

School on transferable skills: managing, entrepreneurial and IPR

What is entrepreneurship?

Claudio Cruz Cázares

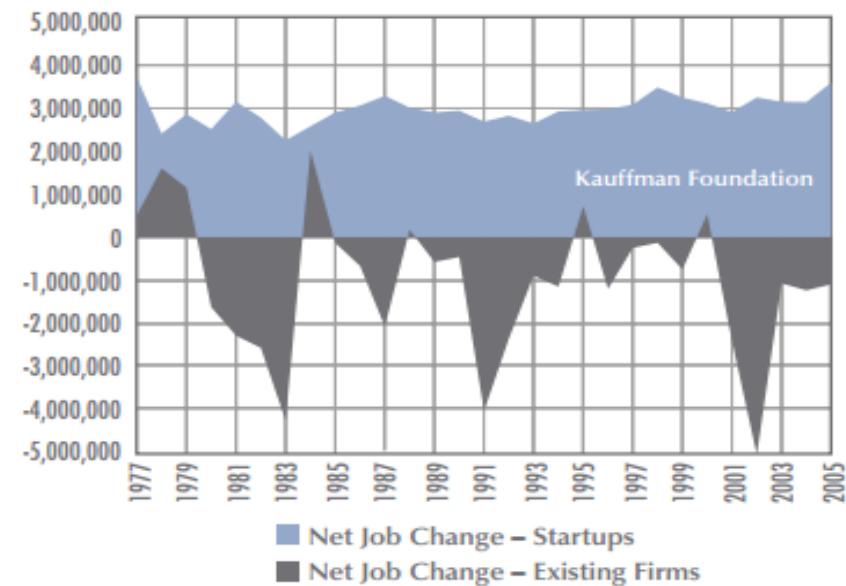
2nd May 2025

Why is entrepreneurship important?

Outcomes of entrepreneurship

- Economic impact
- Renewal in existing organizations
- Job creation
- Personal satisfaction

Figure 1:
Startups Create Most New Net Jobs in
the United States



Why is entrepreneurship important?

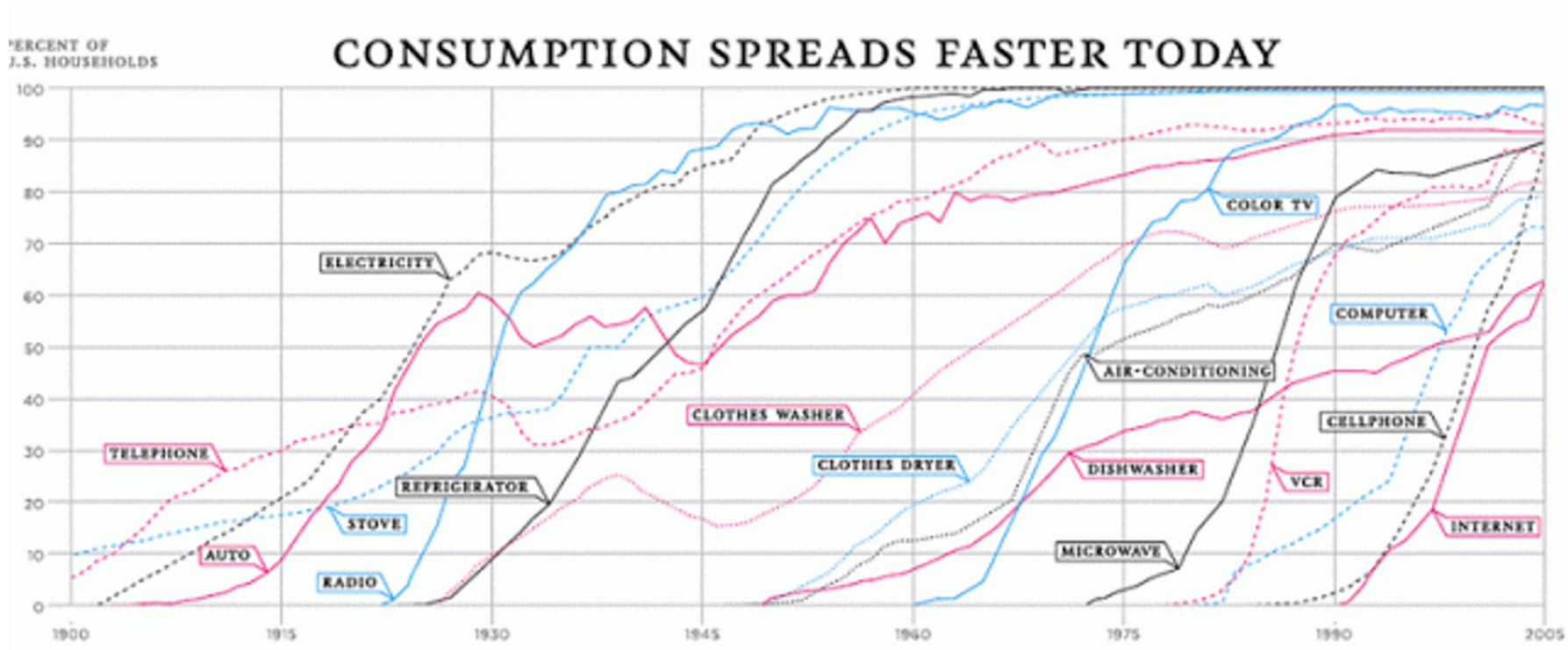
Why is now more important?

