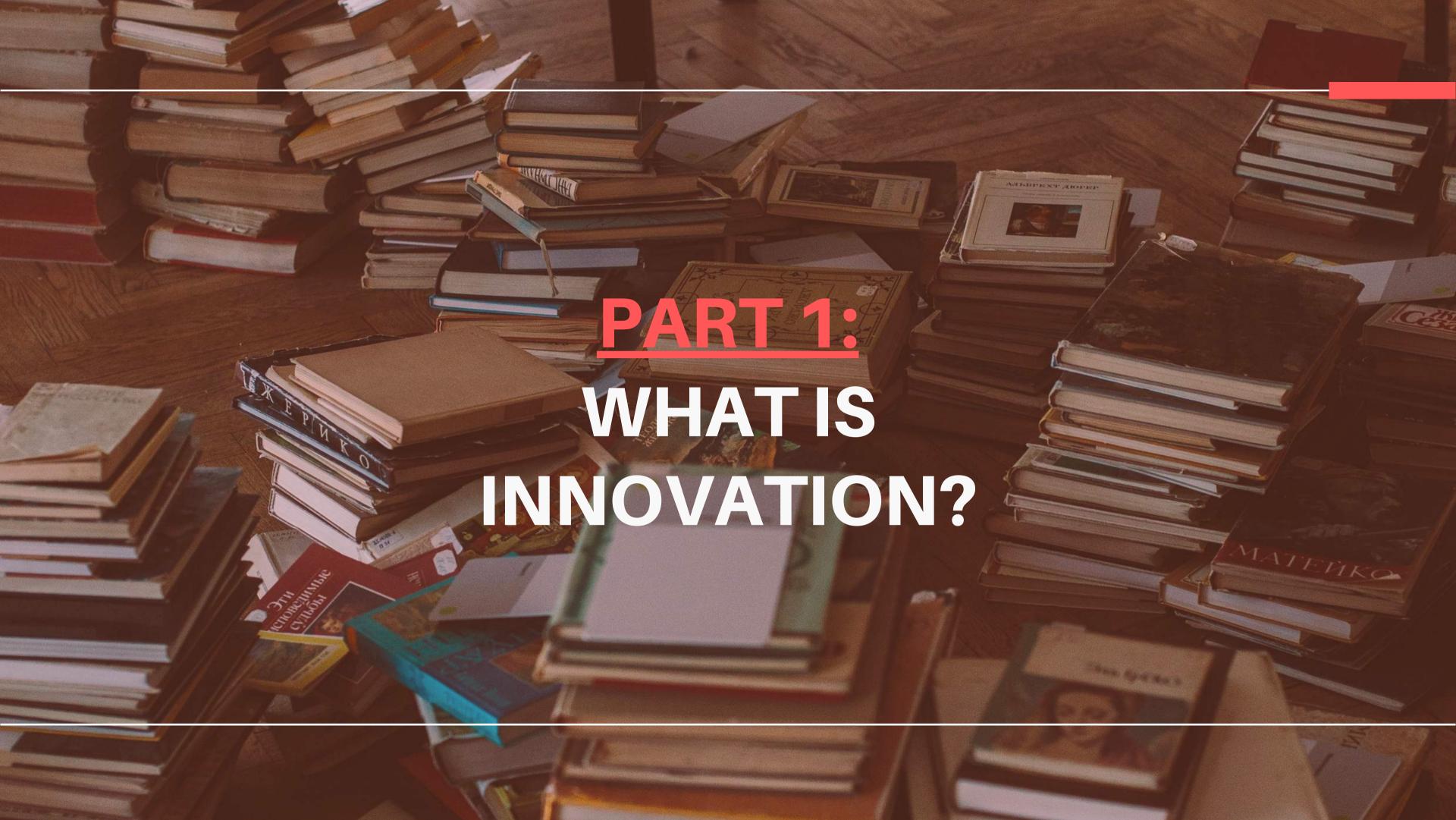# INNOVATION AND NEW BUSINESS MODELS

ALICIA K/BIDI - 22/02/2022 - ALICIA.KBIDI@UNIROMA1.IT

OBJECTIVES:

This seminar's objective is to give students a basic understanding of:

- how innovation is defined in the literature and what factors facilitate its emergence,
- how business models are defined, designed, and developed,
- how to evaluate the robustness of a business model,
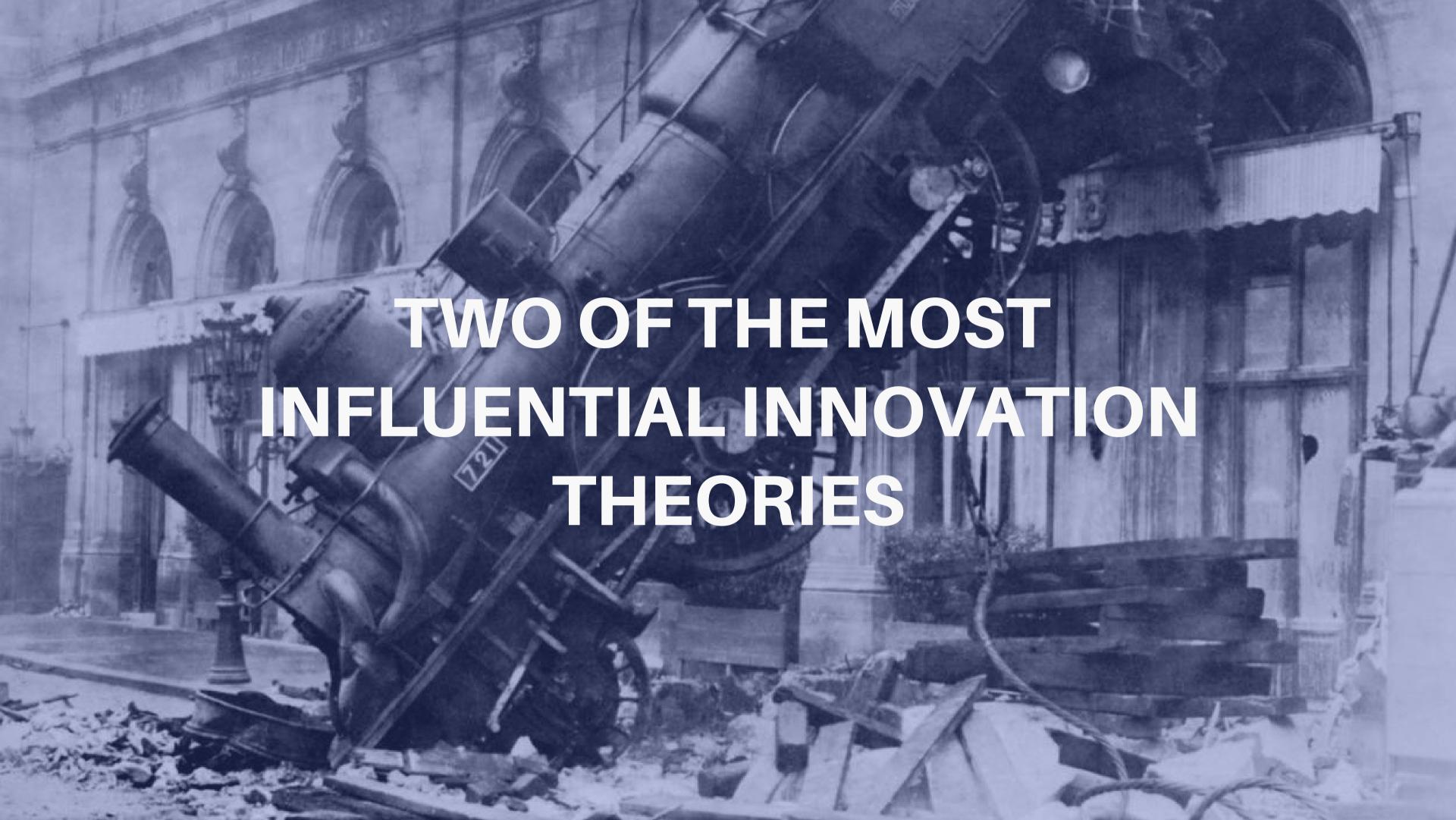- how to use the Business Model Canvas.

