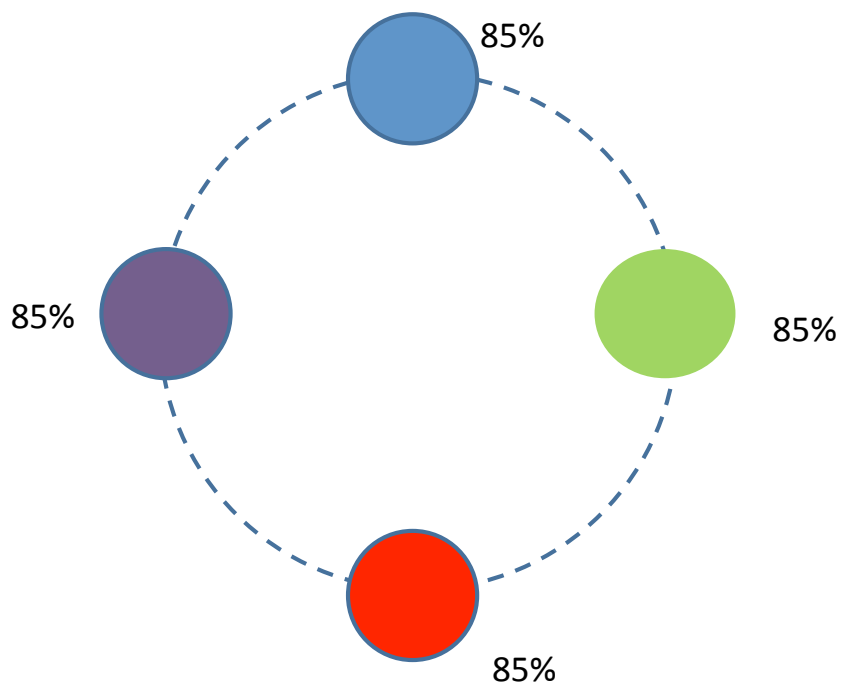
The business constellation



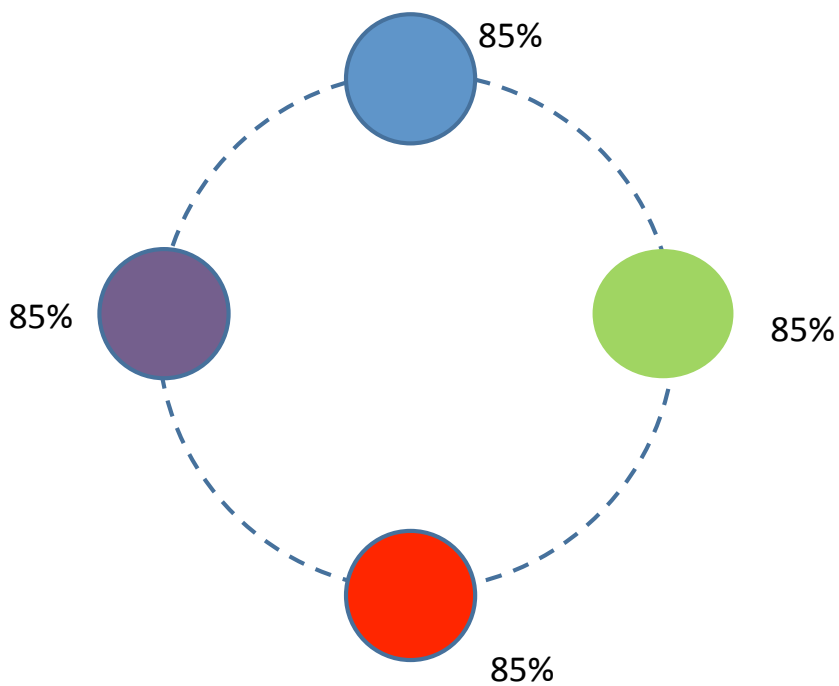
Business system

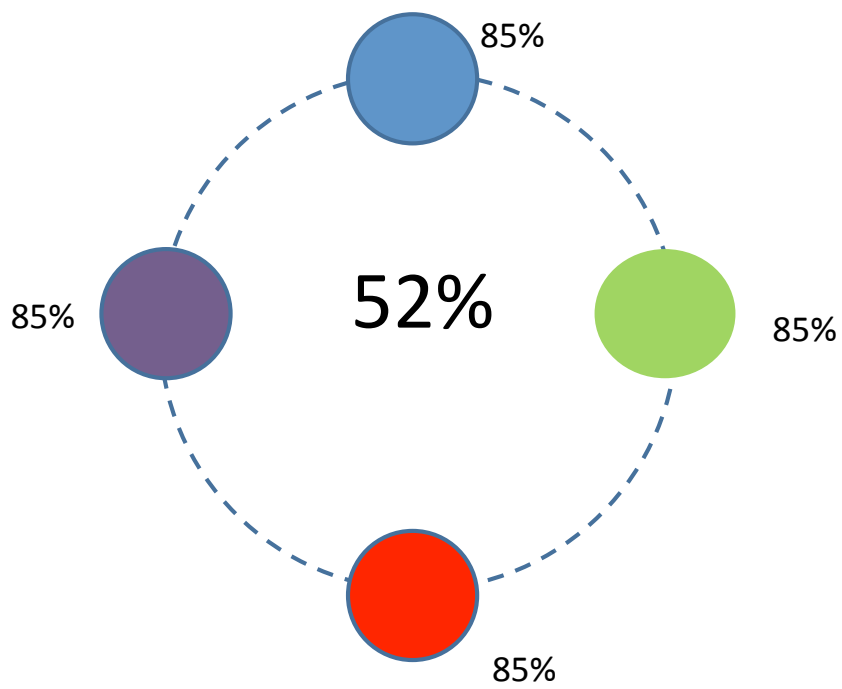


Success rate...