Unprecedented speed of change

- Technological
 - Rapid advancement
 - Global deregulation and standardization
 - Huge efficiency gains
- Social
 - New markets
 - New customer needs
- Economical
 - Small is beautiful and effective
 - Existing resource bases becoming obsolete

Why is now more important?

Unprecedented speed of change



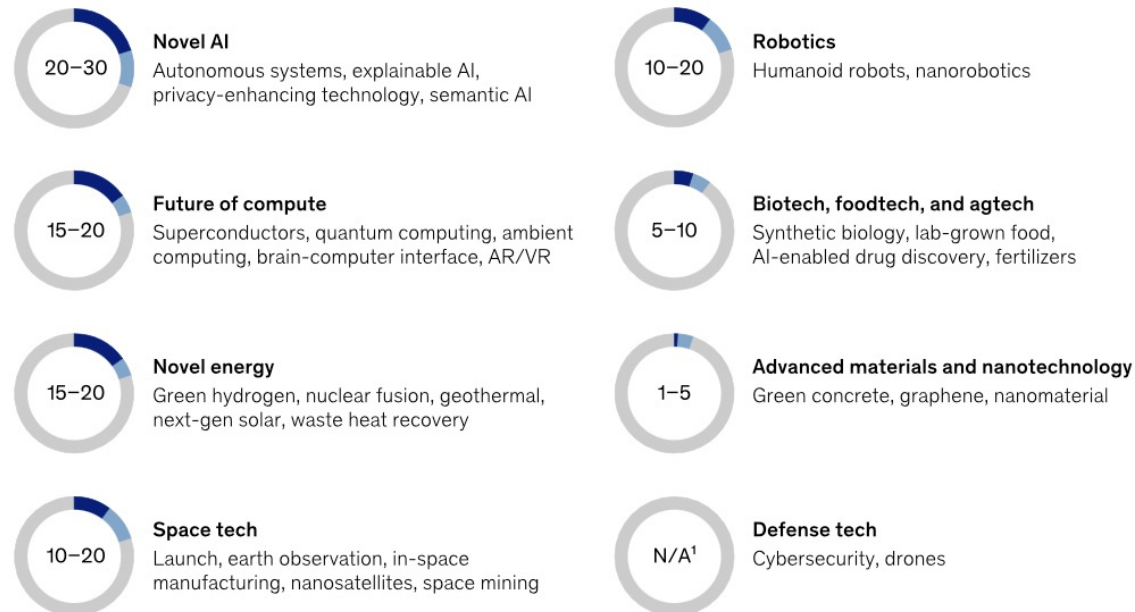
Why is entrepreneurship important?

Why is now more important?

Unprecedented speed of change

Deep tech's recent breakthroughs span eight thematic investment areas.

Indicative share of European VC investment in emerging deep tech, by investment theme, 2023, %



¹Indicative share of investment already included in other themes.
Source: Dealroom.co; press search

Why is entrepreneurship important?

Under which conditions?

- Entrepreneurship is unlimited
 - Age
 - Sex
 - Background
 - Prior financial condition
 - Industry
 - Country
- However, entrepreneurship is more likely...
 - Changing environments
 - Self-perception
 - Social acceptance
 - Strong motivation...



What is an entrepreneur?

The entrepreneurial ecosystem



Source: <https://www.euronews.com/business>

What is an entrepreneur?

The entrepreneurial ecosystem

4. LISBON

[Lisbon](#) has positioned itself as one of the rising startup cities in Europe. The capital of Portugal has a Heatmap Trust Score of 96%. However, with annual investments of only 150 million Euro (3-year average), the city's popularity has yet to be matched by capital flows.

The main buzz in town is Infrastructure, AI & Data, and Female Entrepreneurship. Startup founders appreciate the helpful ecosystem and the high value for money in the city. [Lisbon](#) is home of the [Web Summit](#), one of the largest global tech conferences, and top accelerators [Beta-i](#) and [BGI - Building Global Innovators](#).

Startups to look out for include [Unbabel](#), [Codacy](#), and [Bizay](#).



[Explore Lisbon's profile on the Startup Heatmap.](#)



3. BARCELONA

Founders like [Barcelona's](#) value for money, helpful ecosystem, and access to talent. With a Trust Score of 98%, the Catalan city ranks 3rd among the best startup cities in Europe. It has a strong international appeal, with nearly two thirds of founders coming from abroad.

Annual investments amount to 0.7 billion Euro (3-year average), with 2018 seeing the highest number at 0.9 billion Euro.

Popular [Barcelona](#)-based startup accelerators are [Conector](#), [Wayra](#), and [SeedRocket](#). [Barcelona](#) is home to startups with most inspiring success stories, such as [Letgo](#), [Glovo](#), and [Typeform](#).

How can we define entrepreneurship?