PART 1:
WHAT IS INNOVATION?
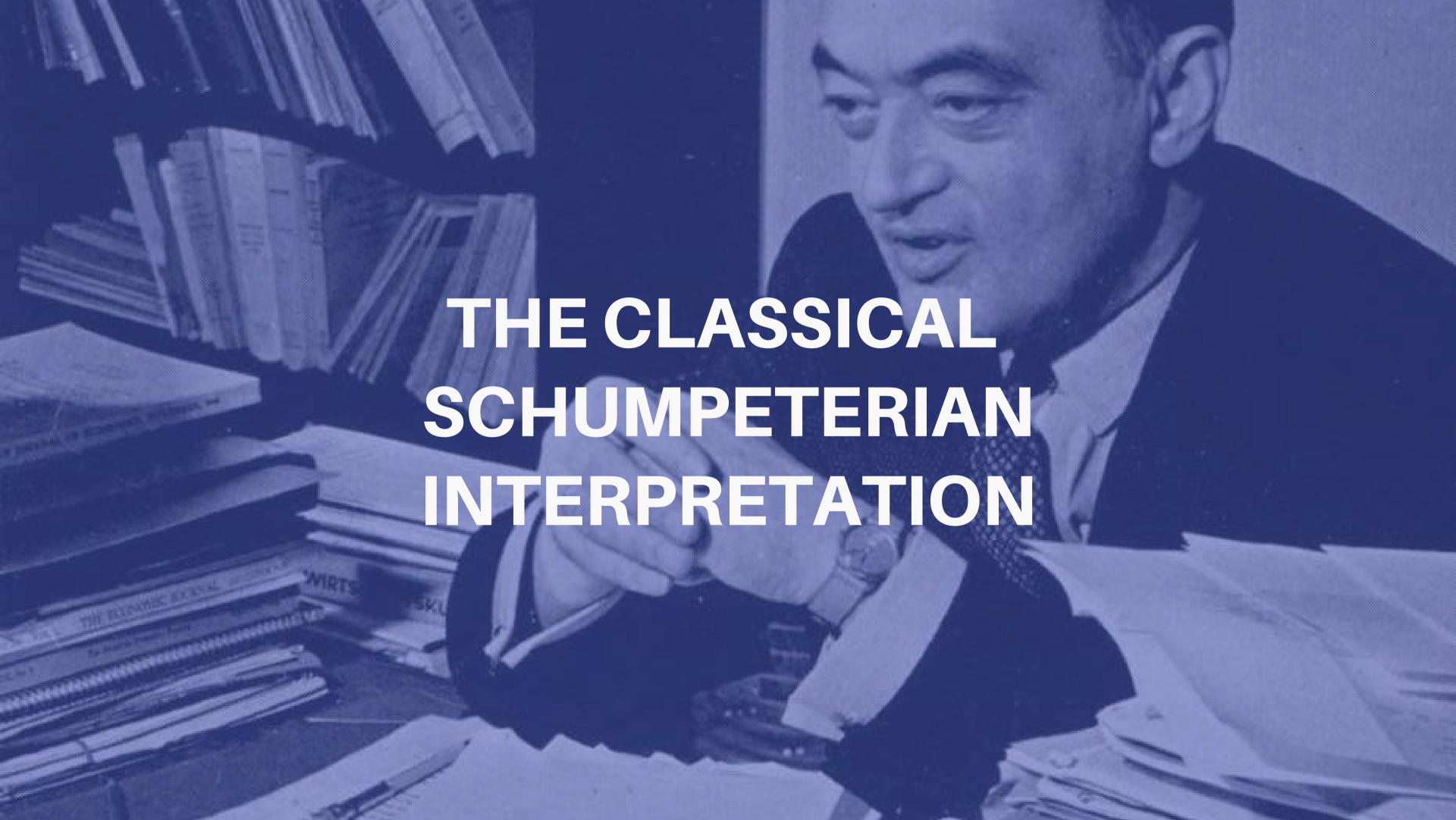
WHAT DOES THE CONCEPT OF 'INNOVATION' BRING TO MIND?

Connect to: https://pingo.coactum.de/197427

PART 1.1:
THE THEORY OF INNOVATION

INNOVATION
AS A RESEARCH FIELD
IS RECENT

INNOVATION WAVES
ARE
ACCELERATING

TWO OF THE MOST INFLUENTIAL INNOVATION THEORIES

THE CLASSICAL SCHUMPETERIAN INTERPRETATION

A THEORY OF ECONOMIC DEVELOPMENT

"A historical and irreversible change in the method of production of things"

Schumpeter,1934

Small (incremental) vs. Large-scale (radical)

THE ENTREPRENEUR AS THE AGENT OF ECONOMIC GROWTH

INNOVATION IS ABOUT CREATING ECONOMIC VALUE

"Innovation and economic growth are one of the same. Countries that innovate would grow wealthier, those that did not would stagnate"

Schumpeter, 1942
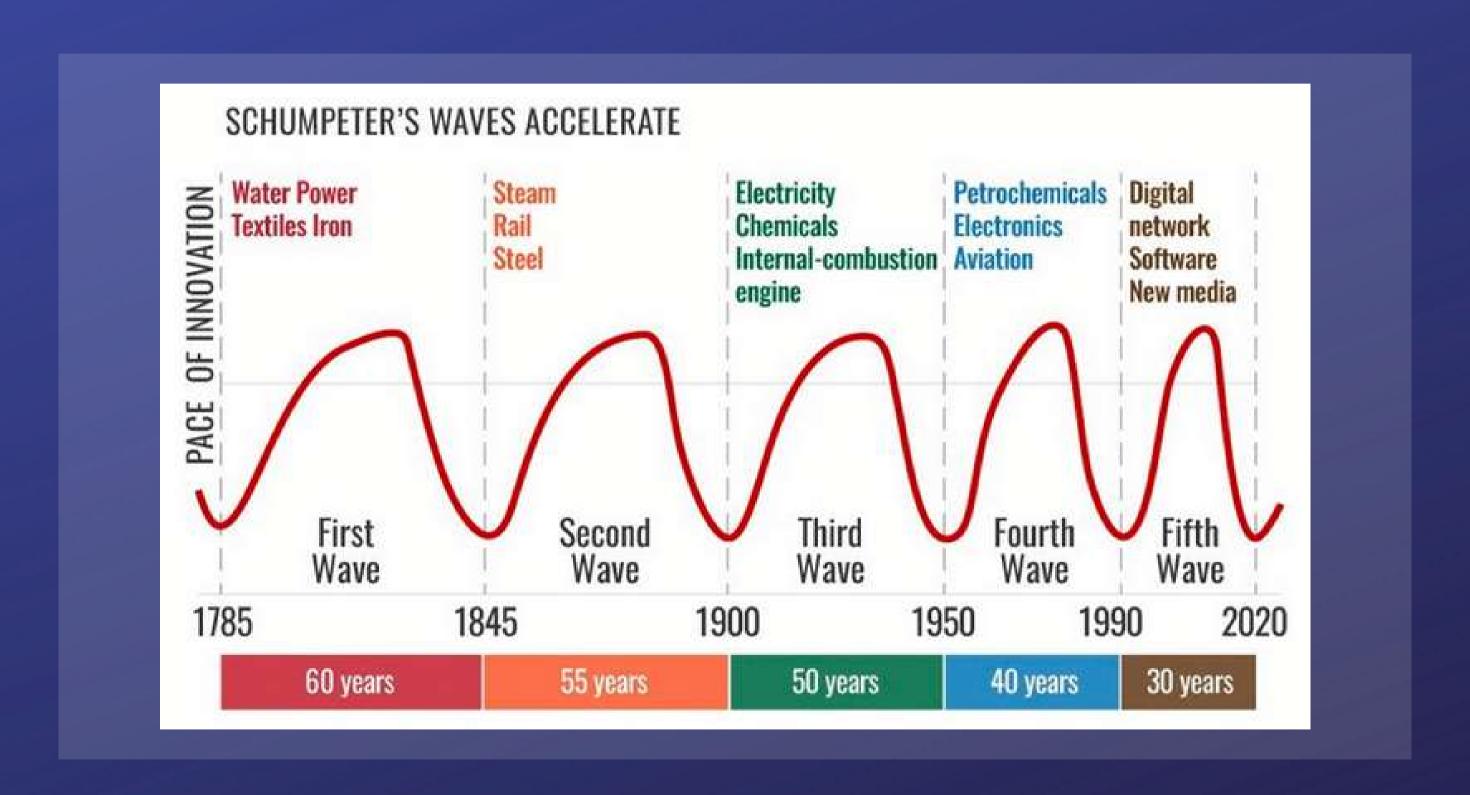
THE GALE OF CREATIVE DESTRUCTION

"Process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one."

Schumpeter, 1942

THE SCHUMPETERIAN CYCLE OF INNOVATION AND ENTREPRENEURSHIP

SCHUMPETER'S WAVES ACCELERATE

PACE OF INNOVATION

Water Power
Textiles Iron

Steam
Rail
Steel

Electricity
Chemicals
Internal-combustion
engine

Petrochemicals
Electronics
Aviation

Digital
network
Software
New media

First Wave | Second Wave | Third Wave | Fourth Wave | Fifth Wave

1785 | 1845 | 1900 | 1950 | 1990 | 2020

| 60 years | 55 years | 50 years | 40 years | 30 years |

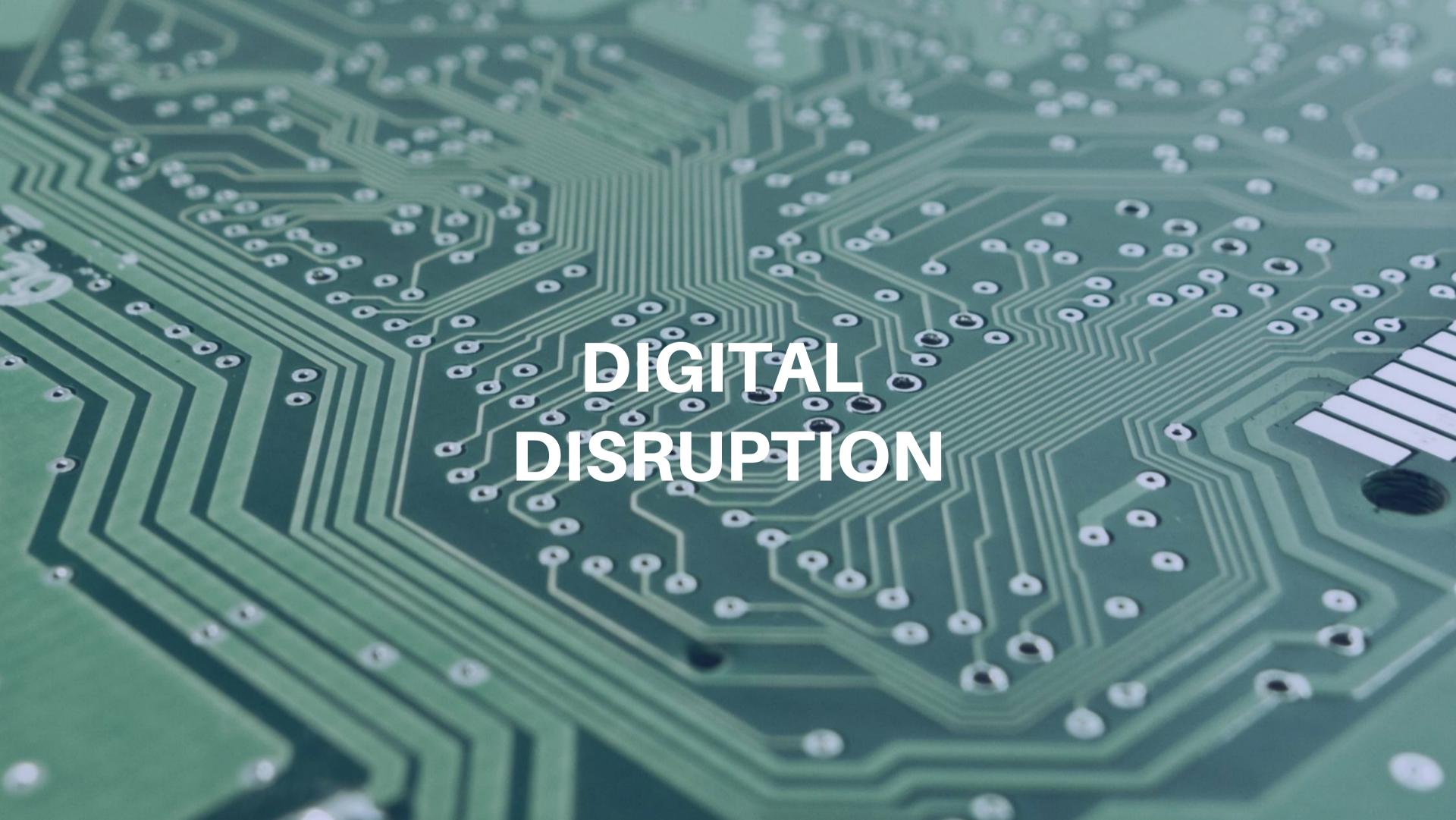Source: https://www.eira.ac.uk/news/enabling-innovation/