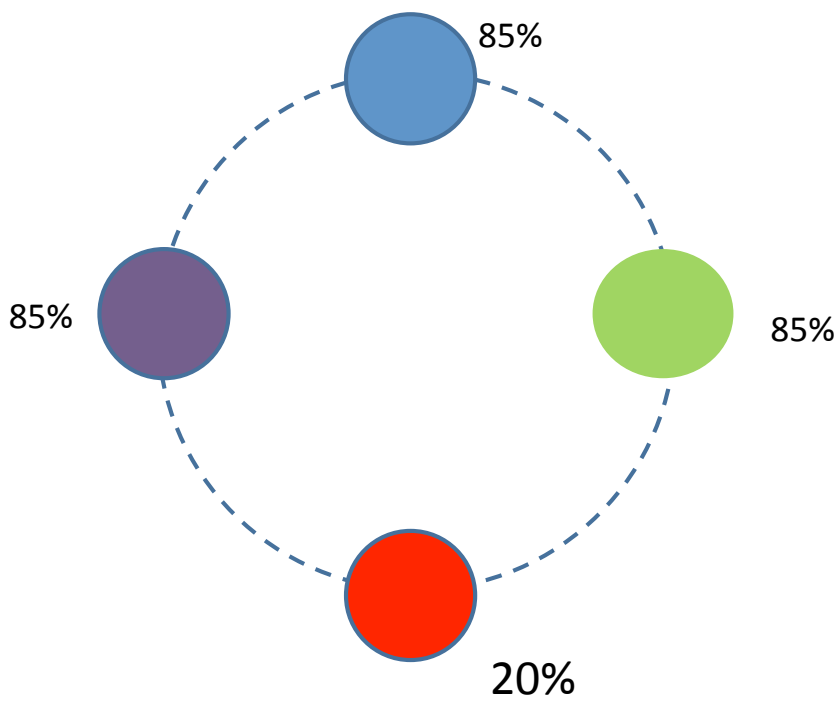


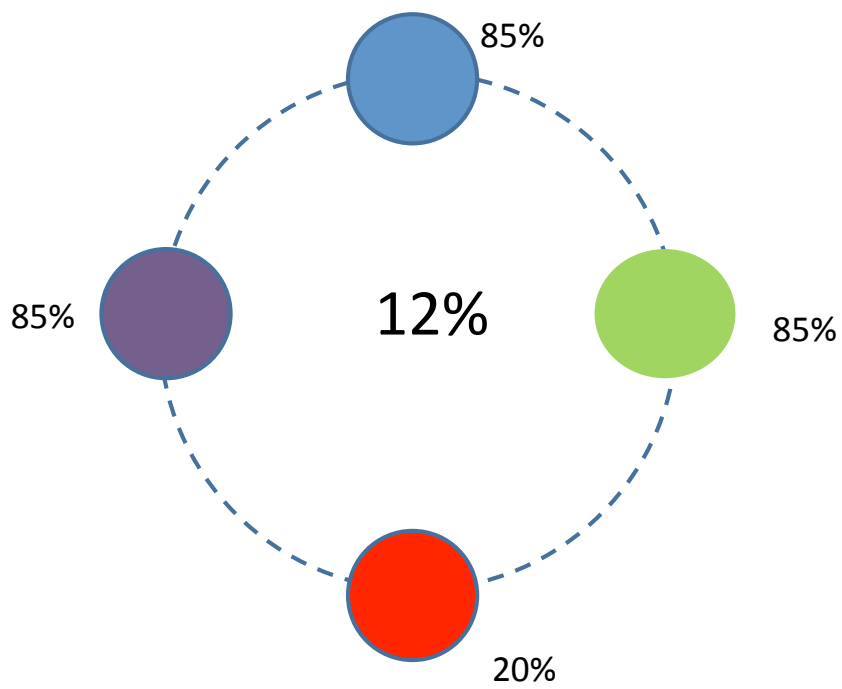
What is the “total” success rate?





With a weak link...





Who wins is not the best,
but is the one who creates a win, win, win,