A simple definition

The pursuit of **opportunity** beyond the
resources **the entrepreneur** currently controls

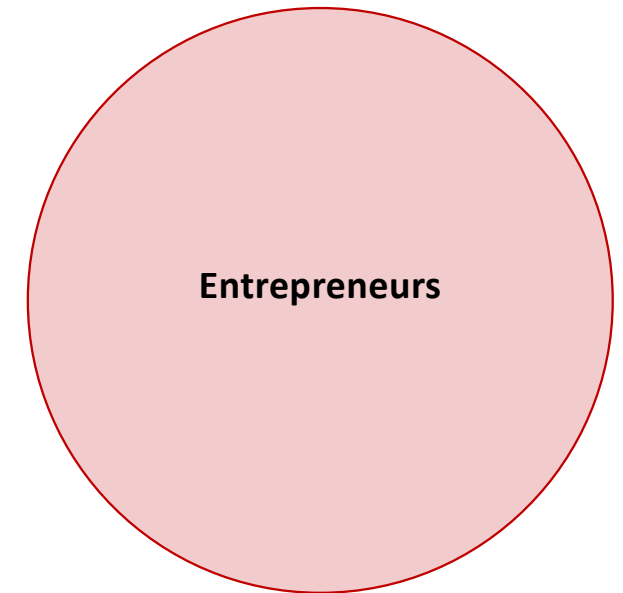
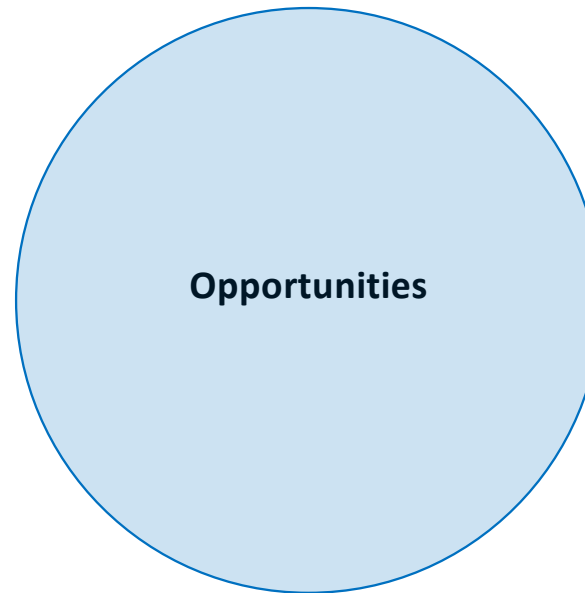
(Harvard Business School)

- The pursuit: not something fixed, but rather a process
 - What is the pursuit of opportunity? When does it start? When does it end?

How can we define entrepreneurship?

The opportunity and the entrepreneur

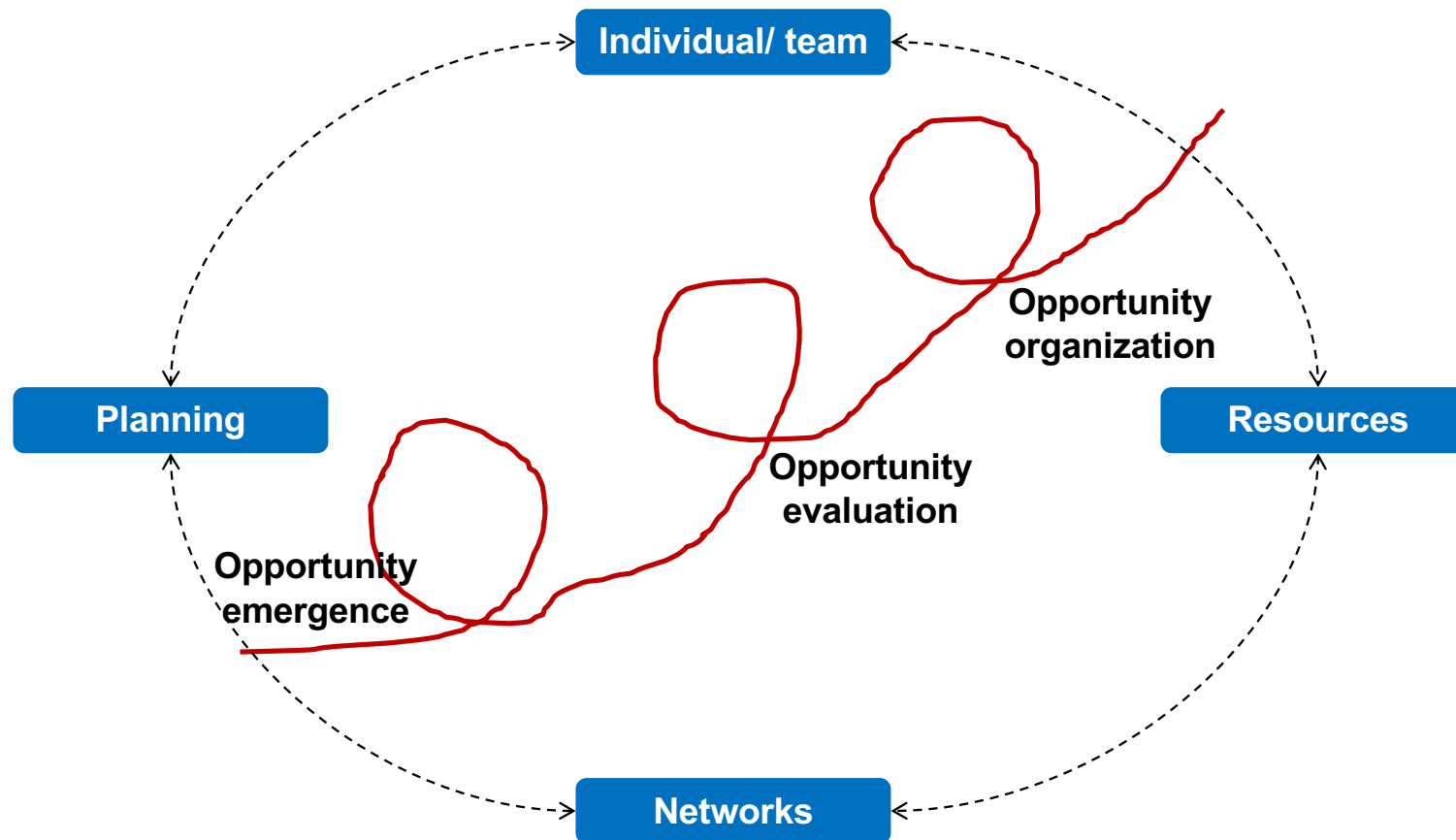
- Two key elements that interact: the opportunity and the entrepreneur
 - Which one is more important?