THE GALE OF CREATIVE DESTRUCTION: AN EXAMPLE

- Early adopters investment

- Transfer of value and efficiency gain

- Decrease in the cost of production, decrease in consumer prices, increase in demand

- Economic instability while the transfer of value occurs

- Economic growth and imitation

Number of automobiles sold in the USA:
1903: 11,235
1913: 3.6 million
1923: 20 million

Number of companies in the horse industry in the USA:
1890: 13,800
Late 1910s: 90

Jobs destroyed between 1910 and 1950:
623,000

Jobs created between 1910 and 1950:
7.5 million

DIGITAL
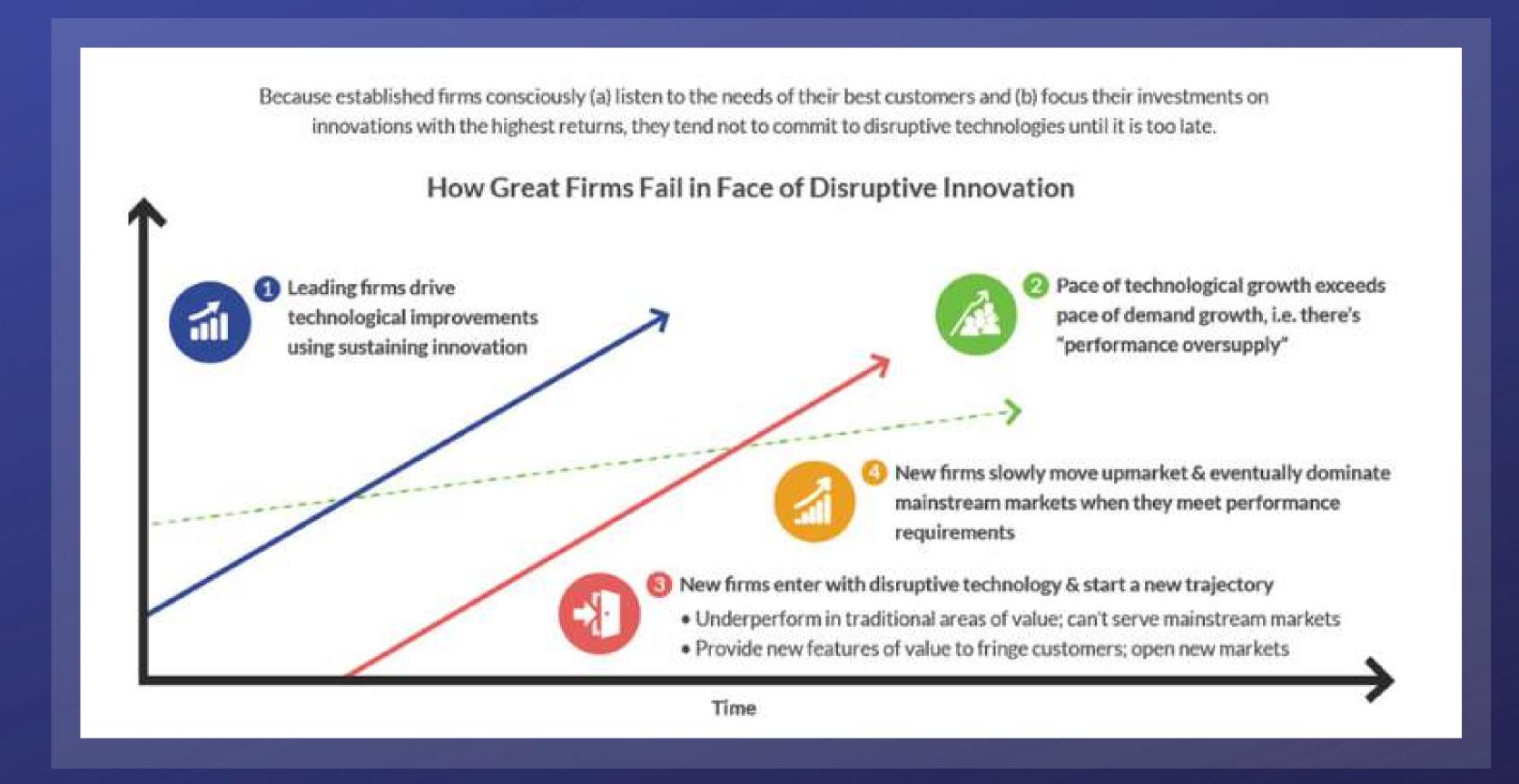DISRUPTION

DISRUPTIVE INNOVATION

Disruptive innovation is the process in which a smaller company, usually with fewer resources, is able to challenge an established business (often called an "incumbent") by entering at the bottom of the market and continuing to move up-market.

Christensen, 1995

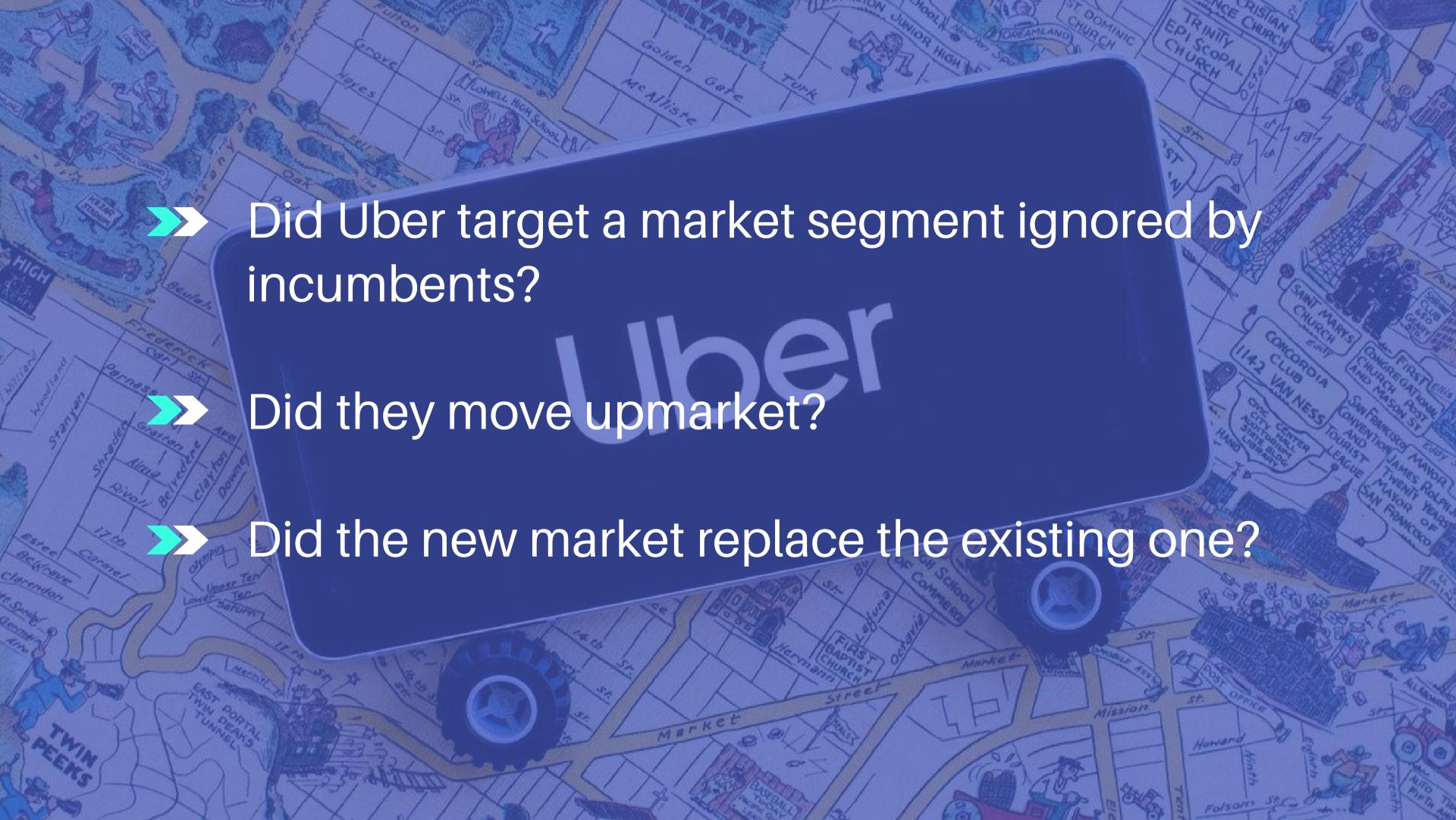Source: https://online.hbs.edu/blog/post/4-keys-to-understanding-clayton-christensens-theory-of-disruptive-innovation

THE INNOVATOR'S DILEMMA

Because established firms consciously (a) listen to the needs of their best customers and (b) focus their investments on innovations with the highest returns, they tend not to commit to disruptive technologies until it is too late.