win... strategy.



Tv

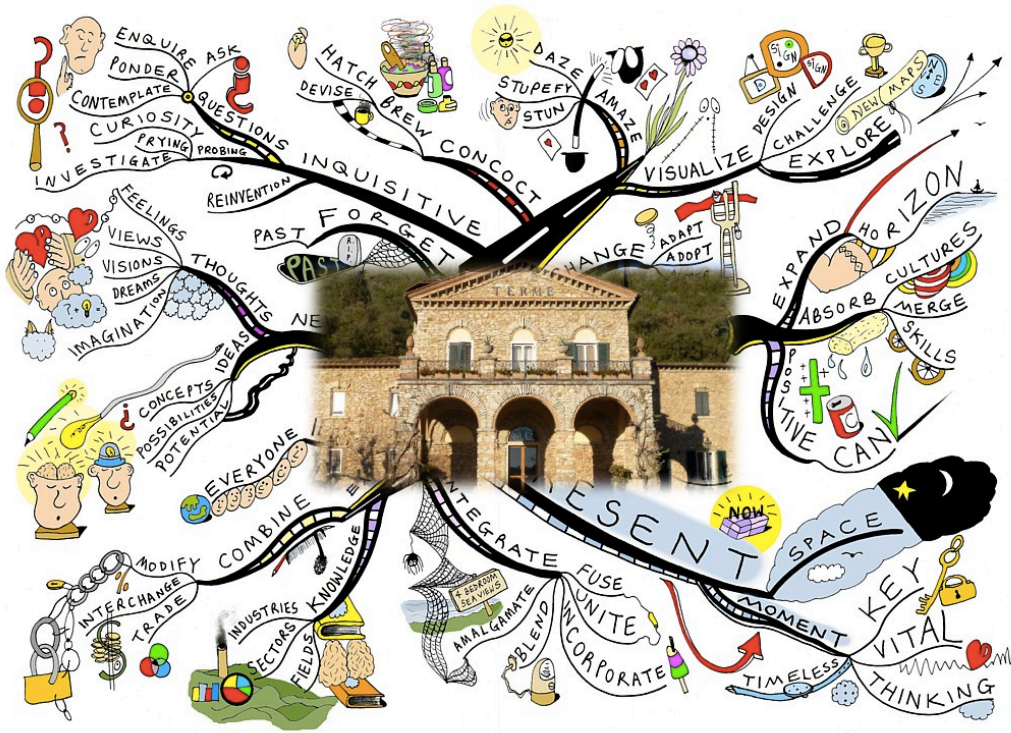


“Television will never survive the market place for more than six months. People will soon tire of spending their evenings watching a wooden box.»