- Entrepreneurship happens when individuals and opportunities meet, thus
 - Many entrepreneurs without opportunities
 - And more importantly, many opportunities without entrepreneur

How can we define entrepreneurship?

Entrepreneurship as a process



What is an entrepreneur?

Elements to take into account

- Uncertainty of income
- Risk of losing entire invested capital
- Lower quality of life until business gets established
- High levels of stress
- Complete responsibility

Combined with high failure rates

Idea vs. Business Opportunity

Technology as a source of ideas

New technology by itself does not lead to opportunities

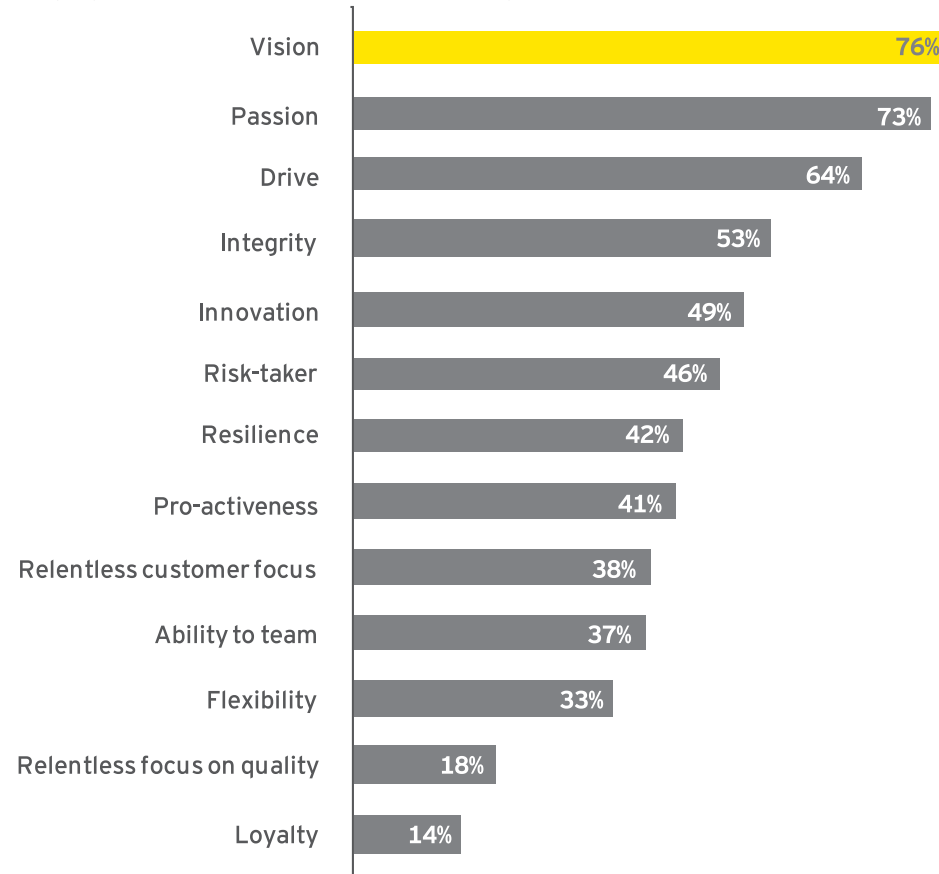
Example of the Bar code

- First Patent for a similar product (US Patent #2,612,994) by Joseph Woodland and Bernard Silver in [October 1952](#)
- First use in [1966](#).
- In [1974](#), first scanner (large scale use) installed in a supermarket in Troy (Ohio, USA).

What is an entrepreneur?