How Great Firms Fail in Face of Disruptive Innovation

① Leading firms drive technological improvements using sustaining innovation

② Pace of technological growth exceeds pace of demand growth, i.e. there's "performance oversupply"

④ New firms slowly move upmarket & eventually dominate mainstream markets when they meet performance requirements

③ New firms enter with disruptive technology & start a new trajectory
- Underperform in traditional areas of value; can't serve mainstream markets
- Provide new features of value to fringe customers; open new markets

Time

▶▶ Did Netflix target a market segment ignored by incumbents?

▶▶ Did they move upmarket?

▶▶ Did the new market replace the existing one?

➤➤ Did Uber target a market segment ignored by incumbents?

➤➤ Did they move upmarket?

➤➤ Did the new market replace the existing one?

PART 1.2:
WHAT DO YOU THINK OF THE FOLLOWING AFFIRMATIONS?

**INNOVATION
IS ALWAYS LINKED TO THE NOTION
OF NOVELTY**

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'INNOVATION' AND 'INVENTION' ARE SYNONYMS

INNOVATION AND INVENTION IN THE LITERATURE

AUTHOR	INNOVATION	INVENTION
Freeman, 1982	Innovation is the introduction of change via something new	An invention is the creation of a new device or process
Senge, 1990	An idea becomes an innovation only when it can be replicated on a meaningful scale at practical costs	An idea has been 'invented' when it is proven to work in the laboratory
O'Sullivan and Dooley, 2009	Innovations are more than the creation of something novel. Innovations also include the exploitation for benefit by adding value to customers.	Inventions do not need to fulfill any useful customer needs and do not need to include the exploitation of the concept in a market

INNOVATIONS ALWAYS DELIVER ECONOMIC VALUE

INNOVATING MEANS DESTROYING SOMETHING EXISTING

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GODIN'S CLASSIFICATION

Innovation as a process of doing something new

Innovation as:
- Imitation
- Invention
- Discovery

Innovation as human abilities for creative activity

Innovation as:
- Imagination
- Ingenuity
- Creativity

Innovation as change in all spheres of life

Innovation as:
- Cultural change
- Social change
- Organizational change
- Political change
- Technological change

Innovation as commercialization of new products

Innovation as the transposition of an imitation/invention/discovery to the "business world"

BEING INNOVATIVE IS
A STATE OF MIND,
IT CANNOT BE LEARNED

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THE DRIVERS OF INNOVATION

A paper from 2014 analysed 12 years of literature on innovation published at top conferences and found the most significant drivers of innovation to be:

PERSONAL

- Personality
- Motivation
- Cognition

GROUP

- Structure
- Climate
- Leadership
- Task characteristics

ORGANISATIONAL

- Structure
- Culture
- Strategy
- Resources

Source: Zennouche M., Zhang J., W.W. Bo, Factors influencing innovation at individual, group and organisational levels: A content analysis January 2014, International Journal of Information Systems and Change Management 7(1):23-42

THE DRIVERS OF INNOVATION: PERSONAL LEVEL

PERSONALITY DRIVERS
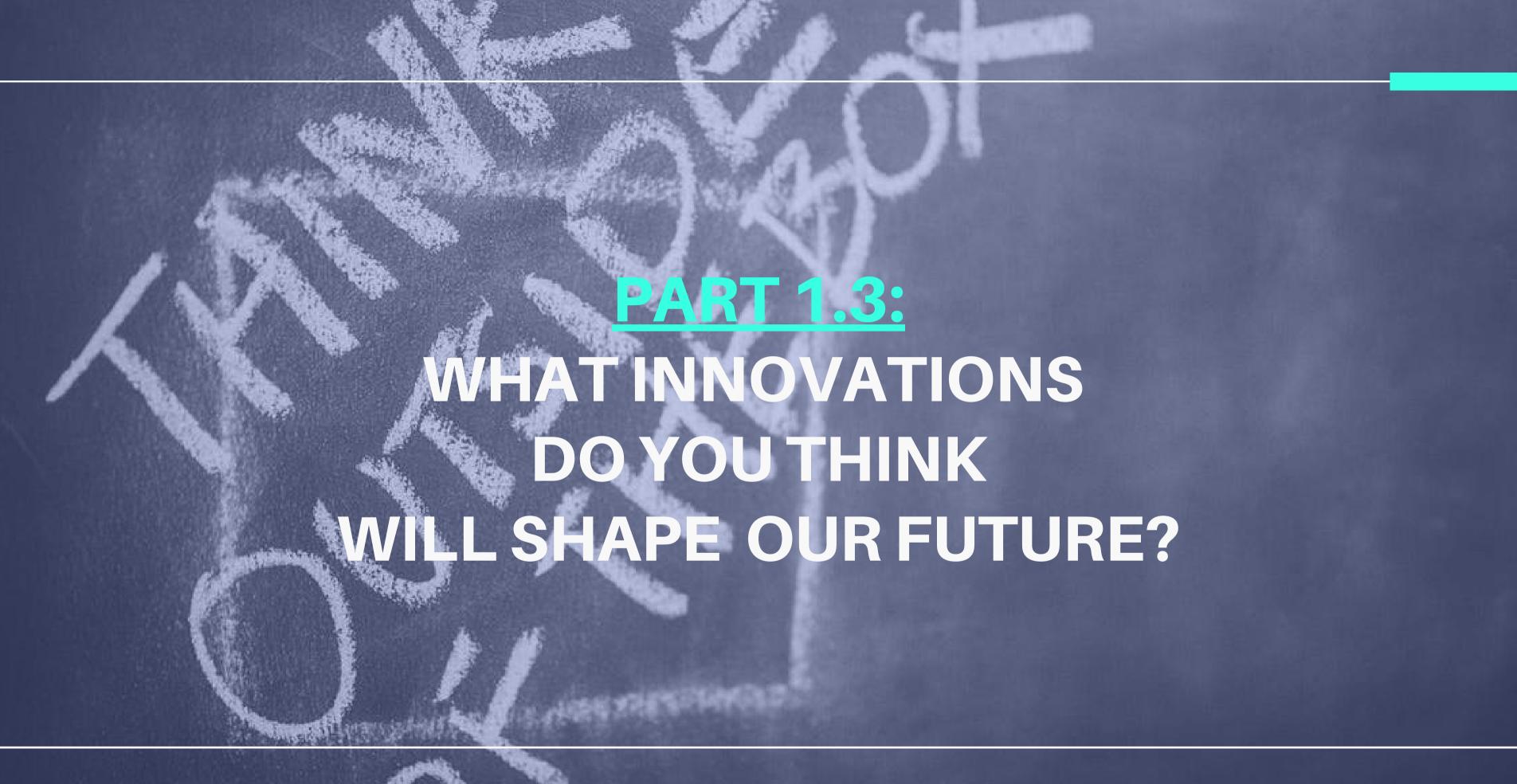
- Openness to new experience
- Autonomy
- Self-efficacy
- Internal locus of control