- Darryl F. Zanuck

Director of 20th Century Fox, USA, 1946

Creativity and cooperation as the sources of innovation



1. Where does innovation come from?
2. The importance of a T shaped person for the team's effectiveness
3. Two tools for group's creativity
4. Your project work
5. Brainstorming rules

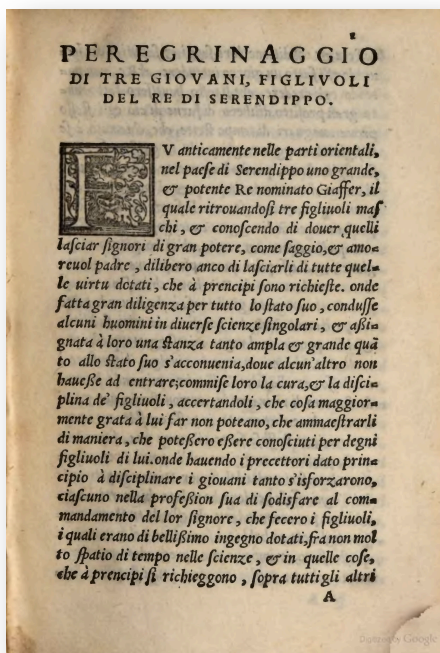
Where does innovation come from?

1. Serendipity
2. Cross fertilization
3. Medici Effect
4. Team working

1. Serendipity

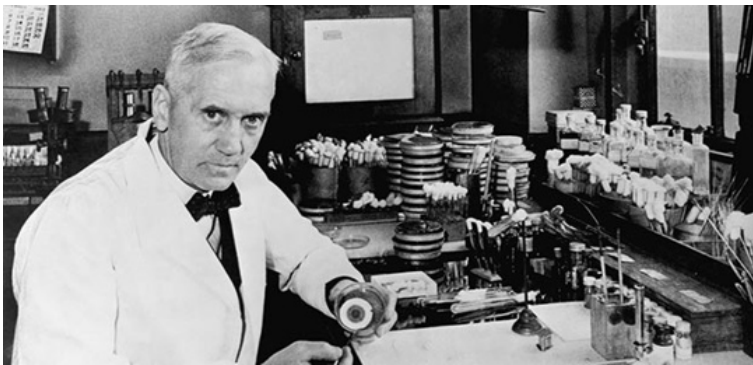
..is when you go looking for a needle in a haystack and you find the farmer's daughter

- Roger Needham, Computer Lab Cambridge



A "pleasant surprise". It was coined by referring to a Persian fairy tale, *The Three Princes of Serendip* published by Michele Tramezzino in Venice in 1557. The princes were “always making discoveries, by accidents and sagacity, of things which they were not in quest of”.

Serendipity is a common occurrence throughout the history of scientific innovation such as Alexander Fleming's accidental discovery of penicillin in 1928 and the invention of the microwave oven by Percy Spencer in 1945.



2. Cross pollination

Being able to connect and combine nonobvious ideas and objects is essential for innovation and a key part of the creative-thinking process.

Along with your ability to reframe problems, it engages your imagination and thereby unlocks your innovation engine.



**THE
SHiNiNG**

From war to cinema

Steadicam used the first time by Stanley Kubrick was invented by Garrett Brown who took inspiration from machine guns used in vietnam.





From birds to finance

The models we use to explain the evolution of financial strategies are mathematically similar to the equations biologist use to understand population of predator-prey systems

- Robert Hagstrom Chief
Legg Mason Investment
Counsel



From law enforcement to entertainment

Shazam: the software
was invented to
enforce music's
copyright on the web



From dogs to clothes



De Mestral first conceptualized Velcro in 1941 after removing several of the burdock burrs (seeds) that kept sticking to his clothes and his dog's fur



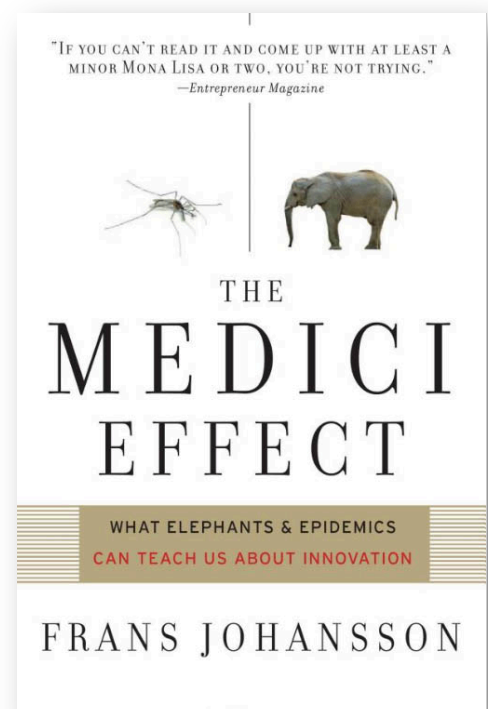
3. The Medici Effect



Painters financiers
scientists architects
philosophers sculptor
working together

Overlapping and cross
pollination between
different disciplines

According to Frans Johansson, the innovators are changing the world by stepping into the *intersection*: a place where ideas from different fields and cultures meet and collide, ultimately igniting an explosion of extraordinary new discoveries.