Top qualities of an entrepreneur

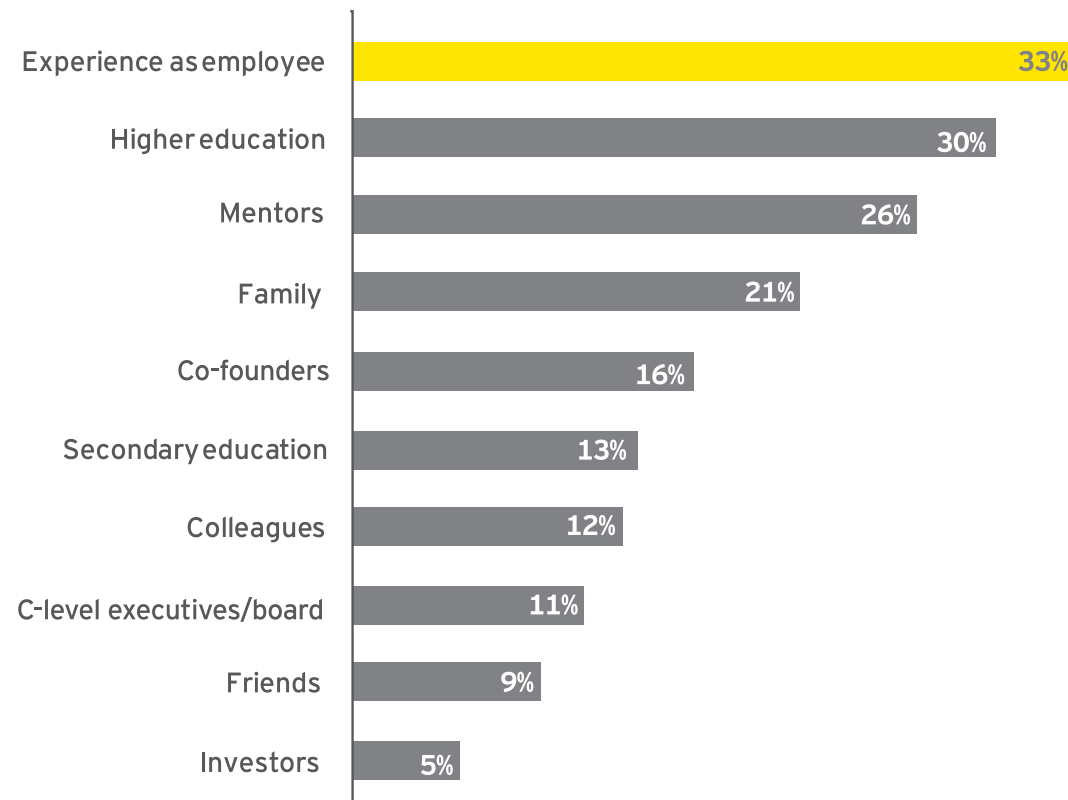
Top qualities of successful entrepreneurs



What is an entrepreneur?

The entrepreneur's DNA

Success factors ranked number one

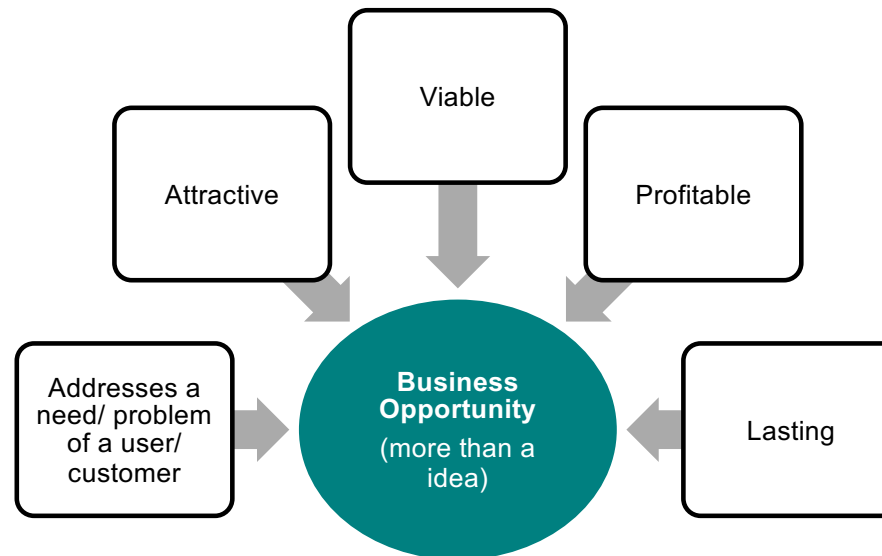


Idea vs. Business Opportunity

What is a business opportunity?

It is an attractive, lasting and timely idea of a product or service that add value to the buyer or the user.

- Attractive to all stakeholders (entrepreneur, investors, customers, etc...).
- Timely – Right timing...not before the window...not after.
- Lasting – sustainable long enough so that stakeholders can benefit from it.



.....identify / develop business opportunities / innovations ...

Which is the path to entrepreneurship?

Why is creativity important?

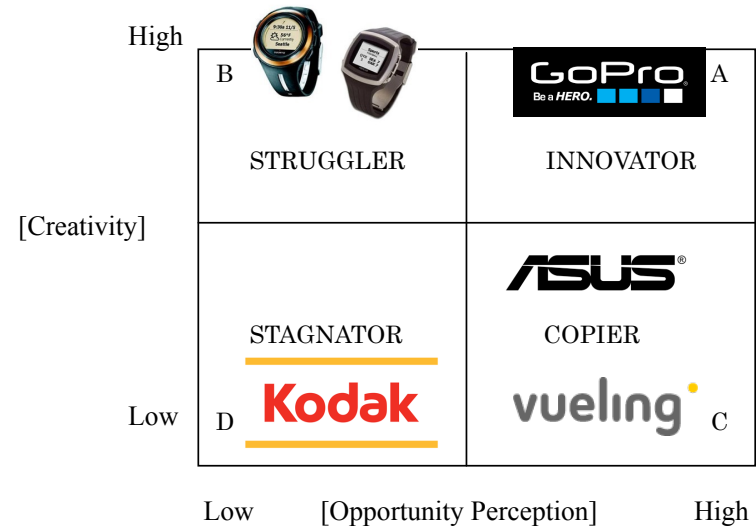
Burns' s matrix

Quadrant A: A winning combination of creativity and opportunity perception leading to an entrepreneurial action.