MOTIVATION DRIVERS
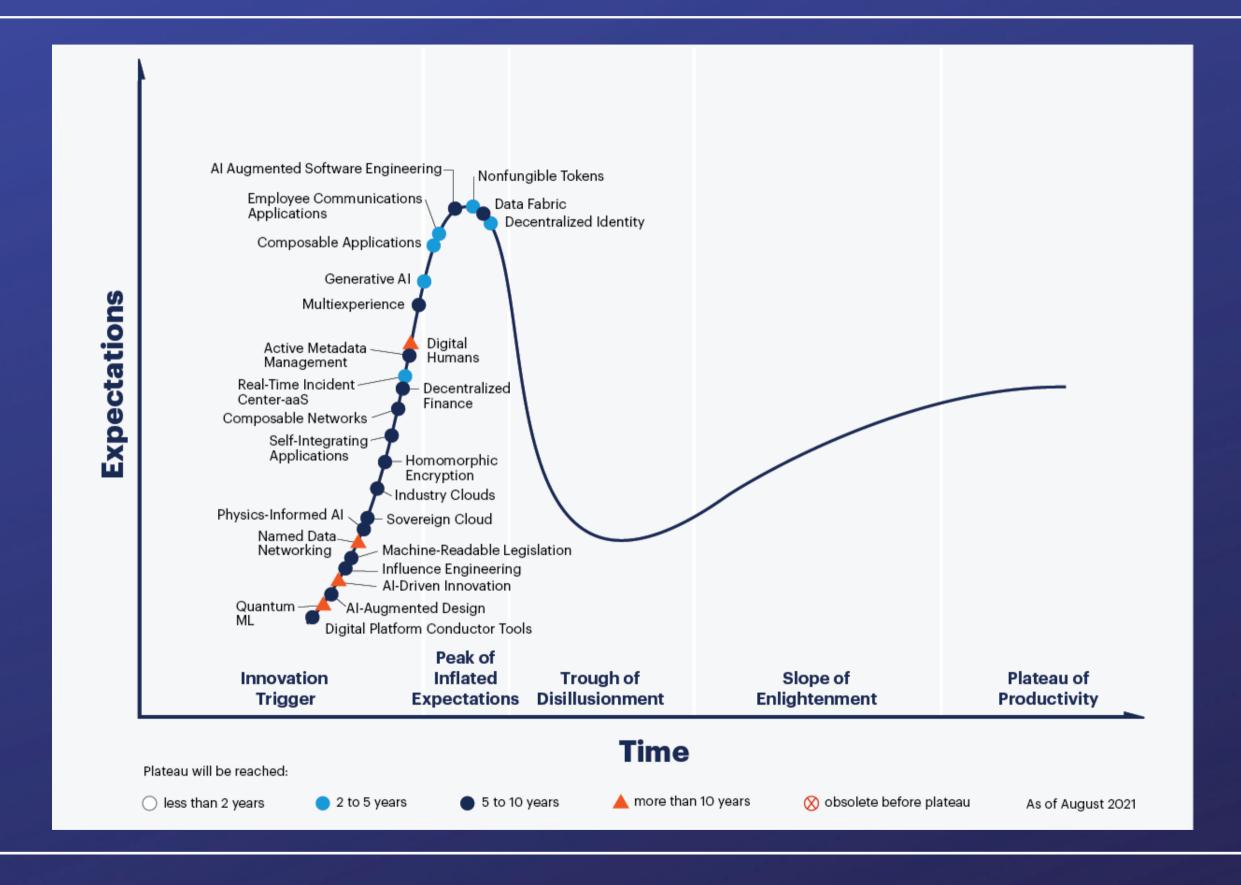
- Intrinsic motivation
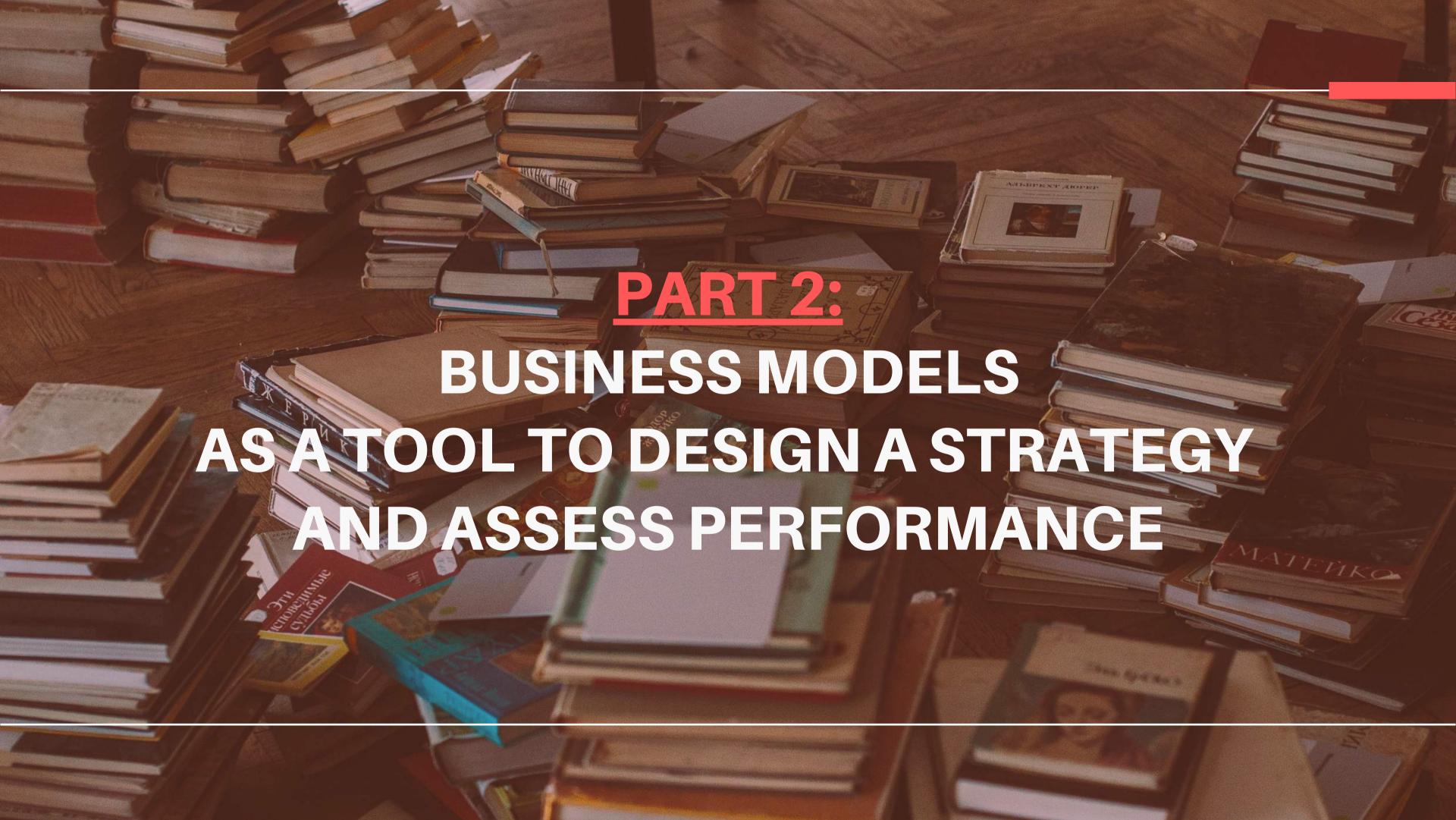
COGNITION DRIVERS
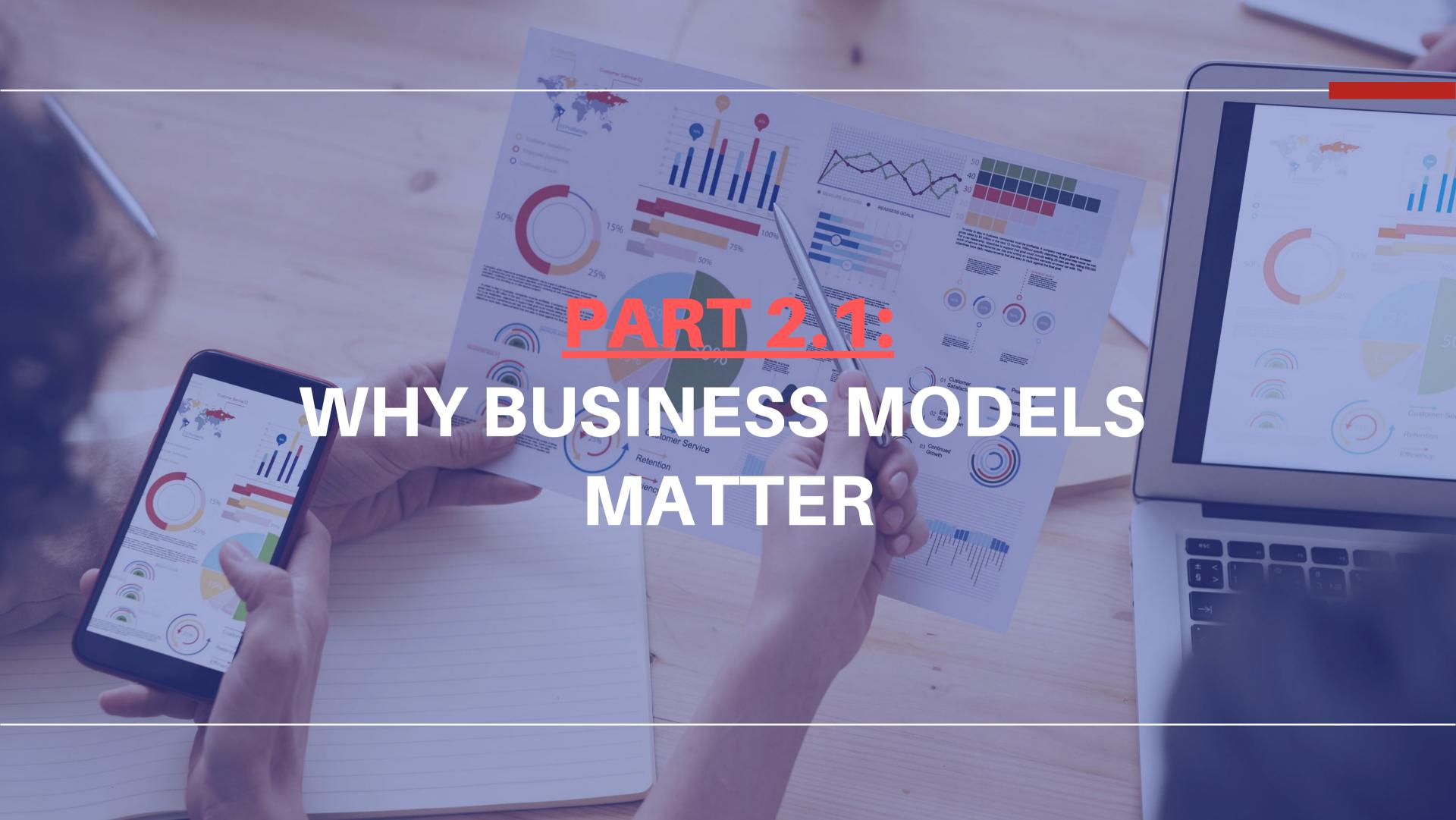
- Balance between convergent and divergent thinking

PART 1.3:
WHAT INNOVATIONS DO YOU THINK WILL SHAPE OUR FUTURE?

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GARTNER'S HYPE CYCLE FOR EMERGING TECHNOLOGIES, 2021

PART 2:
BUSINESS MODELS AS A TOOL TO DESIGN A STRATEGY AND ASSESS PERFORMANCE

PART 2.1:
WHY BUSINESS MODELS MATTER

"*Models attempt to* structure [...] knowledge *so that it can be* extrapolated *to future applications. Models attempt to* describe both facts and the relationships between them *to create a* dynamic representation *that can identify what the past and present mean to the future.*

Most models do not claim to be exact representations of a real system, but rather capture useful information *and make* predictions *better than a less structured view of that information*"