4. Team Working

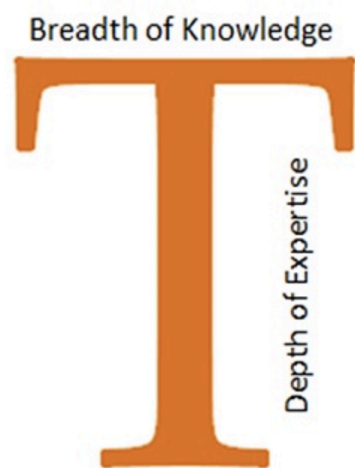


Putting together many disciplines is not enough: the risk of the Apollo syndrome

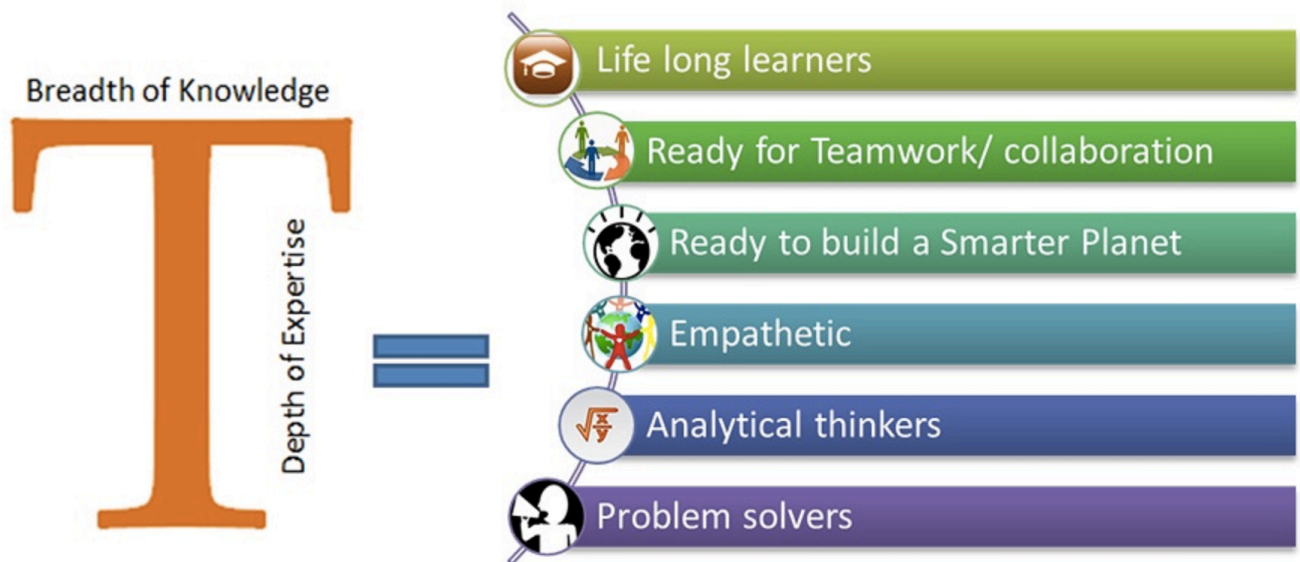


Highly specialized and intelligent members of the team, are not necessarily available for cooperation