Quadrant B: The struggler fails to see the commercial application of the idea through lack of entrepreneurial orientation. Results in a waste of ideas.

Quadrant C: The lack of creativity potential is made for by copying and possibly improving on existing ideas.

Quadrant D: Stagnators rarely survive in a competitive business environment.



Which is the path to entrepreneurship?
Innovation impact



Ohoo!

Which is the path to entrepreneurship?

Innovation impact



Stupa ice

Which is the path to entrepreneurship?

Innovation impact



Which is the path to entrepreneurship?

Innovation impact



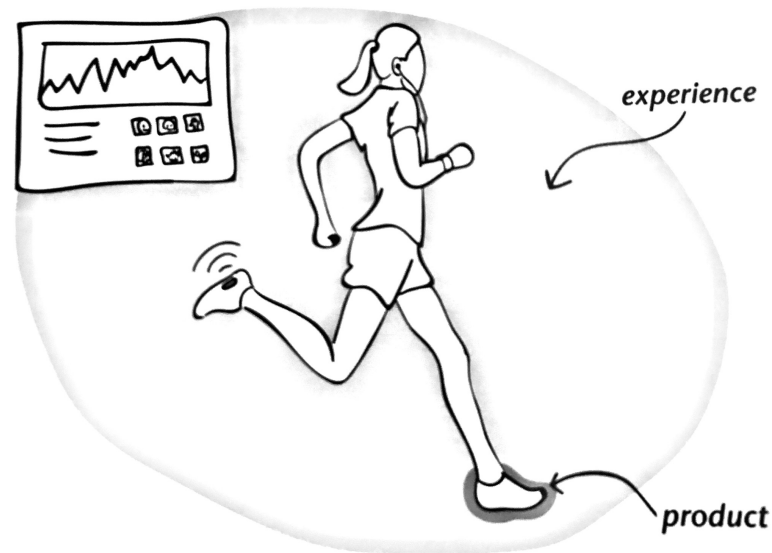
Science

'E-tattoo' could track mental workload for people in high-stake jobs, study says

Core Principles of Successful Innovation

P1. Build innovations around experiences

Experience can be defined as the art of living through event. UX (user experience) is a success factor in any type of offering. Companies has to focus in the experiences that they provide as a starting point of innovation.



Core Principles of Successful Innovation

P2. Think of innovations as Systems

An offering naturally belongs to a larger system of offerings, organizations and markets.

For example, a healthcare-related product has to be conceived in relation to all components of the system: patient, doctor, hospital, home, pharmacy, medical device manufacturer, medical supplier, insurance company, pharmaceutical company, government and so forth.

Understanding the flows that happen between components helps to understand the system-level implications for design the product but also reveals opportunities for innovation.

With this approach, simultaneous innovations in the system are possible.

.....now build your business model...

What is a business model?

Definition 1

“assumptions about what a company gets paid for”

Peter Drucker (1994)

- Markets
- Clients
- Competitors
- Technology
- Company's strengths & weakness

What is a business model?

Definition 2

“A business model describes the rationale of how an organization creates, delivers, and captures value”

Osterwalder & Pigneur (2010)

Core Principles of Successful Innovation

P5. Adopt a disciplined innovation process

What is a business model?

A business model has two parts:

all the activities associated with
making something: designing it,
purchasing raw materials,
manufacturing

all the activities associated with
selling something: finding and
reaching customers, transacting a
sale, distributing the product, or
delivering the service