Roger Smith, 2008

BUSINESS MODELS
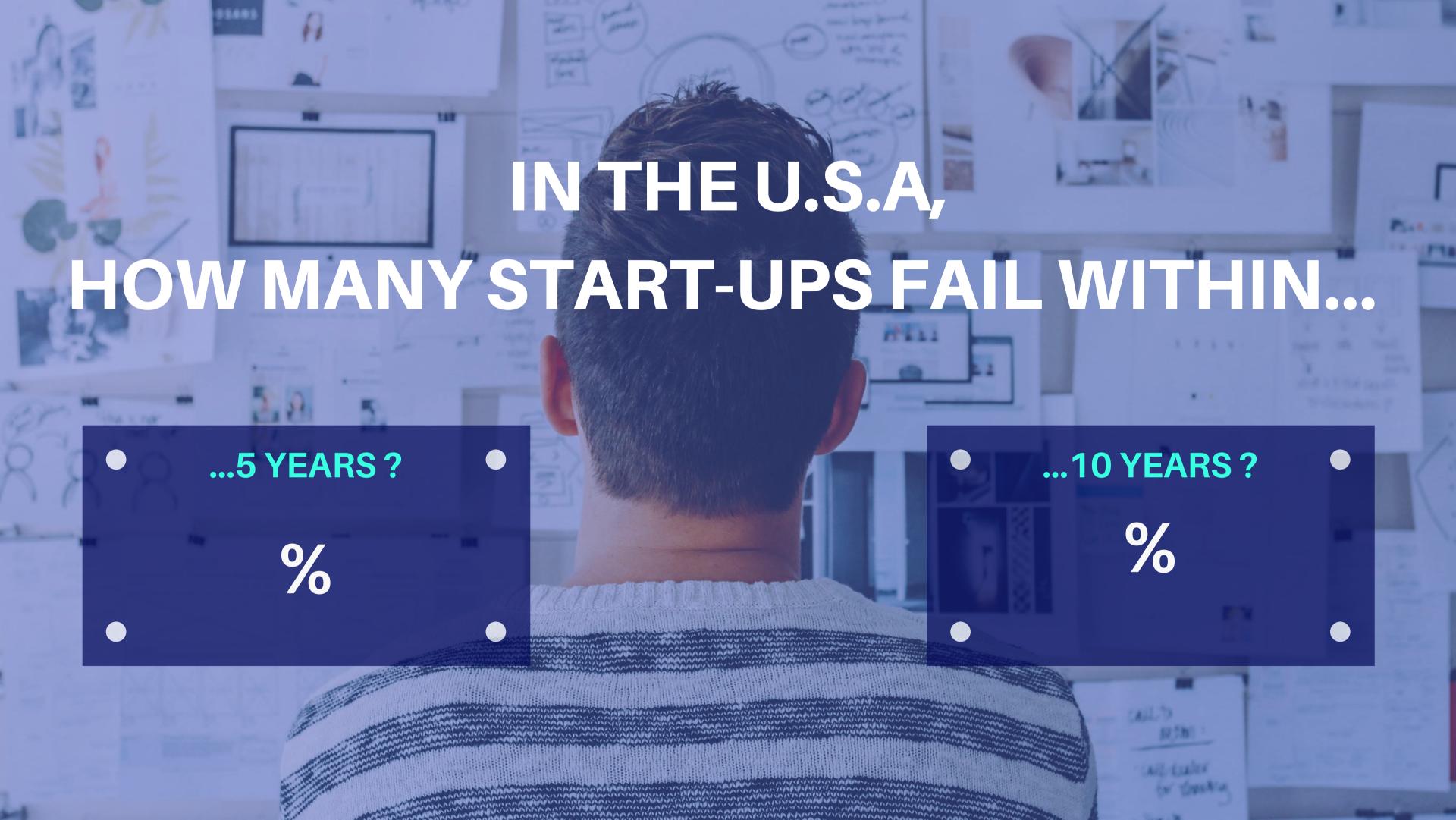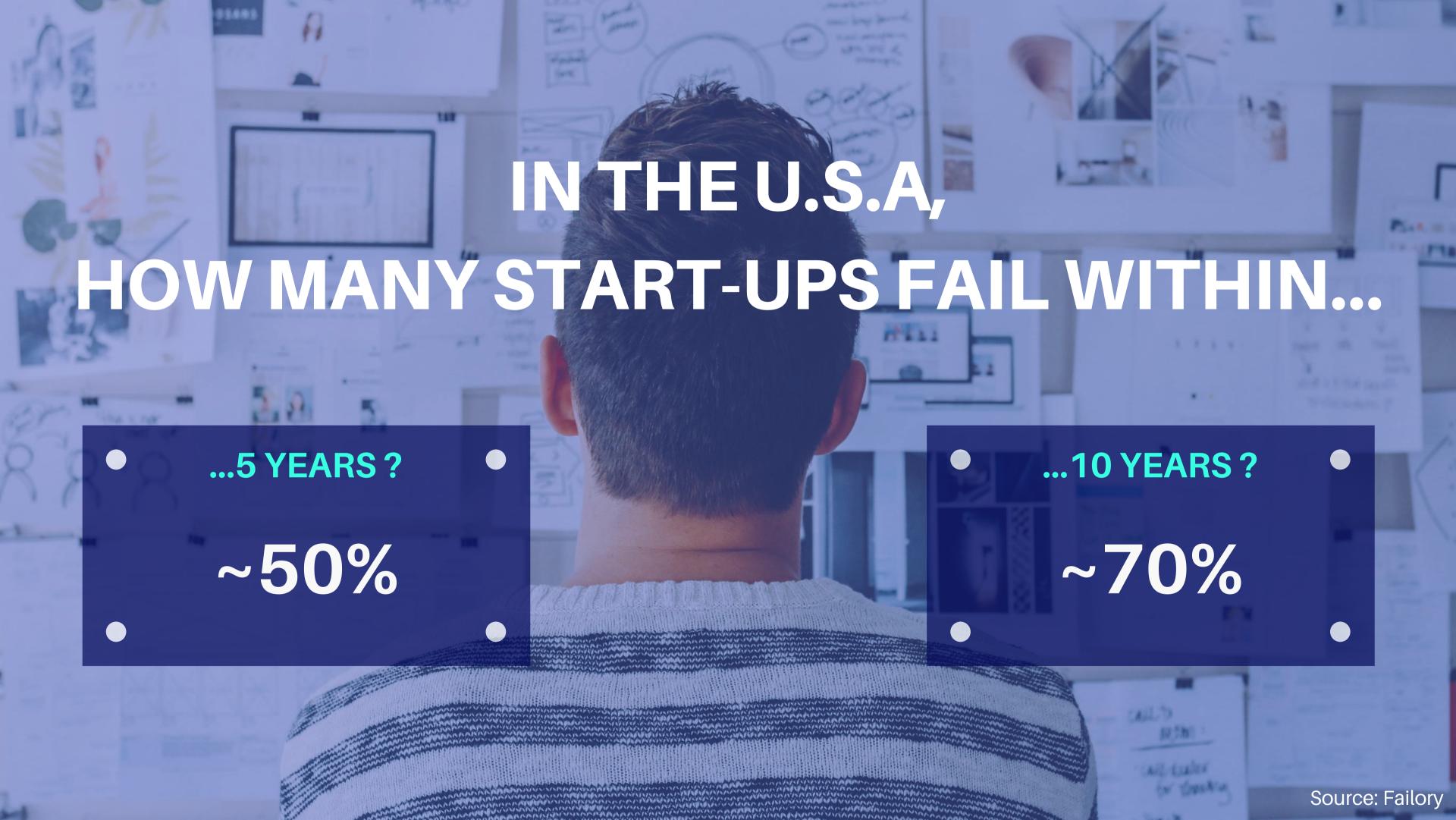
" Stories that explain how enterprises work. A good business model answers [...] age-old questions, 'Who is the customer? And what does the customer value?' It also answers the fundamental questions every manager must ask: How do we make money in this business? What is the underlying economic logic that explains how we can deliver value to customers at an appropriate cost?"

Joan Magretta, 2002

Source: "Why business models matter", Joan Magretta, May 2002. https://hbr.org/2002/05/why-business-models-matter

IN THE U.S.A, HOW MANY START-UPS FAIL WITHIN...

...5 YEARS ?

%

...10 YEARS ?

%

IN THE U.S.A,
HOW MANY START-UPS FAIL WITHIN...

...5 YEARS ?

~50%

...10 YEARS ?

~70%

Source: Failory

WHY DO START-UPS FAIL?

LACK OF MARKET UNDERSTANDING - 34%

Including: product without business model, mistimed product, ignoring customers, etc.

POOR MARKETING/UX - 22%

Including: product's attributes (unfriendly product), pricing, etc.

POOR TEAM/ROLE REPARTITION - 18%

Responsibilities' overlap. Diversity: mixed team with one hacker and one hustler have 2.9x more user growth

POOR FINANCING STRATEGY - 16%

Business Models should be viable and scalable. Funds should be spent intelligently

TECHNICAL, LEGAL & OPERATIONAL PROBLEMS - 10%

Resulting from a lack of expertise or a wrong market analysis

EXAMPLES OF FAILED START-UPS

Color Labs - Social Media

- Fiscal irresponsibility and high burn rate
- Poor, unproven product
- Wrong market analysis

Reasons why they failed: Ran out of cash ✓ Ignored customers ✓ Did not understand the market ✓

Beepi - Secondhand car marketplace

- Bad execution of the founder's vision
- Bad operation of the company, high burn rate
- Wrong understanding of customer's needs

Reasons why they failed: Ran out of cash ✓ Failed to deliver the promise ✓ Aggressive growth without business model ✓ Misunderstood customer's needs ✓

BUSINESS MODELS
ARE NOT STATIC

TYPES OF BUSINESS INNOVATION

MARKET

NEW

RECOMBINANT

Creating new applications of existing technologies by recombining them.

Ex: Uber, Waze

RADICAL

Radical change that leads to the creation of completely new industries. Rare form of innovation that allows society to take a leap forward.

Ex: The industrial revolution, the internet

EXISTING

INCREMENTAL

Improvement of an existing product in terms of performance, features, or costs. Incremental = sustaining

Ex: Iphone

DISRUPTIVE

Innovation that radically transforms an existing market or industry.