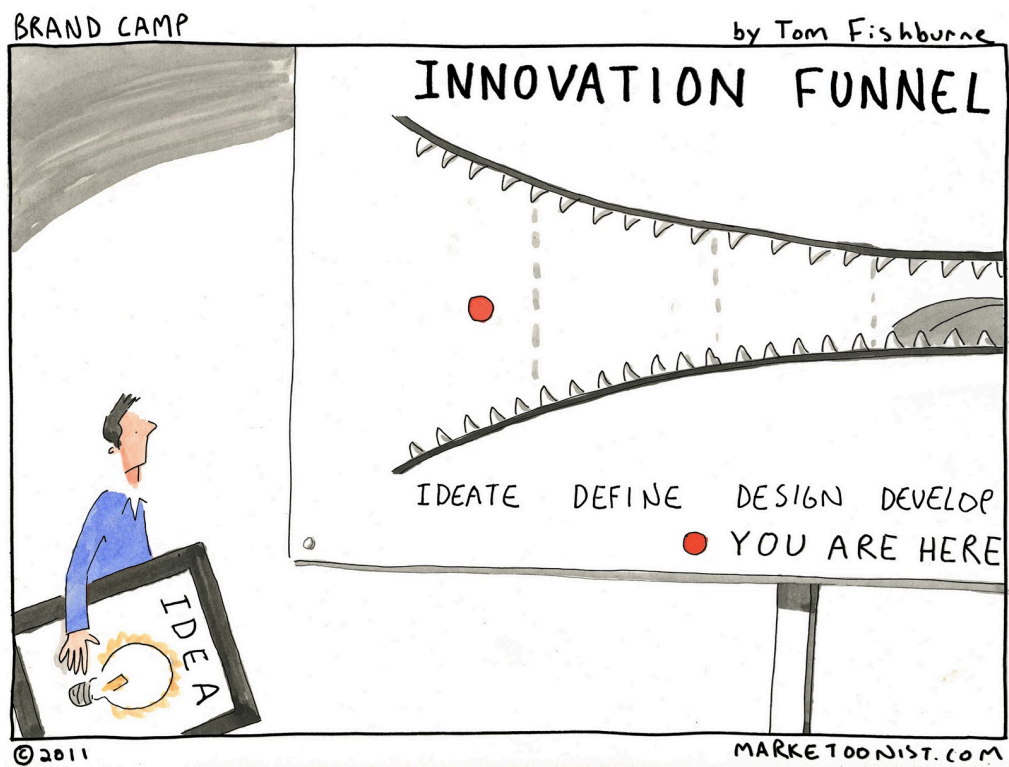
..we need T shaped people



The vertical bar of the T represents depth of expertise in a single field (being an engineer, biologist, computer scientist), whereas the horizontal stroke of the T is the ability to collaborate across the disciplines (being collaborative and empathetic).



You need a lot of ideas to have one success!

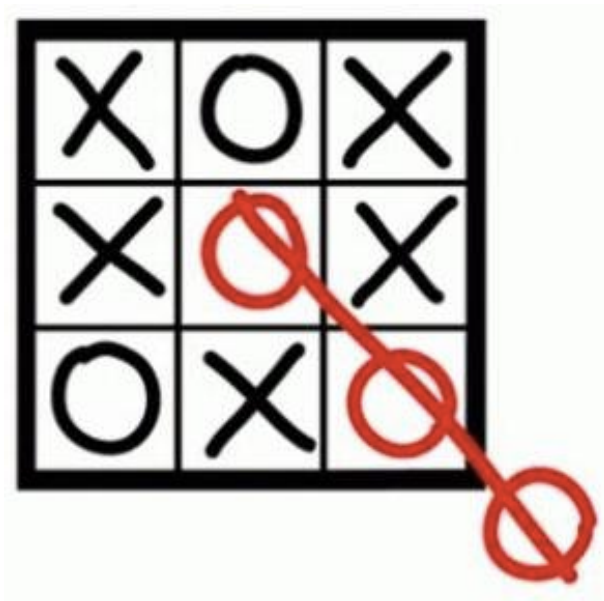


Tools

- A. Opposite thinking
- B. Wow! experience

A. Opposite thinking

Doing the opposite of what you would normally do in that situation



Services are intangible...



To fly short distance is more
expensive than driving your car...



To enjoy the show you need to buy the ticket...



Think about..

- The world's largest taxi company owns no vehicles.
- The world's most popular media owner creates no content
- The most valuable retailer has no inventory
- The world's largest accommodation provider owns no real estate



The 5 fundamental rules of brainstorming

1. Postpone and withhold your judgment of ideas
2. Encourage wild and exaggerated ideas
3. Quantity counts at this stage, not quality
4. Build on the ideas put forward by others
5. Every person and every idea has equal worth