Introduction

Business Model Canvas



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Business Model Canvas

5B

Author /

Date /

Version /

Key partners

Key activities

Value propositions

Customer relationships

Customer segments

Key resources

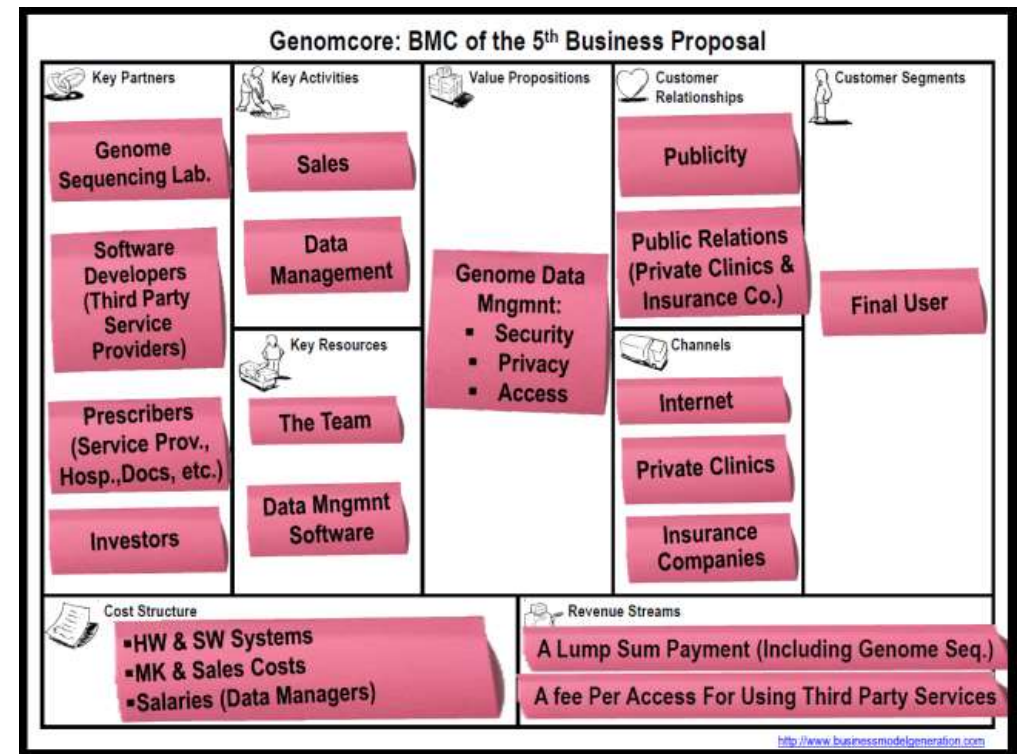
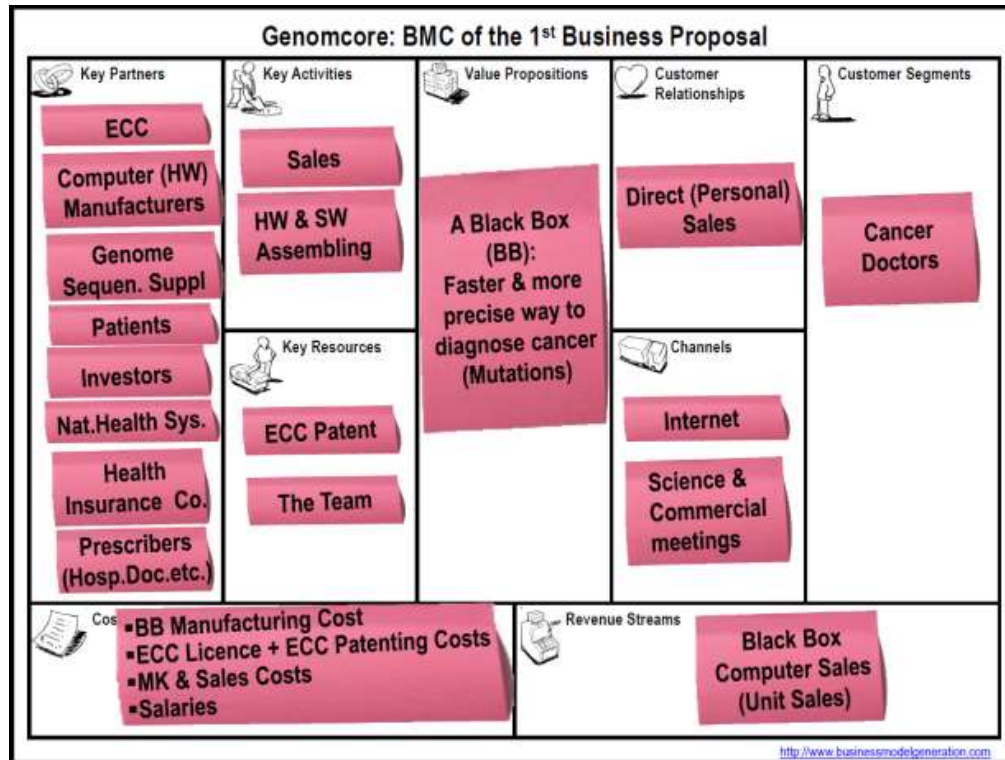
Channels