Ex: Netflix, Wikipedia

EXISTING   **NEW**

TECHNOLOGY

PART 2.2:

THE BUSINESS MODEL CANVAS
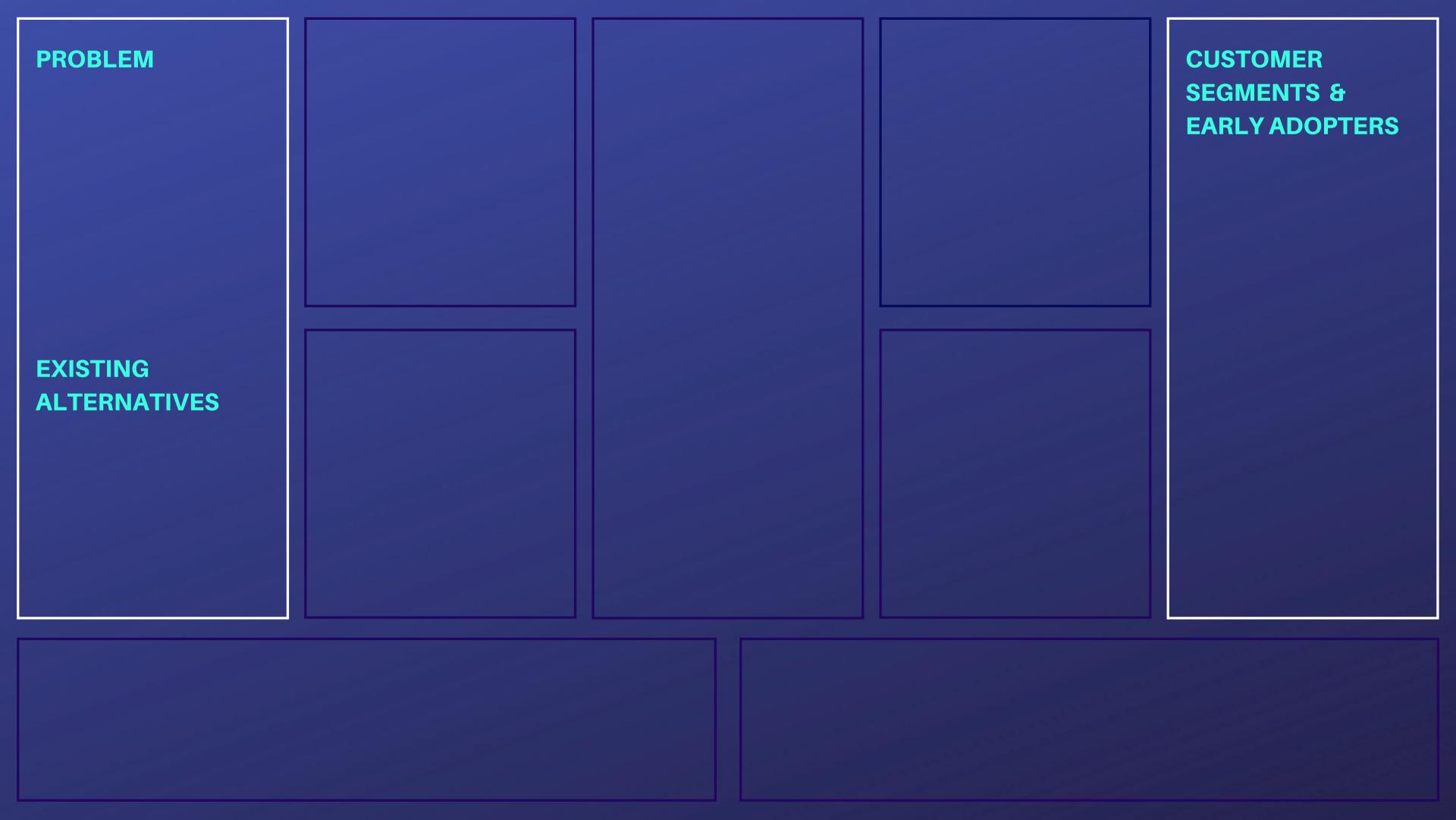
KEY PARTNERS

KEY ACTIVITIES

VALUE PROPOSITIONS

CUSTOMER RELATIONSHIPS

CUSTOMER SEGMENT

KEY RESOURCES

CHANNELS

COST STRUCTURE

REVENUE STREAMS

PROBLEM	SOLUTION	UNIQUE VALUE PROPOSITION	UNFAIR ADVANTAGE	CUSTOMER SEGMENTS & EARLY ADOPTERS
	KEY PARTNERS			
EXISTING ALTERNATIVES	KEY METRICS	HIGH LEVEL CONCEPT		

COST STRUCTURE	REVENUE STREAMS

STEP 1:

MARKET RESEARCH

PROBLEM

EXISTING ALTERNATIVES

CUSTOMER SEGMENTS & EARLY ADOPTERS

TYPES AND PURPOSE

Market research consists in collecting information to understand if there is a need for your product and help develop your business plan

Customer-related information:
- Exploratory research: focused on finding the problem(s), usually through open-ended interviews (qualitative research). Understand underlying reasons, opinions, and motivations
- Specific research: focused on diving in the problem(s) raised by exploratory research with smaller samples

Market-related information:
- Industry, competition, target market, products & services and operations management
- Found from public, commercial or internal sources
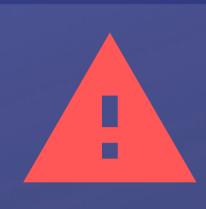
UNDERSTAND YOUR CUSTOMERS

ASK YOURSELF

- Who are my customers, who are my users?
- Who/what influences their purchasing decision?
- What is the problem/need I want to solve for them?
- Am I adding value to my customers' life?
- Are there enough people who are facing this issue?
- Would they pay to solve this issue?
- How much would my customers be ready to pay?

DON'T
- "My users = My customers"
- "My customers are all identical"
- "If my product is good, someone will buy it"

DO
- Research
- If you do not know, ask someone who does
- Think of ways to create value and connection with your customers

UNDERSTAND CUSTOMER NEEDS

In marketing, a need is a user's desire for a product's or service's benefit.

A functional need is a basic need rooted in logic.

An emotional need appeals to the emotional connection to the product.

A need becomes **demand** when combined with an **ability to buy.**

THE IMPORTANCE OF EMOTIONAL BENEFITS

▶ **AMAZON PRIME**
Fast delivery - Power and immediate gratification

▶ **NIKE**
Apparel - Feeling of greatness

▶ **REDBULL**
Energy drink - Feeling you can achieve the impossible

MARKETING PERSONAS

LEA RUSSI

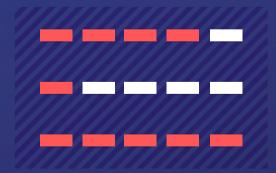" I play games with my friends at the weekend. I mostly do dungeons and quests"

10H/week

10% of the player base

GIORGIO FONTANA

"I do not care about quests, I want to fight other players and world bosses to get stronger"
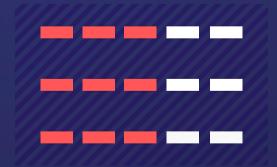
30H/week

40% of the player base

FABIO COSTA

"I play a bit every day after work, it relaxes me. I made some friends in-game and we play together"

14H/week

20% of the player base

QUESTS			
PVP			
PVE			
TIME SPENT			
% OF PLAYERS			

DO CUSTOMERS KNOW
WHAT THEY WANT?

THE FIVE TYPES OF NEEDS

STATED NEEDS >> "i want a car"   "i want to buy meat"

REAL NEEDS >> "i need a mean of transportation with low operating costs"   "i am planning a gathering at home"

UNSTATED NEEDS >> "i want a good aftersale service"   "I am hoping to impress my guests"

DELIGHT NEEDS >> "i want the car to include some gift"   "the butcher gave me the best pieces"

SECRET NEEDS >> "i want the car as a status symbol"   "my event was better than the one of Patrick"

UNDERSTAND YOUR MARKET

Find Your Competitive Position with a **SWOT** Analysis

A SWOT analysis is a strategic planning tool which helps specify the objectives of the business by identifying the internal and external factors that are favorable and unfavorable to achieving those objectives

▶ Strengths

What advantages does your company have? What do you do better than anyone else? What are your unique selling points?

▶ Weaknesses

What areas can you improve on? What does your company lack? What do your competitors do better than you?

▶ Opportunities

What changes in technology, policies, and social patterns can be a growth opportunity for the company?

▶ Threats

What are the obstacles to your company's growth? Who are your competitors? What changing factors can threaten your company's position?

Analyse external factors with a PESTLE analysis

A PESTLE analysis is a framework to analyse the key factors influencing an organisation from the outside. It offers insight into the macro-economic factors impacting an organisation (newly created or existing)

Political

Government policy, political stability, bureaucracy, corruption, foreign trade policy, funding grants & initiatives, etc.

Technological

Infrastructure, consumer access to technology, competitor technology and development, emerging technologies, automation, research and innovation, technology incentives, etc.

Legal

laws on: discrimination, antitrust, employment , consumer protection, copyright, patent, health and safety , tax policy, trade restrictions, environment etc.

Economic

Economic trends, growth rates, industry growth, seasonal factors, international exchange rates, International trade, labor costs, consumer disposable income, unemployment rates, taxation, inflation, interest rates, availability of credit, monetary policies, raw material costs, etc.

Social

Attitudes and shared beliefs: money, customer service, imports, religion, taboos, health, work, leisure, the environment; population growth and demographics, immigration/emigration, family size/structure, lifestyle trends, etc.

Environmental

Define your corporate strategy with the **Porter's Five Forces** analysis

Porter's Five Forces model can be applied to any industry or segment of the economy to understand the underlined level of competition within the industry and enhance a company's long-term profitability

THREATS
OF
NEW ENTRANTS

BARGAINING
POWER
OF
SUPPLIERS

RIVALRY
BETWEEN
EXISTING
COMPETITORS

BARGAINING
POWER
OF BUYERS

THREAT OF
SUBSTITUTE
PRODUCT OR
SERVICE

STEP 2:
DESIGN A SOLUTION

SOLUTION

KEY PARTNERS

IMAGINE YOUR PRODUCT

- What are the main features of my product/ service?
- Are these features indispensable or optional for my customers?
- How does my initial customer and market research help me improve the product/service?
- What partners will help me deliver value to my customers?

DON'T

- Build a product or service before doing market research
- Assume no one had the same idea
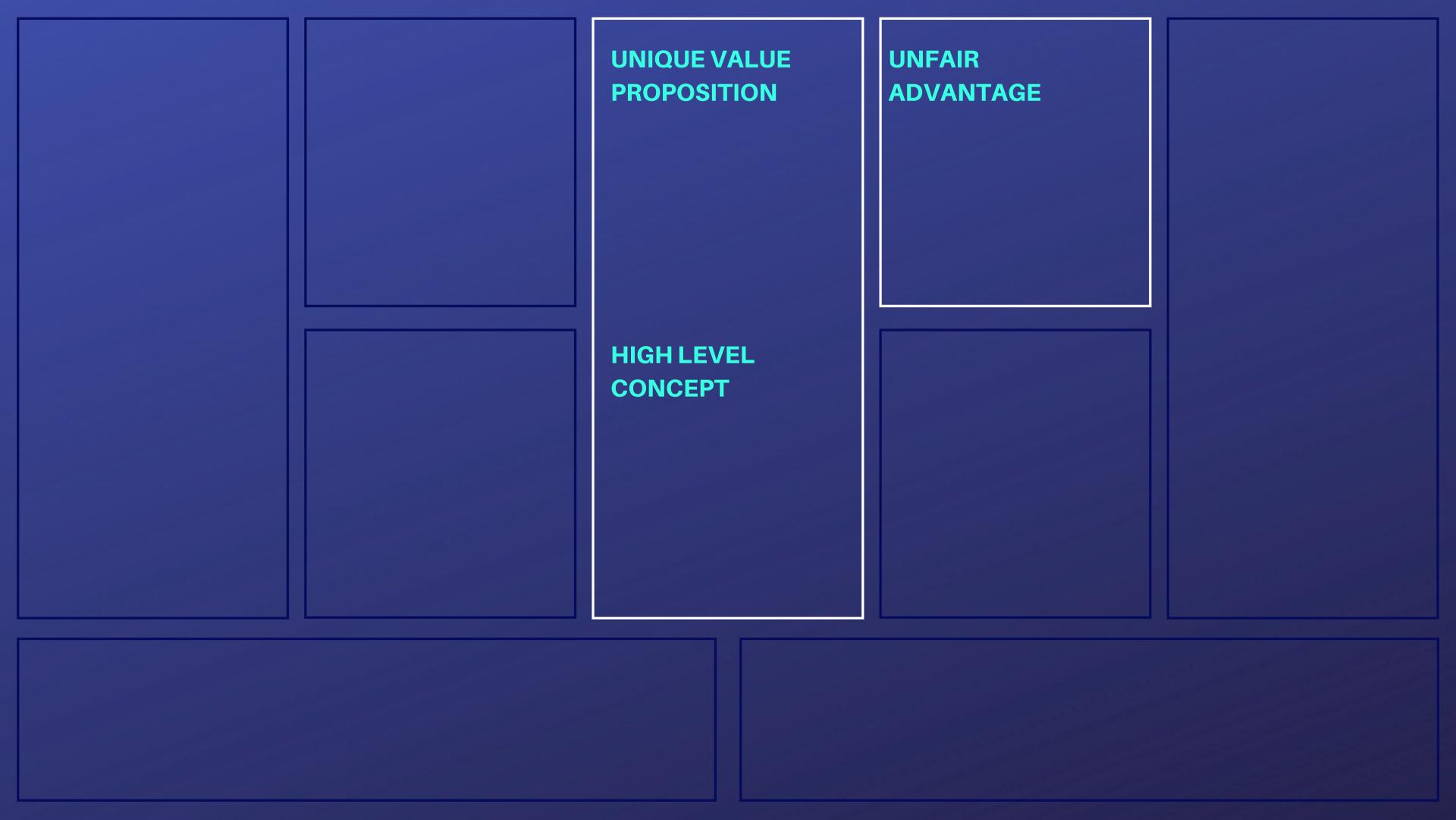- Add too many 'nice to have' features

DO

- Get advice from specialised people from the industry
- Talk to your customers
- Create a culture of feedback

STEP 3:
DEFINE WHAT IS UNIQUE ABOUT YOUR BUSINESS MODEL

UNIQUE VALUE PROPOSITION

UNFAIR ADVANTAGE

HIGH LEVEL CONCEPT

"WHATEVER IS WELL-CONCEIVED
IS CLEARLY SAID"

Nicolas Boileau-Despreaux

DEFINE YOUR UNIQUE VALUE PROPOSITION

A value proposition refers to the value a company promises to deliver to customers should they choose to buy their product.

A value proposition is also a declaration of intent or a statement that introduces a company's brand to consumers by telling them <u>what</u> the company stands for, <u>how</u> it operates, and <u>why</u> it deserves their business.

Source: Investopedia

UBER: THE SMARTEST WAY TO GET AROUND

Offering convenience while pointing our everything that is wrong with traditional taxis without explicitly saying it. Hassle-free, quick, affordable

IPHONE: THE EXPERIENCE IS THE PRODUCT

Offering a unique experience, a unique design, easy of use. Apple is not selling a phone with different features, it is selling a different experience

SLACK: BE MORE PRODUCTIVE AT WORK WITH LESS EFFORT

Offering a productivity app that can fit in any company's existing communication workflow. Promise of simplicity, finding everything in one place, anywhere, anytime, from any device. Value proposition backed by NASA Jet propulsion lab

HIGH ✕ LEVEL CONCEPT

Analogy allowing anyone who does not know your company to immediately understand what you do

AMAZON
Earth's biggest book store

AIRBNB
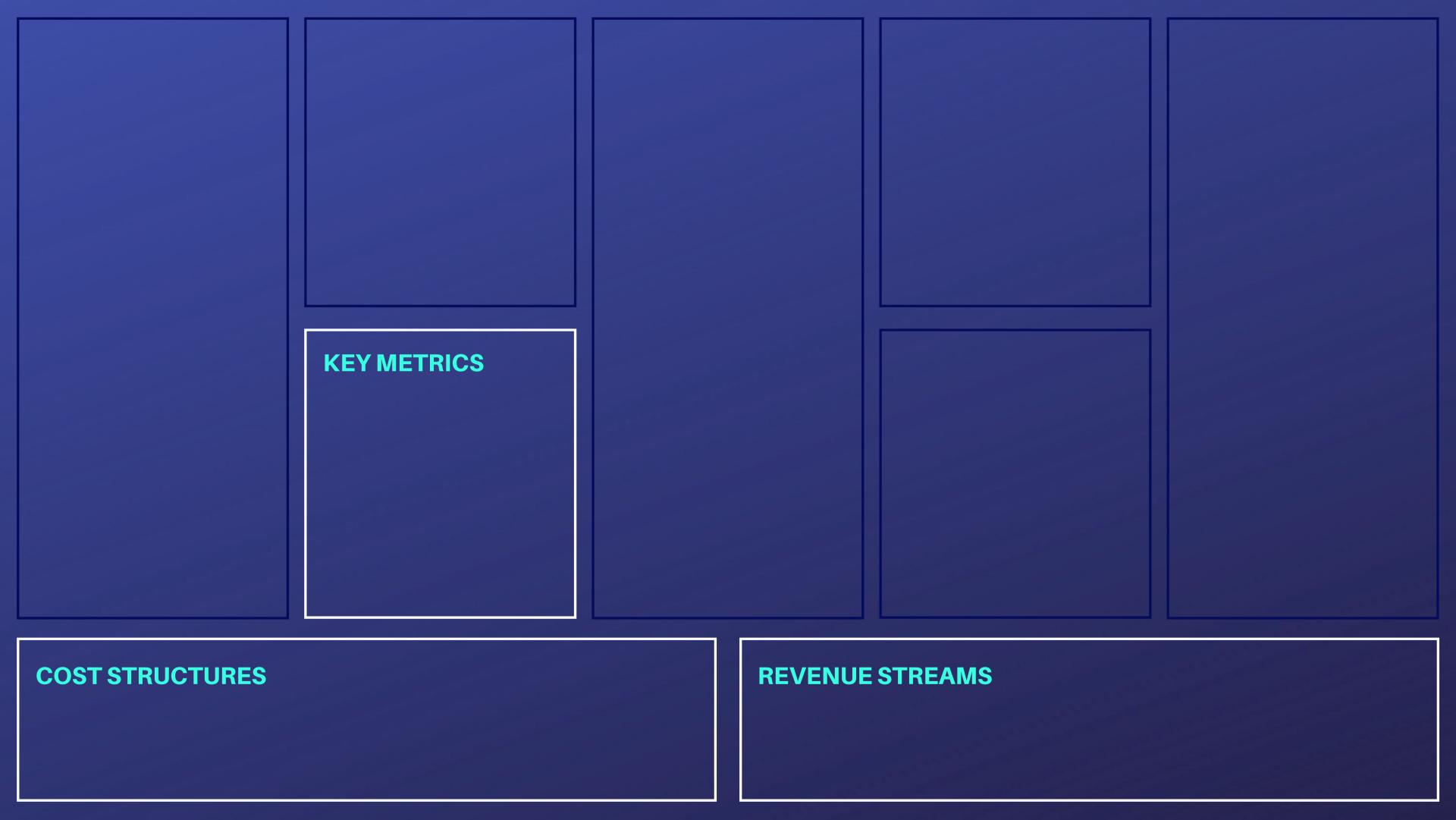Everyone can become a host

UBER
Taxis, but cheaper, easier and safer

STEP 4:

DEVISE AN ECONOMIC STRATEGY

KEY METRICS

COST STRUCTURES

REVENUE STREAMS

BALANCING COSTS & REVENUES

Costs and revenues are business specific. One model can work for a company and be disastrous for another.

Examples of costs: workforce, licensing, raw material, premises, overheads (electricity...), rental of material, taxes, duties etc.

Examples of revenue models: subscription based, ad-based, affiliate-based, transactional, freemium. etc.

MEASURING SUCCESS

Key Performance Indicators need to be: Simple, Actionable, Relevant and Measurable.

Economic/Financial indicators: estimated breakeven point, sales, net income, net income ratio (profit/income), etc.

Marketing/Sales indicators: average customer reviews, customers referral, social media reputation, net promoter score, nb of contracts signed, etc.

Organisational/Operational indicators: employees' satisfaction, time to market, order fulfillment time etc.