Cost structure

Revenue streams

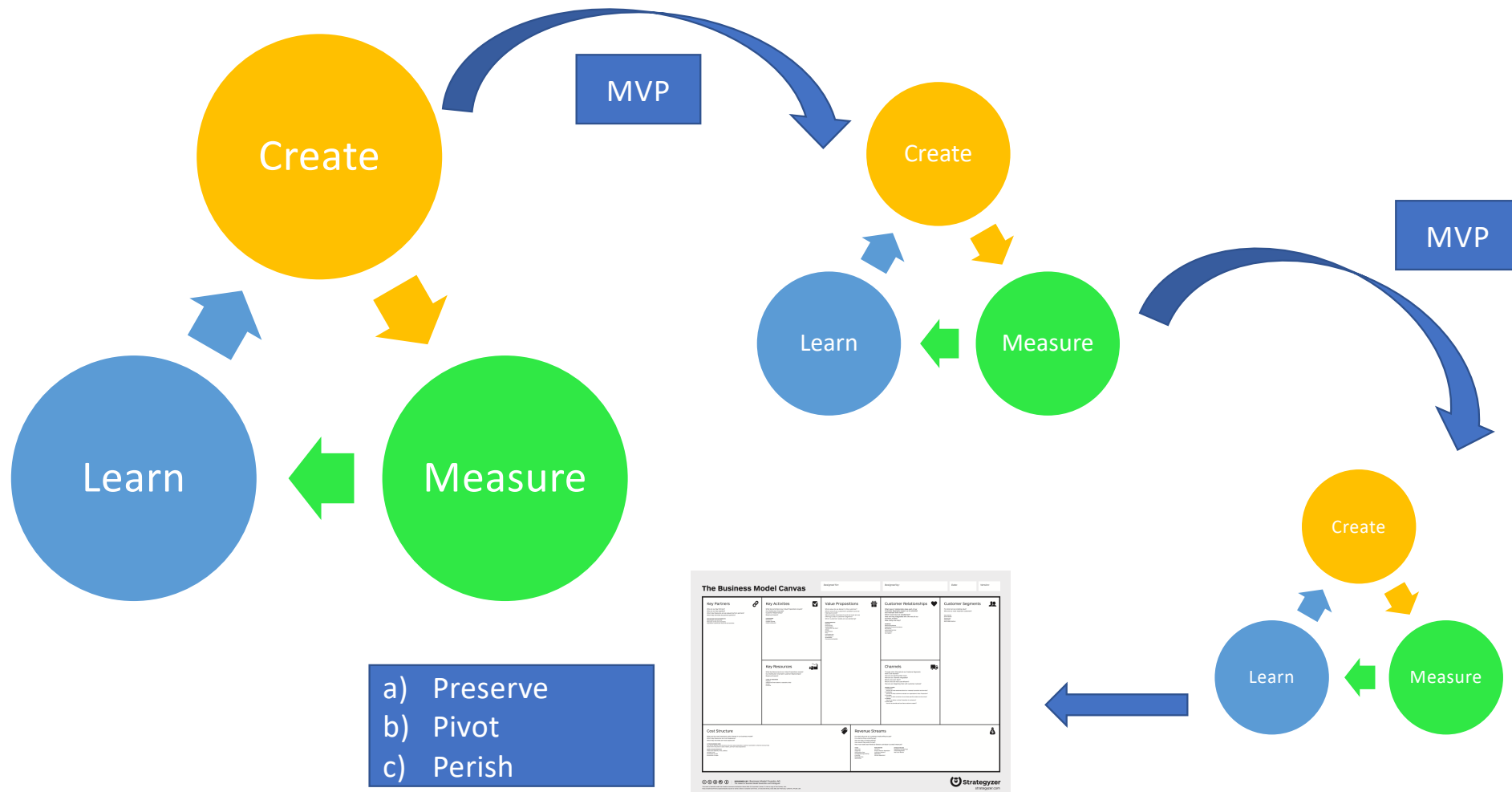
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Business Model Innovation - Transformation



Introduction

The Lean path (Ries)



Road to market

License out technology

Coolinside

surgical sealing dissector



Lean can be defined as a customer and value-centric approach to creating a flow of activities that continuously generate customer value by eliminating non-value-adding activities or “waste”

(Feld, 2000; Liker, 1997; Womack & Jones, 1997).

1. Create value for the customer. Value is created when internal waste decreases and so costs are reduced, and is increased by offering new services and/or functions valued by the customer.

2. Identify the value stream. The concept of value stream must not hide behind a wall of obscurity. The costs of every firm must be transparent to all supply chain partners.

3. Create flow. The principle of creating flow has the aim of avoiding any stoppage in the value stream by preventing the main causes of such stoppages (i.e. changes in production, breakdowns, incorrect batches in terms of quantity or timing, lack of necessary information and re-entrant loops).

Introduction

The Lean principles

4. **Produce only what is pulled by the customer.** This principle implies high responsiveness while producing the highest quality products in an efficient and valuable way. The production pull is extended uphill to the suppliers and the whole upstream supply chain.

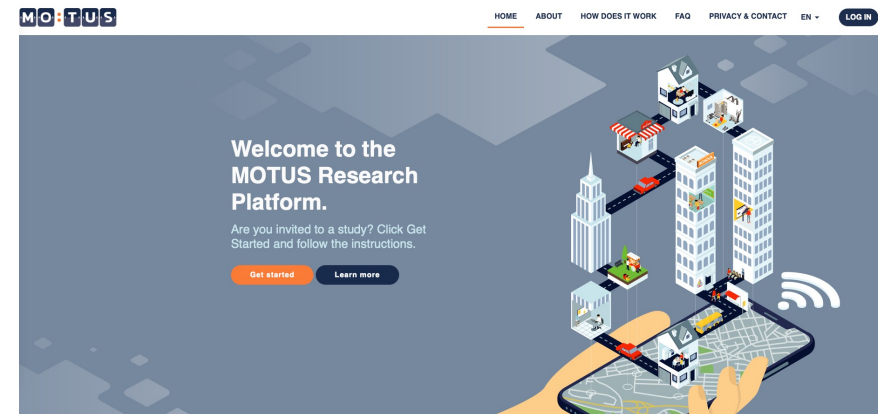
5. **Pursue perfection** by continuously identifying and eliminating waste.

Road to market Spin-off

ColorSensing
tracking true colors



**virtual
bodyworks**



Looking for Support



Personalized advice



Incubation space



Training and activities